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6 April 2018

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. 70 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

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The Director of Audit's Report No. 70 contains the following chapters:

Chapter	Subject
1	Management of restored landfills
2	Consumer protection against unfair trade practices, unsafe goods, and short weights and measures
3	Integrated education
4	Government's efforts in managing excavation works on public roads
5	Department of Health's efforts in smoking control
6	OGCIO's programmes and projects in promoting the wider use of IT in the community
7	Home Affairs Bureau's funding schemes and programmes for youth exchange and internship
8	Sha Tin Section of Route 8

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

**Environment Bureau
Home Affairs Bureau
Environmental Protection Department
Leisure and Cultural Services Department
Architectural Services Department
Home Affairs Department**

Management of restored landfills

**Audit Commission
Hong Kong
3 April 2018**

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. 70 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 RESTORED LANDFILLS

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MANAGEMENT OF RESTORED LANDFILLS

Executive Summary

1. Today, there are 16 landfill sites in Hong Kong, of which 3 large strategic landfills are operating and used for final waste disposal and 13 relatively small landfills (commissioned during 1960 to 1988) were closed between 1975 and 1996. According to the Environmental Protection Department (EPD), the 13 closed landfills were not designed with contemporary environmental standards as imposed on the current 3 strategic landfills, and these 13 closed landfills demand dedicated and effective efforts of restoration over a very long aftercare period (30 years or more). Since the landfilled waste is continuously undergoing biodegradation and generating landfill gas and leachate, they present environmental and safety hazards to the surrounding areas, and the landfills are subject to differential ground settlement during the process. Restoration of the 13 closed landfills (which were not installed with proper leachate and landfill gas management system at the time when they were in operation) comprises two stages: (a) Stage 1: Restoration works which include construction and installation of restoration facilities; and (b) Stage 2: Aftercare work which would commence after completion of restoration works to ensure that the landfill is maintained in a safe condition and is environmentally acceptable for appropriate future beneficial uses (i.e. afteruse of restored landfills).

2. The EPD has used a design-build-operate (DBO) form of contract for the restoration and management of the 13 closed landfills. Under the DBO contract arrangement, a contractor is responsible for the design and construction of restoration facilities (e.g. leachate treatment plant (LTP) and landfill gas flaring plant (LGP)) and the aftercare of a landfill for 30 years after completion of the restoration facilities. The EPD awarded 5 DBO contracts (hereinafter referred to as “landfill restoration contracts”) through open tendering to 2 contractors during 1996 to 2004. The EPD’s contractors completed the construction and installation of restoration facilities at the 13 landfills between 1997 and 2006 at a total capital cost of \$1,317.7 million and such facilities have been commissioned. The total actual operating cost of the aftercare work was \$67.9 million in 2016-17.

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3. The 13 restored landfills occupy a total area of 320 hectare (ha) (equivalent to over 15 times the size of the Victoria Park). According to the EPD, in light of the many development restrictions (e.g. differential ground settlement) at restored landfills, recreational use (e.g. public parks and sitting-out areas) is considered the most suitable afteruse option at these landfills. The EPD has indicated that, except for areas occupied by restoration facilities required for aftercare work, all the remaining areas would in principle be available for afteruse as long as the nature of afteruse projects could fulfil the specified conditions and constraints at the remaining area. As of February 2018, the current and planned afteruse at the 13 restored landfills occupied a total area of about 113 ha (35% of 320 ha). The development of afteruse projects at restored landfills is implemented by the Government or non-governmental bodies.

4. The Audit Commission (Audit) has recently conducted a review to examine the Government's efforts in the management of restored landfills.

Aftercare of restored landfills

5. The EPD's landfill restoration contractors need to comply with the statutory requirements stipulated under the relevant environmental legislations (e.g. Water Pollution Control Ordinance (WPCO) — Cap. 358) and the contractual requirements in various major environmental parameters (e.g. total nitrogen level of leachate discharge) as stipulated in the landfill restoration contracts. According to the EPD, in the past 5 years from 2013 to 2017, of the 13 restored landfills, only the landfill restoration contractor (i.e. Contractor A) of the Pillar Point Valley Landfill (PPVL) in Tuen Mun District had since December 2015 failed to meet the statutory requirements under the WPCO and the contractual requirements. Audit selected the PPVL in Tuen Mun District as a case study for examination of the EPD's monitoring of contractors' aftercare work at restored landfills. In August 2004, the EPD entered into a landfill restoration contract with Contractor A for the design and construction of restoration facilities at PPVL and the aftercare of the landfill for 30 years after completion of the restoration facilities. In July 2006, the construction works of restoration facilities at PPVL were completed and the aftercare work commenced in the same month. The actual capital cost for the design and construction of the restoration facilities at PPVL was \$199.2 million. In 2016-17, the actual operating cost of the aftercare work was \$10.7 million (paras. 2.4, 2.6 and 2.7).

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6. ***Long period of non-compliances with statutory and contractual requirements.*** From January to April 2016, the EPD received complaints on suspected malpractice of Contractor A in the operation of some restoration facilities at PPVL. The EPD's subsequent investigations found that: (a) between May 2016 and July 2017, Contractor A had contravened various statutory requirements of the licence issued by the EPD under the WPCO for the PPVL, and Contractor A was convicted and fined a total of \$208,000 for 21 offences under the WPCO; and (b) between December 2015 and November 2017, Contractor A had committed various non-compliances with the contractual requirements, and up to November 2017, payments totalling about \$7.7 million had been deducted from Contractor A (paras. 2.8, 2.11 and 2.13).

7. ***Need to ensure compliance with statutory and contractual requirements.*** In June 2016, in light of complaints received from January to April 2016, the EPD completed a review on the robustness of environmental monitoring practices at the EPD's waste facilities (hereinafter referred to as "2016 EPD Review"), including restored landfills. The 2016 EPD Review recommended, among others, the installation of advanced equipment (e.g. upgrading data monitoring systems and installing surveillance cameras) at PPVL and 4 other restored landfills installed with both LTP and LGP with a view to automating the monitoring work and detecting cases of non-compliance in a more timely manner. Audit found that, as of March 2018: (a) the installation dates of certain advanced equipment items were later than the target dates as set in the 2016 EPD Review, and the data monitoring systems at 2 restored landfills installed with both LTP and LGP had not yet been upgraded. The EPD needs to expedite the progress of installing such equipment; and (b) apart from these 2 landfills (where the data monitoring systems were yet to be upgraded), there were 3 other landfills for which the EPD considered it unnecessary to upgrade the data monitoring systems for their LTP and/or LGP. Before automated data monitoring systems are in place, the EPD needs to strengthen its monitoring actions on the landfill restoration contractors' compliance with the statutory and contractual requirements and the related record-keeping requirements (paras. 2.14 and 2.20 to 2.25).

8. ***Need to improve Leachate Treatment Plant at Pillar Point Valley Landfill.*** In early 2016, the EPD found that the LTP at PPVL was not functioning properly and could not treat leachate in an efficient manner. Subsequently, the EPD instructed Contractor A to carry out overhaul works for the LTP to remedy the problem. Between May 2016 and January 2017, owing to the LTP overhaul works at PPVL and the forecast increase of leachate inflow in the wet season, the EPD instructed Contractor A to suspend the LTP operation and arrange direct transfer of

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leachate by vehicles to the Government's other facilities for off-site treatment. Moreover, between July and November 2017, mainly due to very heavy rainfall, the leachate inflow at PPVL far exceeded the LTP treatment capacity and reached the alert level of leachate storage tanks. As a result, with the EPD's consent, Contractor A directly transferred leachate by vehicles from PPVL to the Government's other facility for off-site treatment. In February 2018, a hydrogeological survey for PPVL was completed, which recommended mitigation measures (including installation of groundwater pumps) to resolve the leachate inflow/overflow problem. The EPD needs to take measures to ensure early implementation of mitigation measures (paras. 2.26, 2.30 and 2.31).

9. *Scope for improving demerit point system.* The 5 landfill restoration contracts adopt a demerit point system for the deduction of monthly payments from the related contractor for specified non-compliances with contractual requirements. Audit notes that while the 5 contracts require contractors to comply with the requirements of any licences issued under the WPCO, apart from total nitrogen limit, the demerit point system does not cover other non-compliances with the licence requirements under the WPCO, including cases where the stipulated maximum daily discharge limit of leachate is exceeded and the 24-hour notification requirement is not observed. The EPD needs to review the feasibility of incorporating non-compliances with the relevant statutory environmental requirements in the demerit point system of a landfill restoration contract in future (paras. 2.12, 2.33, 2.35 and 2.37).

Development of government recreational facilities at restored landfills

10. Since the early 2000s, the Government has planned/implemented projects for developing recreational facilities (parks and gardens) at 7 restored landfills. Audit noted that the implementation of 5 of these projects was that one project's development progress was slow (still at preliminary planning stage) and four projects had increases in costs and the actual project completion dates were later than the original target completion dates. Audit selected three projects (namely, Kwai Chung Park at Gin Drinkers Bay Landfill, Wan Po Road Pet Garden at Tseung Kwan O Stage I Landfill and Jordan Valley Park at Jordan Valley Landfill) as case studies with a view to identifying room for improvement, focusing on issues relating to development of government facilities at restored landfills. In these case studies, Audit notes that the special nature of restored landfills (including differential ground settlement, potential landfill gas hazards and buried restoration facilities (e.g. leachate and landfill gas

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pipes)) warrants more attention and actions of departments and non-governmental bodies in developing facilities there. Such actions include ascertaining technical feasibility of proposed developments and up-to-date site conditions for design work before tendering, and allowing sufficient time for seeking the EPD's advice on design and layout plans before inviting tenders (paras. 1.10, 3.2, 3.3, 3.7, 3.28, 3.37, 3.47 and 3.57).

11. ***Kwai Chung Park: Need to expedite actions to develop the Park.*** The slow progress in developing the Kwai Chung Park (covering an area of about 25.5 ha) had been covered in Report No. 60 of the Director of Audit of March 2013. The Leisure and Cultural Services Department (LCSD) has agreed with the audit recommendations. However, Audit's follow-up review revealed that the development progress of the Park was still less than satisfactory. In 2013, a committee under the Kwai Tsing District Council endorsed the LCSD's proposed project scope of the Park (including a golf driving range with 30 golf driving bays). In May 2014, the Home Affairs Bureau (HAB) issued a Project Definition Statement for the Park to the Architectural Services Department (ArchSD) for the latter to prepare a Technical Feasibility Statement in order to confirm the technical feasibility of the proposed project and facilitate bidding for the necessary government resources for implementing the proposed works. In July 2014, the ArchSD informed the HAB and the LCSD that the site could not physically accommodate the proposed golf driving range, and requested the HAB to revise the Project Definition Statement by removing the proposed golf driving range from the project scope of the Park. With commitment to take forward this project, the Kwai Chung Park was included in the Policy Address of January 2017 as one of the 26 projects in the five-year plan for sports and recreation facilities targeted to be launched in or before 2022. In September 2017, the District Council endorsed the LCSD's proposal to develop the Kwai Chung Park by two stages. As of February 2018, 17 years had elapsed since the completion of restoration facilities by the EPD in September 2000, the HAB had not revised the Project Definition Statement of May 2014 for the ArchSD to prepare a Technical Feasibility Statement for the Kwai Chung Park (paras. 3.4 to 3.7, 3.10, 3.12 and 3.15).

12. ***Wan Po Road Pet Garden.*** In 2007, a working group under the Sai Kung District Council proposed to develop a 1.2-ha pet garden at Tseung Kwan O Stage I Landfill. The LCSD was the lead department to work with the Sai Kung District Council in implementing the project. The Home Affairs Department (HAD) appointed a term consultant to provide consultancy services for the project (para. 3.22). Audit found that:

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- (a) ***Need to ascertain up-to-date site conditions before tendering.*** In April 2009, a consultant of the HAD engaged a land surveyor to conduct a topographical survey at the works site. In December 2010, the LCSD awarded the works contract to a contractor at \$15.1 million. From January to March 2011, the works contractor conducted another topographical survey and found that the actual site levels were significantly lower than those shown on the contract drawings. In August 2011, the HAD's consultant provided the revised design drawings to the works contractor, who resumed the works in the same month. As a result, the contractor was entitled to an extension of time for 3.5 months and an additional cost of \$1.1 million was incurred for the works arising from the above re-design. According to the HAD, the continuous ground settlement at the project site was unusual, and in hindsight, the extent of design revisions during the construction stage could have been reduced if the HAD's consultant had conducted another topographical survey to ascertain the site levels before tendering for the works (paras. 3.22, 3.26, 3.27 and 3.30); and
- (b) ***Need to enhance the accuracy in estimating project cost and time allowed for tender stage.*** In March 2010, the HAD's consultant estimated that the tender price for the works contract was \$11.7 million and the HAD invited tenders for the contract. In April 2010, seven tenders were received and the prices of the returned tenders ranged from \$15.1 million to \$23.5 million, exceeding the pre-tender estimate by 29% to 101%. According to the HAD, regarding the under-estimation of tender price, the Pet Garden project was a pilot project under which no separate quantity surveyor was engaged to offer advice on the cost estimate provided by the HAD's consultant. Moreover, Audit noted that the feasibility study by the HAD's consultant had only allowed 3 months for the tender stage which would normally take 6 months to complete, leading to under-estimation of 3 months for the tender stage (paras. 3.30 and 3.31).

13. ***Jordan Valley Park: Need to allow sufficient time to consult EPD before inviting tenders.*** In November 2005, the EPD requested the ArchSD to provide the detailed design and layout plans of the Jordan Valley Park Project for its comments when available. The ArchSD issued the tender document (which included the design and layout plans of 13 blocks of buildings and a model car circuit) in mid-August 2007 and awarded the works contract to a contractor at \$137.7 million in December 2007. According to the ArchSD, due to time constraint, the ArchSD could

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only consult the EPD of the design and layout plans after issuing tender documents in mid-August 2007. In the event, in May 2008, the ArchSD revised the design, including raising the external ground level of the 13 blocks of buildings with imported fill. The revision of the design had resulted in variation works of \$9.4 million (paras. 3.46 to 3.50).

Monitoring of non-governmental bodies' afteruse facilities at restored landfills

14. With delegated authority from the Lands Department under the Land (Miscellaneous Provisions) Ordinance (Cap. 28), the EPD grants land licences to applicants (mainly non-governmental organisations and National Sports Associations) to develop and operate recreational facilities at restored landfills. As of December 2017, the EPD had granted five land licences to five licensees for developing and operating recreational facilities at 4 restored landfills (as two land licences were issued for one landfill) on a self-financing basis for use by the general public and/or members of the licensees in order to better utilise the vacant land at restored landfills (paras. 4.2 and 4.3).

15. *Non-compliances with conditions of land licences.* As of December 2017, 3 licensees had opened their facilities for use while 2 licensees had not completed the development of facilities, with delays of 6 and 15 months respectively when compared with the corresponding target completion dates as stipulated in the related land licences. Furthermore, the land licence for a facility opened for use (bicycle motocross (BMX) park) requires the licensee to operate a high-quality facility and maximise the facility utilisation. However, there were complaints on the poor quality and lack of maintenance of the BMX park, and the main track of the park was closed for maintenance for over one year from October 2016 to December 2017. According to the EPD, given the diversified nature of afteruse facilities, it did not have the expertise and capacity to ensure that a licensee would operate a high-quality facility and maximise the facility utilisation. There is scope for the EPD to seek the assistance and support of the relevant bureaux and departments (e.g. HAB and LCSD) in monitoring the licensees' compliance with licence conditions (paras. 4.3, 4.5 and 4.8 to 4.10).

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16. ***Scope for improving conditions of land licences.*** Audit notes that some land licences contain conditions that are qualitative in nature, including operation of a high-quality facility, the need to maximise the facility utilisation, promotion and strengthening the development of relevant sports activities, and provision of intensive sports training to the community. However, quantitative/objective measures are not specified in these conditions, rendering it difficult for the EPD to assess whether the licensees meet such conditions (para. 4.12).

17. ***Need to formulate guidelines on the circumstances for requesting licensees to submit audited financial information.*** Under the land licences, for two licensees who had opened their afteruse facilities for use, upon the EPD's written request, they shall submit to the EPD the audited financial statements on their operation and maintenance of the facilities. However, Audit noted that the EPD had not requested the two licensees to submit audited financial statements (paras. 4.15 and 4.16).

18. ***Delays in implementing Restored Landfill Revitalisation Funding Scheme (Funding Scheme).*** In his Policy Address of January 2014, the Chief Executive announced that the Government had earmarked \$1 billion to launch the Funding Scheme to provide funding for developing recreational, environmental or other community facilities on restored landfill sites. One of the objectives of the Funding Scheme is to expedite the development of gainful use at restored landfills so that the community can benefit from them at the earliest opportunity. According to the EPD, the Funding Scheme covers 7 restored landfills with applications to be invited in three batches. In June 2014, the EPD informed the Legislative Council of a tentative action timetable for taking forward 10 key actions (e.g. inviting preliminary proposals and granting approval-in-principle) under Batch 1 (covering 3 restored landfills) of the Funding Scheme. Audit noted that, as of December 2017, while 4 key actions had been completed, the other 6 key actions had yet to be completed. In particular, no in-principle approval had been granted to applicants as of December 2017, giving rise to the longest delay of 28 months. Furthermore, the EPD originally planned to invite applications under Batch 2 (covering the other 4 restored landfills) and Batch 3 (covering any landfills unallocated from Batches 1 and 2) in the second quarter of 2016 and the first quarter of 2017 respectively. However, as of December 2017, the EPD was still processing the applications under Batch 1 of the Funding Scheme, and applications under Batches 2 and 3 had not been invited (paras. 4.22 and 4.25 to 4.28).

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Audit recommendations

19. 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:

Aftercare of restored landfills

- (a) expedite the progress of installing the advanced equipment at restored landfills as recommended by the 2016 EPD Review, and keep under review the operation of the installed equipment to assess their effectiveness in monitoring of contractors' aftercare work (para. 2.42(a));
- (b) before automated data monitoring systems are in place, ensure that the contractors properly maintain the site records, and strengthen monitoring actions on the contractors' compliance with the statutory and contractual requirements and the related record-keeping requirements (para. 2.42(b));
- (c) take measures to ensure early implementation of mitigation measures to resolve the leachate inflow/outflow problem at PPVL (para. 2.42(d));
- (d) review the feasibility of incorporating non-compliances with the relevant statutory environmental requirements in the demerit point system of a landfill restoration contract in future (para. 2.42(g));

Development of government recreational facilities at restored landfills

- (e) expedite the revision of the Project Definition Statement of the Kwai Chung Park and issue it to the ArchSD for preparing a Technical Feasibility Statement for the project (para. 3.18(b));
- (f) when implementing works projects at works sites susceptible to ground settlement (e.g. restored landfills) in future, take measures to ascertain up-to-date site conditions for design work before tendering (para. 3.38(a));

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- (g) when implementing works projects (including those at restored landfills) in future, take measures to enhance the accuracy in estimating the project cost and time allowed for tender stage (para. 3.38(b));
- (h) conduct a review on the unusual ground settlement of the project site of Wan Po Road Pet Garden with a view to identifying whether other areas of the Tseung Kwan O Stage I Landfill have such settlement problem and ascertaining whether such settlement would lead to any adverse impacts on the EPD's restoration facilities and aftercare work (para. 3.39);
- (i) when implementing works projects at restored landfills (with specific construction requirements and restrictions) in future, allow sufficient time for seeking the EPD's advice on design and layout plans before inviting tenders (para. 3.58(a));

Monitoring of non-governmental bodies' afteruse facilities at restored landfills

- (j) keep under review the licensees' development progress of afteruse facilities with a view to completing the afteruse facilities in a timely manner (para. 4.19(a));
- (k) take measures to monitor the licensees' compliance with licence conditions, including seeking the assistance and support of the relevant bureaux and departments if necessary (para. 4.19(b));
- (l) explore the feasibility of incorporating quantitative/objective measures (e.g. Key Performance Indicators) in land licences when issuing or renewing licences in future (para. 4.19(d));
- (m) formulate guidelines on the circumstances for requesting licensees to submit audited financial information for monitoring their operations and financial viability (para. 4.19(e)); and

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- (n) **make additional efforts in implementing the Restored Landfill Revitalisation Funding Scheme with a view to achieving the objective of expediting the development of gainful use at restored landfills so that the community can benefit from them at the earliest opportunity (para. 4.36).**

Response from the Government

- 20. 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 In Hong Kong, landfilling has been the major approach for waste disposal for decades. Before the 1990s, the relatively small landfills near main urban areas had generally served the territory well, but they had been filled up and closed due to the rapid economic development. In the 1990s, the Government constructed 3 large strategic landfills (Note 1) for waste disposal purpose. Today, there are 16 landfill sites in Hong Kong, of which:

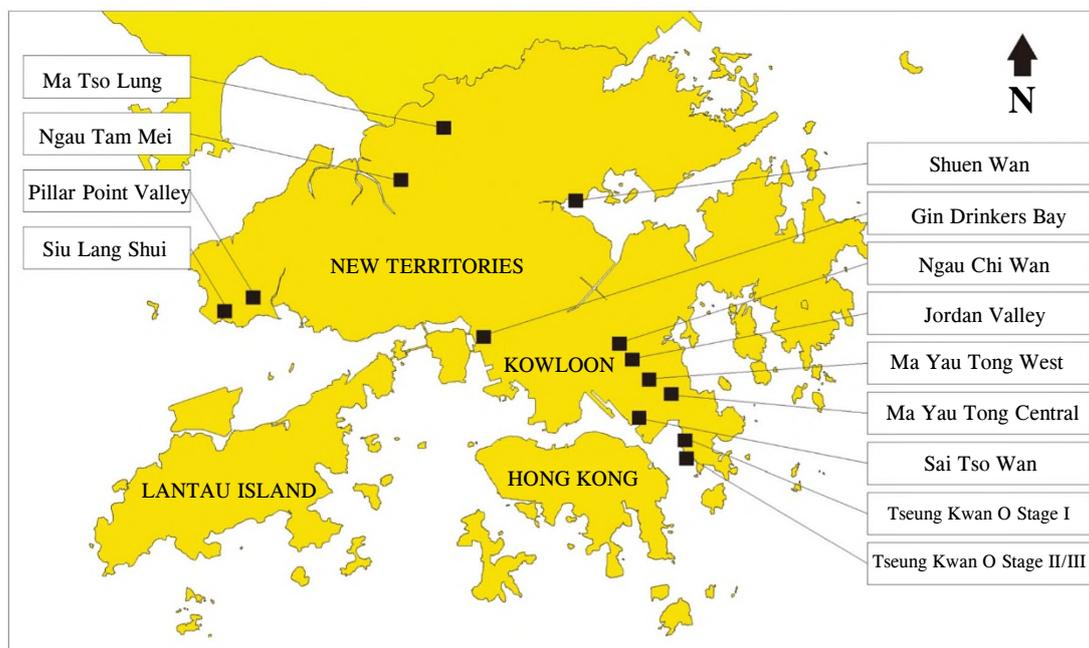
- (a) the 3 large strategic landfills are operating and used for final waste disposal. The 3 landfills occupy a total area of some 280 hectares (ha — Note 2); and
- (b) the remaining 13 landfills, commissioned during 1960 to 1988 and operated by the former Civil Engineering Department (now the Civil Engineering and Development Department), were closed between 1975 and 1996 (see Appendix A). These closed landfills occupy a total area of 320 ha (equivalent to over 15 times the size of the Victoria Park). Figure 1 shows their locations.

Note 1: *The three operating strategic landfills are Southeast New Territories Landfill in Tai Chik Sha of Sai Kung District, Northeast New Territories Landfill in Ta Kwu Ling of North District and West New Territories Landfill in Nim Wan of Tuen Mun District. They were constructed in 1993 and 1994, and commissioned between 1993 and 1995.*

Note 2: *A hectare (or 10,000 square metres) of land is approximately the size of a standard football pitch.*

Figure 1

Locations of 13 closed landfills



Source: EPD records

1.3 Landfills, whether operating or closed, produce landfill gas and leachate (Note 3) as products of refuse decomposition. Landfill gas is malodorous and potentially asphyxiating, flammable and explosive. Leachate is highly polluting and, if not properly controlled, may seriously contaminate water bodies due to direct discharge of leachate.

1.4 Municipal solid waste, when disposed of at landfills, does not exhibit homogeneous geotechnical properties, as it is subject to continuing biological decomposition process. This results in differential ground settlement of the landfill surface which may lead to slope instability problems.

Note 3: *Leachate is the liquid that has percolated through solid waste. It is generated by the moisture content in the waste, decomposition of waste, and rainwater infiltration into the waste mass.*

1.5 Refuse decomposition in a landfill is a slow process which may take a long time before a landfill is fully restored (Note 4). Landfills will continue to produce landfill gas and leachate and be subject to differential ground settlement during the refuse decomposition process.

1.6 In view of the problems envisaged, the “White Paper: Pollution in Hong Kong — A Time to Act” issued in June 1989 set out the policy objective of formulating a programme for the comprehensive restoration of closed landfill sites (Note 5). The landfill restoration programme initiative and target were promulgated in the 1995 Policy Address. According to the Environmental Protection Department (EPD), the 13 closed landfills were not designed with contemporary environmental standards as imposed on the current three strategic landfills. After closure of the 13 landfills, the former Civil Engineering Department handed over the landfills to the EPD for carrying out restoration works and aftercare work in order to control and mitigate environmental impacts, and to enable the restored landfills for safe future beneficial use (i.e. afteruse of restored landfills). Since the merging of the Environment Bureau (ENB — Note 6) and the EPD in 2007, they are responsible for the policy matters on management of landfills, the implementation of the restoration programme, and the monitoring of the aftercare and afteruse of restored landfills. Figure 2 shows the key elements in the Government’s management of restored landfills.

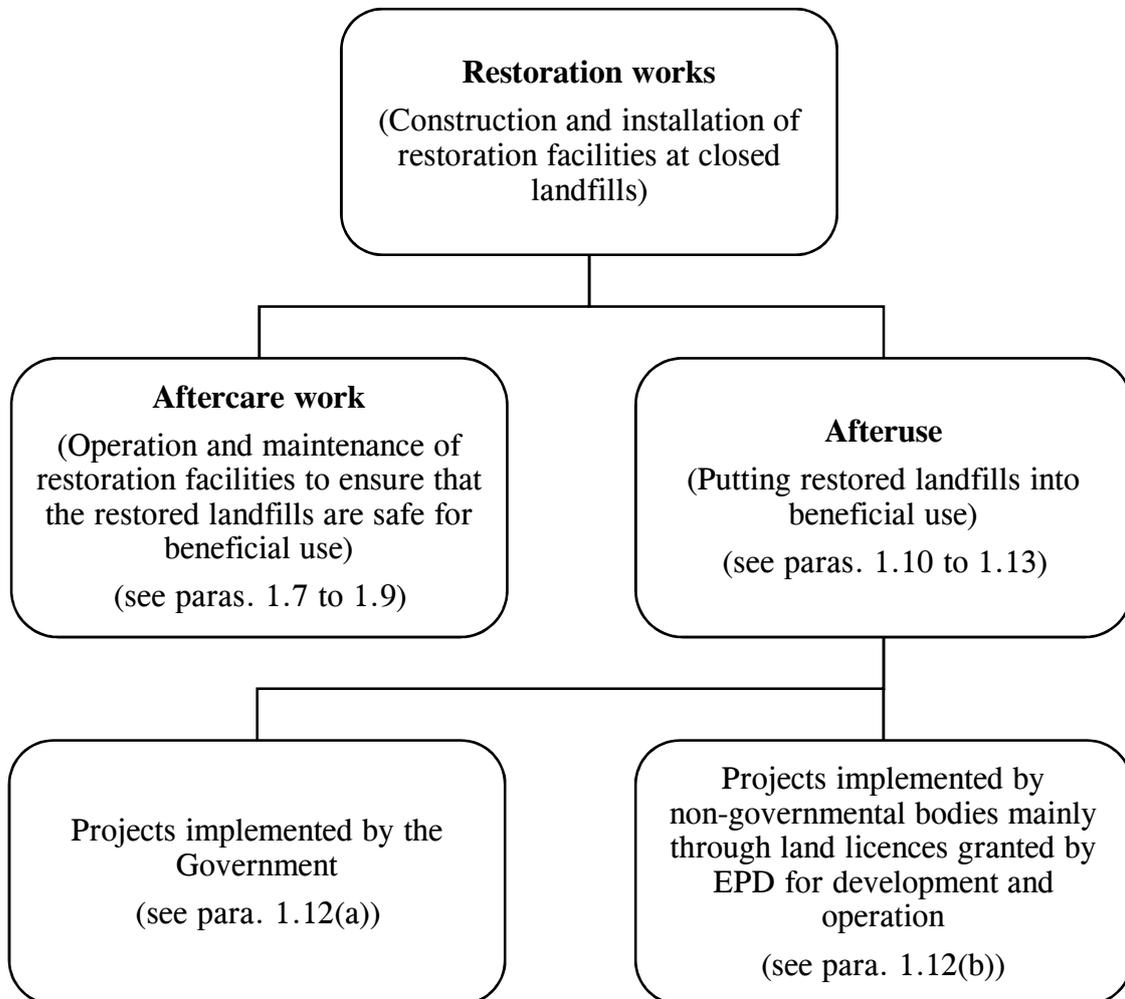
Note 4: *According to the Environmental Protection Department, a “restored landfill” refers to a closed landfill installed with appropriate restoration facilities (see para. 1.7(a)), and a “fully restored landfill” refers to a restored landfill where aftercare work is no longer required (see para. 1.7(b)).*

Note 5: *According to the White Paper, the long-term waste disposal strategy was based on the construction of three very large operating landfills (see para. 1.2(a)). These landfills would be designed and operated to minimise their environmental impacts not only during their operating life but also after their closure. According to the Environmental Protection Department, these landfills have been installed with landfill gas and leachate management systems.*

Note 6: *In July 2007, the ENB was formed to take over the policy responsibility for environmental matters. Before July 2007, the policy responsibility had been taken up by the then Environment, Transport and Works Bureau (July 2002 to June 2007), the then Environment and Food Bureau (January 2000 to June 2002), the then Planning, Environment and Lands Bureau (July 1997 to December 1999) and the then Planning, Environment and Lands Branch (before July 1997).*

Figure 2

Key elements in the Government's management of restored landfills



Source: EPD records

Aftercare of restored landfills

1.7 Restoration of all the 13 closed landfills is essential as they were not installed with proper leachate and landfill gas management systems at the time when they were in operation. The restoration comprises the following two stages:

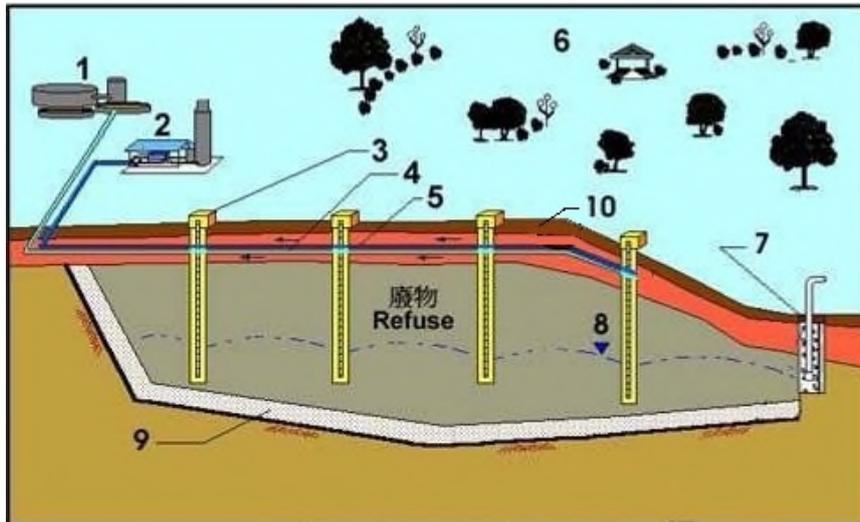
- (a) ***Stage 1: Restoration works.*** These include construction and installation of restoration facilities, including:
 - (i) leachate management systems to extract, collect, treat and dispose of leachate;
 - (ii) landfill gas management systems to control gas emission and prevent off-site gas migration;
 - (iii) engineered capping layers (with low permeability) and surface water drainage system to reduce infiltration of rain water into the waste mass, thereby reducing the amount of leachate generated; and
 - (iv) improvements to slope stability, landscaping of landfill sites and other ancillary engineering works; and

- (b) ***Stage 2: Aftercare work.*** After completion of restoration works, the aftercare work would commence until the landfill is fully restored to ensure that the landfill is maintained in a safe condition and is environmentally acceptable for appropriate future land uses. The aftercare work includes:
 - (i) operation and maintenance of leachate management systems;
 - (ii) operation and maintenance of landfill gas management systems;
 - (iii) environmental monitoring and auditing; and
 - (iv) maintenance of landscape and site infrastructures.

Figure 3 shows the typical layout of a restored landfill.

Figure 3

Typical layout of a restored landfill



- Legend:
- 1. Leachate treatment plant
 - 2. Landfill gas utilisation plant and/or flaring plant
 - 3. Leachate/Gas extraction well
 - 4. Leachate pipe
 - 5. Landfill gas pipe
 - 6. Recreational or other beneficial use
 - 7. Gas venting trench
 - 8. Leachate level
 - 9. Drainage layer
 - 10. Capping system

Source: EPD records

1.8 The EPD has used a design-build-operate (DBO) form of contract for the restoration and management of the 13 closed landfills. Under the DBO contract arrangement, a contractor is responsible for the design and construction of restoration facilities and the aftercare of a landfill for 30 years after completion of the restoration facilities (Note 7). The EPD awarded 5 DBO contracts (hereinafter referred to as “landfill restoration contracts”) through open tendering to 2 contractors during 1996 to 2004. The EPD’s contractors completed the construction and installation of restoration facilities at the 13 landfills between 1997 and 2006 at a total capital cost of \$1,317.7 million and such facilities have been commissioned. The total actual operating cost of the aftercare work was \$67.9 million in 2016-17. Details of landfill restoration contracts and restoration works are shown in Appendix B.

1.9 According to the EPD:

- (a) unlike other works projects of the Government, the 13 closed landfills demand dedicated and effective efforts of restoration over a very long aftercare period (30 years or more). Since the landfilled waste is continuously undergoing biodegradation and generating landfill gas and leachate, they present environmental and safety hazards to the surrounding areas;
- (b) in view of the above, the EPD has adopted the DBO contract arrangement in managing the 13 closed landfills’ restoration works and aftercare work, and engaged qualified specialist contractors with relevant expertise, knowledge and experience in carrying out the restoration works and aftercare work. Adopting the 30-year DBO contract arrangement imposes continuous liability on a single party and ensures continued commitment to the aftercare work throughout the entire aftercare period, and the contractor is responsible for developing, constructing, operating and maintaining the restored landfills at acceptable environmental and safety standards throughout the contract period; and

Note 7: *According to the information submitted to the Legislative Council when seeking funding approval for the DBO contracts, the Government would carry out an environmental review for each restored landfill every five years to determine whether the post-completion aftercare work should continue. As specified in the landfill restoration contracts, the EPD has the right to terminate the contracts provided that the EPD gives the contractors sufficient advance notice (i.e. notice of 9 or 12 months according to individual contracts).*

Introduction

- (c) consideration to terminate the contracts (see Note 7 to para. 1.8) should not and cannot be taken lightly, which should take into account a host of factors including potential legal, social and financial implications. Among other impacts, it would be extremely costly to the Government and the community at large, and have grave implications on the day-to-day life of the general public, in case there is a change of contractors for taking up the aftercare work of restored landfills.

Afteruse of restored landfills

1.10 Before the full restoration of a closed landfill which may take at least 30 years, the EPD, through the aftercare work, will continue to ensure that the restored landfills are maintained in a safe condition and they are environmentally acceptable for beneficial use. According to the EPD:

- (a) restored landfills are very different from any ordinary piece of land and there are many restrictions on the afteruse of restored landfills in terms of site constraints, differential ground settlement over restored landfills, potential landfill gas hazards, and possible interfacing issues between restored landfills and afteruse developments. For example, restored landfills cannot accommodate excessive loading in order to avoid damage to restoration facilities, and excavation at landfill surface for construction of basements or piles is not allowed as this may cause damage to the buried restoration facilities (e.g. leachate and landfill gas pipes) or unnecessarily expose the landfilled waste. A landfill gas hazard assessment is also required before planning afteruse developments at restored landfills; and
- (b) development of afteruse projects is a very challenging and difficult task since there are numerous development constraints and technical difficulties for the project proponents to overcome before the afteruse projects can be turned into beneficial use without affecting the aftercare work of restored landfills. In light of these constraints, revitalisation of restored landfills for recreational use (e.g. public parks and sitting-out areas) is the most suitable option.

1.11 The 13 restored landfills occupy a total area of 320 ha. According to the EPD, except for areas occupied by restoration facilities required for aftercare work, all the remaining areas would in principle be available for afteruse as long as the nature of afteruse projects could fulfil the specified conditions and constraints at the remaining area (Note 8). Details of the areas and afteruse of the 13 restored landfills as provided by the EPD to the Audit Commission (Audit) are given in Table 1 and Appendix C.

Note 8: *According to the EPD, in general, flat area of a restored landfill is considered readily available and suitable for afteruse development, while slopes render difficulties to afteruse project proponents as they have to deal with technical risk management and administrative issues, such as implementing slope stabilisation measures and conducting natural terrain hazard assessment and/or slope failure analysis.*

Introduction

Table 1
Areas and afteruse of 13 restored landfills
(February 2018)

Restored landfill	Total area	Status of current and planned afteruse (Approximate area in ha)	Remaining area after deducting afteruse area in (b) (Notes 1 and 2) (c) (ha)
	(a) (ha)	(b)	(c) (ha)
1. Tseung Kwan O Stage I	68	(i) Football training centre under construction (12.5 ha)	54.2
		(ii) Wan Po Road Pet Garden and car park opened (1.3 ha)	
2. Pillar Point Valley	65	Temporary shooting range opened (0.2 ha)	64.8 (also see Note 1(c))
3. Shuen Wan	55	Golf course under planning (50 ha), including temporary golf driving range opened (15.6 ha)	5.0
4. Tseung Kwan O Stage II/III	42	Temporary training field of unmanned aerial vehicles for land survey purpose by Civil Engineering and Development Department which had not carried out any development works (8.9 ha)	33.1
5. Gin Drinkers Bay	29	(i) Kwai Chung Park under planning (25.5 ha — including facilities in (ii) and (iii) below)	3.5
		(ii) Temporary cricket grounds under construction (4.5 ha)	
		(iii) Bicycle motocross (BMX) park opened (3.9 ha)	
6. Siu Lang Shui	12	No afteruse identified	12.0 (also see Note 1(c))
7. Jordan Valley	11	Jordan Valley Park opened (5 ha)	6.0
8. Ma Yau Tong Central	11	Ma Yau Tong Central Sitting-out Area opened (0.1 ha)	10.9
9. Sai Tso Wan	9	Sai Tso Wan Recreation Ground opened (3 ha)	6.0
10. Ngau Chi Wan	8	Ngau Chi Wan Park opened (4 ha)	4.0
11. Ma Yau Tong West	6	Ma Yau Tong West Sitting-out Area opened (0.1 ha)	5.9
12. Ma Tso Lung	2	Campsite opened (2 ha) under a Lands Department's short-term tenancy	0.0
13. Ngau Tam Mei	2	No afteruse identified	2.0
Total	320	112.6	207.4

Legend: Restored landfills included under the Restored Landfill Revitalisation Funding Scheme (see para. 1.13)

Projects implemented/to be implemented by the Government

Projects implemented/to be implemented by non-governmental bodies

Source: EPD records

Table 1 (Cont'd)

Note 1: According to the EPD, the remaining areas in column (c) include:

- (a) those reserved for the Restored Landfill Revitalisation Funding Scheme (12.9 ha — see Table 7 in para. 4.25);*
- (b) those occupied by the EPD's and landfill restoration contractors' site offices, restoration facilities, access roads, trees and landscaping features; and*
- (c) other specified uses (including 22.8 ha of the Tsing Shan Firing Range located within the Pillar Point Valley Landfill and 2.3 ha of the Siu Lang Shui Landfill designated as a Site of Special Scientific Interest for over-wintering of butterflies).*

Note 2: The EPD does not carry out surveys on the areas occupied by the items in Note 1(b) above (i.e. EPD's and landfill restoration contractors' site offices, restoration facilities, access roads, trees and landscaping features) as the EPD considers that there is no operational need to do so. As a result, the EPD does not maintain detailed breakdown on the areas occupied by each of these items at each restored landfill.

Remarks: More details on the land areas for afteruse of restored landfills are shown in Appendix C.

1.12 While the EPD's contractors are responsible for the aftercare work of the 13 restored landfills (see para. 1.8), the development of afteruse projects at restored landfills is implemented through the following two channels:

- (a) **Public works projects planned/implemented by the Government.** Since the early 2000s, the Government has planned/implemented projects for developing recreational facilities at 7 restored landfills (see items 1(ii), 5(i) and 7 to 11 of Table 1 in para. 1.11) under the Capital Works Reserve Fund (CWRP — Note 9). These projects relate to the development of parks and gardens for the Leisure and Cultural Services Department (LCSD) which is responsible for the management of the completed facilities upon their commissioning. A total capital cost of \$443.3 million was incurred on such projects. The LCSD is under the policy direction of the Home Affairs Bureau (HAB) which is responsible for policy matters on the development of sports and recreation. The Architectural Services Department (ArchSD) is responsible for the design and construction of public recreational projects on two restored landfills (see items 7 and 10 of Table 1 in para. 1.11 and

Note 9: *The CWRP was established with effect from April 1982 by a resolution of the Legislative Council in January 1982 for financing public works projects and acquisition of land.*

Introduction

Table 4 in para. 3.2 for details). Under the District Minor Works Programme (Note 10), the Home Affairs Department (HAD) is also responsible for the design and construction of minor public recreational projects on three restored landfills (see items 1(ii), 8 and 11 of Table 1 in para. 1.11 and Table 4 in para. 3.2 for details); and

- (b) ***Projects implemented by non-governmental bodies.*** The EPD has allowed non-governmental bodies (e.g. non-profit-making organisations or National Sports Associations) to develop and operate 5 afteruse projects under a self-financing arrangement at restored landfills for recreational purpose (see items 1(i), 2, 3, 5(ii) and 5(iii) of Table 1 in para. 1.11) through the grant of land licences. The EPD monitors the performance of licensees according to the licence conditions. For the afteruse project at Ma Tso Lung Landfill (see item 12 of Table 1 in para. 1.11), it is operated under a Lands Department's short-term tenancy (see Note 4 to Appendix C).

Restored Landfill Revitalisation Funding Scheme

1.13 The 2014 Policy Address announced that the Government had earmarked \$1 billion to set up the Restored Landfill Revitalisation Funding Scheme (hereinafter referred to as "Funding Scheme") to expedite the development of recreational facilities or other innovative proposals. According to the EPD, six (see items 3, 5, 7, 9, 10, 12 of Table 1 in para. 1.11) of the 13 restored landfills have been developed for public use or reserved for conservation or other uses. As a result, the Funding Scheme covers the remaining seven restored landfills (see Table 1 in para. 1.11). The EPD is responsible for providing secretariat support for the Funding Scheme.

Note 10: *In 2007, the Government introduced the District Minor Works Programme to implement district-based works projects to improve local facilities, living environment and hygienic conditions in the territory. The Programme is funded by a dedicated block vote under the CWRP and the cost of each project is limited to \$30 million.*

Responsible divisions of EPD

1.14 The Environmental Infrastructure Division (EI Division) of the EPD is responsible for managing the performance of landfill restoration contractors, carrying out regular environmental monitoring activities, monitoring the afteruse at restored landfills and administering the Funding Scheme. The Environmental Compliance Division (EC Division) of the EPD is responsible for ensuring compliance with various environmental legislations, and would refer non-compliance cases to the EPD's Central Prosecution Unit for taking further legal action. Appendix D shows an extract of the organisation chart of the EPD.

Audit review

1.15 In October 2017, Audit commenced a review to examine the Government's efforts in the management of restored landfills. The review focuses on the following areas:

- (a) aftercare of restored landfills (PART 2);
- (b) development of government recreational facilities at restored landfills (PART 3); and
- (c) monitoring of non-governmental bodies' afteruse facilities at restored landfills (PART 4).

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

Acknowledgement

1.16 Audit would like to acknowledge with gratitude the full cooperation of the staff of the ENB, the HAB, the EPD, the LCSD, the ArchSD and the HAD during the course of the audit review.

PART 2: AFTERCARE OF RESTORED LANDFILLS

2.1 This PART examines the EPD's monitoring of the contractors' aftercare work at restored landfills.

Restoration facilities installed at restored landfills

2.2 The restoration facilities installed at restored landfills mainly include the following:

- (a) ***Leachate management system.*** The system generally includes extraction wells and leachate pipes for carrying leachate from the waste mass within a landfill site to a leachate treatment plant (LTP — see Photograph 1) for treatment before discharging the treated leachate into nearby public sewers (Note 11). During the treatment process, aqueous ammonia (which is irritating and corrosive in nature) is removed from the leachate in the LTP. Some restored landfills with less leachate generation are not installed with an LTP, and the leachate from such landfills is transported by the pertinent contractor to the LTP at another restored landfill managed under the same landfill restoration contract for treatment; and
- (b) ***Landfill gas management system.*** The system generally includes landfill gas extraction wells, monitoring wells and pipes for carrying landfill gas from underground of a landfill site to a landfill gas flaring plant (LGP) and/or utilisation plant (see Photograph 2). The LGP generates heat energy for the leachate treatment process at the LTP and for on-site power supply as far as possible through combustion of the landfill gas, while the landfill gas utilisation plant processes landfill gas for beneficial use. The remaining landfill gas is flared for safety reasons, preventing it from emission to the atmosphere. Some restored landfills with landfill gas of lower methane content are installed with passive gas venting system to directly disperse the landfill gas to the atmosphere.

Note 11: *The treated leachate would be conveyed to a Drainage Services Department's facility for further treatment before discharge to a nearby water body (e.g. marine water).*

Photograph 1

A leachate treatment plant at Pillar Point Valley Landfill



Source: EPD records

Photograph 2

A landfill gas flaring and utilisation plant at Shuen Wan Landfill



Source: EPD records

2.3 Table 2 shows the key restoration facilities installed at the 13 restored landfills.

Aftercare of restored landfills

Table 2

Key restoration facilities installed at 13 restored landfills

Restored landfill	Contractor	Landfill restoration contract	With LTP (Note 1)	With LGP (Note 2)
1. Tseung Kwan O Stage I	A	A1	No	Yes
2. Tseung Kwan O Stage II/III			Yes	Yes
3. Gin Drinkers Bay		A2	Yes	Yes
4. Ma Tso Lung			No	No
5. Ngau Tam Mei			No	No
6. Siu Lang Shui			No	No
7. Pillar Point Valley		A3	Yes	Yes
8. Shuen Wan	B	B1	No (Note 3)	Yes (Note 3)
9. Ngau Chi Wan		B2	No	No
10. Jordan Valley			Yes	Yes
11. Ma Yau Tong Central			Yes (Note 4)	Yes
12. Ma Yau Tong West			No	No
13. Sai Tso Wan			No	Yes

Source: EPD records

Note 1: For restored landfills without an LTP (except for Shuen Wan Landfill — see Note 3 below), the pertinent contractors transport the leachate produced from these landfills to the LTP installed at another restored landfill managed under the same landfill restoration contract for treatment.

Note 2: An LGP and/or a passive gas venting system installed at restored landfills facilitates the dispersion of landfill gas to the atmosphere to ensure safety.

Note 3: Leachate from the Shuen Wan Landfill is collected and delivered to the adjacent Drainage Services Department's Tai Po Sewage Treatment Works for treatment. Contractor B has also reached an agreement with a gas supply company to sell and deliver the landfill gas to its nearby gas production plant for generation of energy.

Note 4: According to the EPD, the LTP at Ma Yau Tong Central Landfill only operates during the wet season (typically from June to October of a year) due to the increase in leachate generation. During the dry season (typically from November of a year to May next year), the leachate from the Ma Yau Tong Central Landfill is delivered to the LTP at Jordan Valley Landfill for treatment.

EPD's monitoring of contractors' aftercare work

2.4 After completion of construction and installation of the restoration facilities at restored landfills, the EPD's contractors are responsible for their aftercare work (see para. 1.8). The contractors need to comply with the statutory requirements stipulated under the relevant environmental legislations (e.g. Water Pollution Control Ordinance (WPCO) — Cap. 358) (Note 12). The landfill restoration contracts also stipulate requirements for compliance by contractors in various major environmental parameters (e.g. total nitrogen level of leachate discharge (which is same as the statutory limits under the WPCO) and landfill gas emission limits).

2.5 According to the EPD, its two separate divisions (see Appendix D) are responsible for monitoring the performance of contractors independently in complying with the relevant statutory and contractual requirements:

- (a) ***Environmental Compliance Division.*** The EC Division of the EPD is responsible for conducting investigations and taking samples for testing and checking against the relevant statutory requirements, and the Division would refer warranted cases to the EPD's Central Prosecution Unit for initiating prosecution actions. For example, regarding the quality of treated leachate discharge from an LTP, the EC Division would collect leachate discharge samples for testing by the Government Laboratory (Note 13), and would refer the case to the Central Prosecution Unit for further action (e.g. laying of summons and acting as the EPD's representative in courts) if the leachate discharge quality contravenes the requirements stipulated in a licence issued by the EPD under the WPCO; and

Note 12: *The WPCO stipulates the water quality that should be achieved and maintained to promote the conservation and best use of waters in Hong Kong in the public interest. Under the WPCO, the EPD may grant a licence to a person stipulating conditions on various aspects, including a limit of a characteristic or constituent (e.g. flow rate and total nitrogen level) of a discharge to a water body, and the requirements on notifying the EPD of any emergency affecting compliance with the licence.*

Note 13: *Under the WPCO, a certificate of analysis of a sample signed by the Government Chemist may be tendered as evidence in any proceeding under the Ordinance.*

Aftercare of restored landfills

- (b) *Environmental Infrastructure Division.* The EI Division of the EPD is responsible for overall contract management and monitoring the performance of contractors, including the checking of contractors' operating data, taking of environmental samples for testing, monitoring of condition of restoration facilities and administration of landfill restoration contracts. For example, regarding the quality of treated leachate discharge from an LTP, the EI Division would collect leachate discharge samples for testing by a private accredited laboratory, and would take actions (e.g. deduction of monthly contract payment) against a contractor if the leachate discharge quality contravenes the contract requirements.

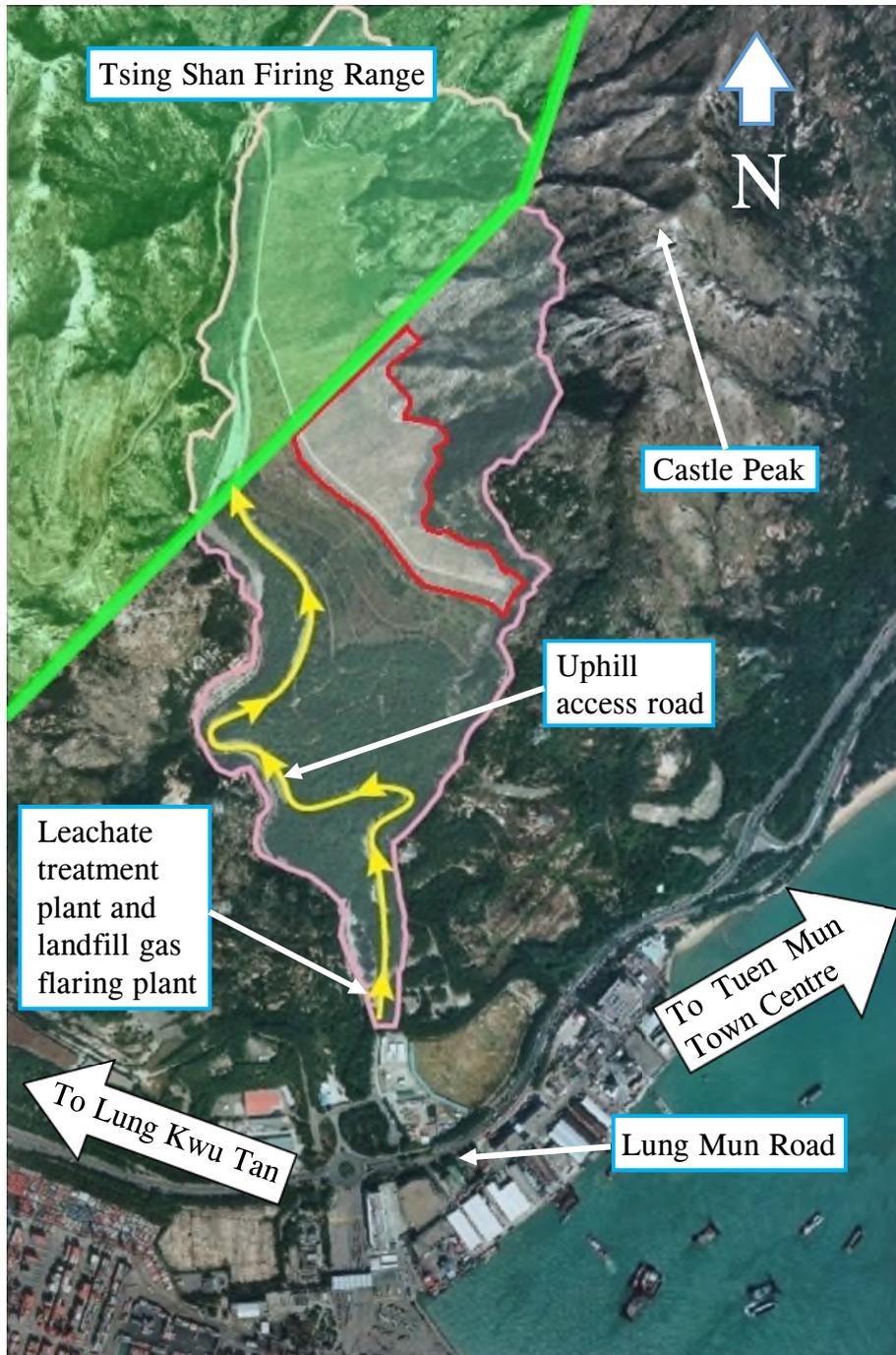
Pillar Point Valley Landfill

2.6 According to the EPD, in the past 5 years from 2013 to 2017, of the 13 restored landfills, only the landfill restoration contractor (i.e. Contractor A) of the Pillar Point Valley Landfill (PPVL — see Figure 4) in Tuen Mun District had since December 2015 failed to meet the statutory requirements under the WPCO and the contractual requirements. Also, the design leachate treatment capacity of the LTP at the PPVL is the highest among all the 5 LTPs of restored landfills due to its unique geological condition (Note 14). Audit selected the PPVL as a case study for examination of the EPD's monitoring of contractors' aftercare work at restored landfills.

Note 14: *The design leachate treatment capacity of the LTP at PPVL, Tseung Kwan O Stage II/III Landfill, Gin Drinkers Bay Landfill, Ma Yau Tong Central Landfill and Jordan Valley Landfill is 2,600, 1,440, 480, 350 and 250 cubic metres per day respectively. According to the EPD, the PPVL is situated at the lower part of a large natural catchment to the west of Castle Peak and has various water pathways along the landfill boundary, leading to a large amount of groundwater ingress into the landfill waste mass that ends up as leachate. As a result, an LTP with a high leachate treatment capacity has been designed for the PPVL.*

Figure 4

Pillar Point Valley Landfill



- Legend:
- Pillar Point Valley Landfill (65 ha)
 - Tsing Shan Firing Range (22.8 ha within landfill site)
 - Area (4.5 ha) available for application under Restored Landfill Revitalisation Funding Scheme (see Table 7 in para. 4.25)

Source: EPD records

Aftercare of restored landfills

2.7 The PPVL was operated by the former Civil Engineering Department between 1983 and 1996. Upon cessation as a waste disposal site (a total of 11 million tonnes of wastes were disposed of at the site), the PPVL was allocated to the EPD for management. In July 2003, the Finance Committee (FC) of the Legislative Council (LegCo) approved funding of \$441.3 million (Note 15) for the restoration of the PPVL. In August 2004, the EPD entered into a landfill restoration contract (i.e. Contract A3) with Contractor A for the design and construction of restoration facilities at PPVL and the aftercare of the landfill for 30 years after completion of the restoration facilities. In July 2006, the construction works of restoration facilities at PPVL were completed and the aftercare work commenced in the same month. Since July 2016, 0.2 ha of the PPVL has been used as a temporary shooting range (see Table 5 in para. 4.3). The actual capital cost for the design and construction of the restoration facilities at PPVL was \$199.2 million (Note 16). In 2016-17, the actual operating cost of the aftercare work was \$10.7 million (see Note 2 to Appendix B).

Note 15: *The approved funding of \$441.3 million was mainly for the design and construction cost of restoration facilities at \$348.1 million and the cost of the related post-commissioning aftercare work for 7 years at \$83.3 million. According to the FC paper seeking funding approval, the Government would conduct a review after 5 years of commissioning the aftercare work to determine the necessity for further aftercare of the PPVL. After commissioning the restoration facilities in 2006, the EPD completed the first environmental review in 2011 and commenced the second review in 2017 (not yet completed as of January 2018). With more operational experience gained in landfill management, the Government considered that the expenditure of aftercare work was more akin to a recurrent commitment rather than a works project in nature. Since 2011, the EPD has sought funding from the General Revenue Account instead of the CWRP to continue with the aftercare work of the 13 restored landfills.*

Note 16: *The actual capital cost for the design and construction of restoration facilities of \$199.2 million was lower than the related estimated cost of \$348.1 million (see Note 15). According to the EPD:*

- (a) Contractor A is also the contractor of Contract A2 where similar restoration facilities had been constructed and the landfills under Contract A2 are not far away from the PPVL (which Contractor A could benefit from sharing of resources); and*
- (b) these might enable Contractor A to offer a competitive tender price for Contract A3 based on the experience gained from Contract A2.*

Long period of non-compliances with statutory and contractual requirements

2.8 From January to April 2016, the EPD received complaints on suspected malpractice of Contractor A in the operation of some restoration facilities at PPVL. The issues under complaints included:

- (a) the landfill gas treatment system had been operated at a temperature below the contractual requirements; and
- (b) substandard leachate had been discharged to a foul sewer (Note 17).

2.9 The EPD conducted investigations on the complaints received and reviewed the environmental monitoring system, including:

- (a) investigations conducted by the EPD's EC Division on the alleged contravention with statutory requirements (see para. 2.11);
- (b) investigations conducted by the EPD's EI Division on the alleged non-compliances with contractual requirements (see paras. 2.12 and 2.13); and
- (c) a review on the robustness of environmental monitoring practices at the EPD's waste facilities (hereinafter referred to as "2016 EPD Review" — see paras. 2.14 and 2.15).

Note 17: *The two issues in paragraph 2.8 were substantiated by the EPD's subsequent investigations. Other issues under complaints included discharge of untreated leachate through an overflow pipe to a nearby stream, disclosure of identities of complainants to Contractor A and pre-notification to Contractor A before inspection by the EPD. The EPD's subsequent investigations found that these allegations were not substantiated.*

Aftercare of restored landfills

In May 2017, the EPD also issued a press release and a summary report on its investigation results on its website (Note 18).

2.10 The EPD's investigations found that between December 2015 and November 2017, Contractor A had various non-compliances with the statutory and contractual requirements in operating the LTP and LGP at the PPVL. A chronology of key events relating to Contractor A's non-compliances with the statutory and contractual requirements is shown at Appendix E.

2.11 *Statutory requirements.* Investigations (arising from the complaints) conducted by the EPD's EC Division found that, between May 2016 and July 2017, Contractor A had contravened various statutory requirements of the licence issued by the EPD under the WPCO (Note 19) for the PPVL. The EPD subsequently initiated prosecutions on Contractor A. In May 2017 and February 2018, Contractor A was convicted and fined a total of \$208,000 for 21 offences under the WPCO on the basis of the EC Division's findings, as follows:

- (a) \$100,000 were fined for 10 offences (i.e. a fine of \$10,000 for each offence) in 10 days in May 2016 for exceeding the stipulated maximum daily discharge limit of leachate (Note 20);

Note 18: *In December 2016, in response to an enquiry of a LegCo Member, the ENB undertook to release the investigation results after a court verdict had been given about prosecution cases on Contractor A for violations of the WPCO in order not to affect the concerned case. The EPD issued the results in May 2017 after the court had given its verdict in the same month.*

Note 19: *A person who contravenes any conditions of a licence issued under the WPCO commits an offence and, on conviction, is liable to a fine of \$200,000 and to imprisonment for 6 months.*

Note 20: *In May 2016, the licence stipulated that the daily leachate discharge to a nearby public sewer should not exceed 894 and 2,600 cubic metres per day during dry season (from November of a year to May next year) and wet season (from June to October of a year) respectively. In November 2017, Contractor A submitted an application to the EPD for increasing the dry-season leachate discharge limit to 990 cubic metres per day with a view to reducing the leachate volume in leachate storage tanks and the associated risk of leachate overflow. In December 2017, the EPD approved Contractor A's application.*

- (b) \$20,000 were fined for 2 offences (i.e. a fine of \$10,000 for each offence) in 2 days in May 2016 for failing to notify the EPD within 24 hours of incidents where the leachate discharge exceeded the maximum daily limit in (a) above; and
- (c) \$88,000 were fined for 9 offences (i.e. a fine of \$10,000 for each of 8 offences and a fine of \$8,000 for the remaining offence) in 9 days during the period from June 2016 to July 2017 for exceeding the stipulated total nitrogen level in treated leachate discharge (Note 21).

2.12 ***Contractual requirements.*** Under Contract A3, Contractor A shall submit a monthly statement showing the value of aftercare work carried out in that month, and the EPD shall make payment to the contractor after adjusting for any sum which the EPD is entitled to deduct payment if the EPD considers that Contractor A has failed to comply with the contractual requirements. For specified types of non-compliances, Contract A3 sets out a demerit point system for the deduction of monthly payments from Contractor A, as follows:

- (a) the demerit point system specifies the number of points to be deducted for each specified type of non-compliance, subject to a maximum deduction limit for different specified types of non-compliance during a monthly period (Note 22); and

Note 21: *The licence stipulates that the total nitrogen level in treated leachate discharge shall not exceed 200 and 100 milligrams per litre during dry season and wet season respectively.*

Note 22: *For example, if the total nitrogen level of a leachate discharge sample exceeds the related limit stipulated under the contract, 1 point would be deducted for each non-compliance case subject to a maximum deduction limit of 3 points during a monthly period. The maximum number of points to be deducted for all non-compliance cases in a month is 35.*

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- (b) the actual amount of monthly payment to be deducted would be calculated based on the total number of deducted points in accordance with a formula stipulated under the contract (Note 23).

2.13 The investigations (arising from the complaints) conducted by the EPD's EI Division found various non-compliances with Contract A3's requirements between December 2015 and November 2017. Up to November 2017, payments totalling about \$7.7 million had been deducted from Contractor A on the basis of EI Division's findings, as follows:

- (a) \$7,203,100 for non-compliances with the required treatment capacity of the LTP (Note 24) in 347 days during the period from May 2016 to November 2017;
- (b) \$227,300 for exceeding the total nitrogen level in treated leachate discharge (Note 25) in 20 days during the period from June 2016 to August 2017; and

Note 23: *Under Contract A3, in calculating the amount of monthly payment to be deducted, the formula takes into account the original amount of contract payment, the total demerit points deducted and price adjustment factors. In general, the more the demerit points are accumulated, the higher the deduction of contract payment will be.*

Note 24: *According to the EPD, the design treatment capacity was 2,600 cubic metres per day. Due to operational problems of the LTP at the PPVL and heavy rain during wet seasons (see paras. 2.26 and 2.30), the LTP could not fulfil the treatment capacity required under Contract A3. Monthly payments had been deducted from Contractor A after taking into account the proportion of the monthly payment attributable to the LTP operation and the number of days on which the LTP failed to meet the required treatment capacity in a month.*

Note 25: *Contract A3 requires Contractor A to comply with the requirements of any licences issued under the WPCO (including the limit of total nitrogen level in treated leachate discharge stipulated in the WPCO licence — see Note 21 to para. 2.11(c)). Monthly payments had been deducted from Contractor A under the demerit point system.*

- (c) \$221,400 for non-compliances with the LGP operating-temperature requirement (Note 26) in 28 days during the period from December 2015 to March 2016.

2016 EPD Review

2.14 In June 2016, in light of complaints received from January to April 2016 (see para. 2.8), the EPD completed a review on the robustness of environmental monitoring practices at its waste facilities (2016 EPD Review), including restored landfills (Note 27). For restoration facilities at restored landfills, the 2016 EPD Review aimed to identify and assess high-risk areas in the process of monitoring contractors that are susceptible to malpractice, and recommended the related enhancement measures, including the installation of advanced equipment with a view to automating the monitoring work and detecting cases of non-compliance in a more timely manner.

2.15 According to the EPD:

- (a) prior to the 2016 EPD Review, the EPD had monitored contractors' performance on their aftercare work at restored landfills with slimmer on-site staff (Note 28), where assessment of contractors' performance was largely based on regular sampling results (Note 29), daily visual inspections

Note 26: *Contract A3 stipulates that the operating temperature of the LGP shall be maintained within the range of 1,000 to 1,200 degrees Celsius. According to the EPD, the temperature requirement aims to break down the impurities in landfill gas and to provide sufficient energy for operating the LTP through combustion of landfill gas. Monthly payments had been deducted from Contractor A under the demerit point system.*

Note 27: *Other facilities under review included three operating strategic landfills (see para. 1.2(a)), refuse transfer stations and special waste treatment facilities.*

Note 28: *Prior to the 2016 EPD Review, for each landfill restoration contract, the EPD had deployed 1 Senior Environmental Protection Inspector and 1 to 3 Environmental Protection Inspectors for monitoring the contractor's aftercare work.*

Note 29: *For example, prior to the 2016 EPD Review, the EPD's frequency of collecting treated leachate discharge samples for testing varied among different restored landfills, ranging from weekly to quarterly intervals.*

Aftercare of restored landfills

during daytime on weekdays and manual checking of contractors' operating data;

- (b) subsequent to and arising from the 2016 EPD Review, the EPD has implemented a number of measures to strengthen its on-site monitoring work of contractors' aftercare work at restored landfills, including installing advanced equipment at PPVL and other restored landfills installed with LTP and LGP, conducting daily and weekend surprise checks (Note 30), adopting irregular inspection patterns and locating new sampling points for leachate discharge; and
- (c) before installation of the advanced equipment as recommended by the 2016 EPD Review, the EPD has monitored contractors' compliance with the contractual requirements mainly through the following means:
 - (i) carrying out regular inspections and completing the daily operation checklists by EPD site monitoring staff for cross-checking the monitoring results reported in the contractors' aftercare monthly reports (which provide information including monitoring data on leachate discharge, landfill gas and ground settlement); and
 - (ii) reviewing the aftercare monthly reports submitted by contractors.

Monitoring of EPD contractors' aftercare work

2.16 Against the above background, Audit examination has found that there is room for improvement in the EPD's monitoring of contractors' aftercare work of restored landfills, as follows:

- (a) need to ensure compliance with statutory and contractual requirements (see paras. 2.17 to 2.25);

Note 30: *Subsequent to the 2016 EPD Review, the EPD employed 1 contract staff to lead 2 Environmental Protection Inspectors for conducting weekend surprise checks at restored landfills.*

- (b) need to strengthen monitoring of overhaul works of restoration facilities (see paras. 2.26 to 2.29);
- (c) need to improve LTP at PPVL (see paras. 2.30 to 2.32);
- (d) scope for improving demerit point system (see paras. 2.33 to 2.37); and
- (e) scope for improving security measures at restored landfills (see paras. 2.38 to 2.41).

Need to ensure compliance with statutory and contractual requirements

2.17 The landfill restoration contractors are required to comply with various statutory and contractual requirements. The EPD's investigations found Contractor A's non-compliance with such requirements (see paras. 2.11 and 2.13). Audit has found room for improvement in ensuring contractors' compliance with statutory and contractual requirements (see paras. 2.18 to 2.25).

2.18 The 5 landfill restoration contracts stipulate, among others, that:

- (a) the operating temperature of an LGP shall be maintained within a range. According to the EPD, the LGP operating-temperature requirement is contingent on the design submission by the related contractors with certification by an independent consultant. The temperature requirement aims to break down the impurities in landfill gas (Note 31). For example, for the PPVL, the operating-temperature range is from 1,000 to 1,200 degrees Celsius; and
- (b) site records (e.g. daily log sheets) shall be properly stored and be available for the EPD's inspection upon request, and all relevant information should be clearly and systematically recorded in the documents.

Note 31: *Apart from the operating temperature of an LGP, the landfill restoration contracts also stipulate requirements on several aspects such as methane level of landfill gas emission on the ground surface and time of landfill gas combustion.*

Aftercare of restored landfills

2.19 **Information in log sheets and aftercare reports.** Audit noted that, in light of complaints received on the PPVL, the EPD's investigations in mid-2016 revealed that the LGP operating temperature as indicated in daily log sheets recorded by the staff of Contractor A had been below 1,000 degrees Celsius on 28 days during the period from December 2015 to March 2016 (see para. 2.13(c)), and these incidents had not been mentioned in the related aftercare monthly reports submitted to the EPD (Note 32). In mid-2016, in view of the above investigation results, the EPD further requested Contractor A to provide daily log sheets covering 973 days from January 2013 to August 2015 for checking purpose. However, Contractor A later informed the EPD that the daily log sheets for 299 (31% of 973) days were missing and 1 daily log sheet was found undated.

2.20 **Installation of advanced equipment.** As mentioned in paragraph 2.14, the EPD conducted the 2016 EPD Review in light of complaints received. The 2016 EPD Review recommended, among others, the installation of advanced equipment at PPVL and other restored landfills installed with LTPs with a view to automating the monitoring work and detecting cases of non-compliance in a more timely manner. According to the EPD, the 2016 EPD Review focused on the installation of advanced equipment at 5 restored landfills installed with both LTP and LGP (see Table 2 in para. 2.3). As the recommended advanced equipment items are not included in the landfill restoration contracts, the cost of procuring and installing such equipment would be borne by the EPD. The recommended advanced equipment included:

- (a) **Data monitoring system.** The system would transmit operating data (e.g. operating temperature, time of combustion and flow rate of leachate discharge) of an LGP/LTP at a restored landfill to the EPD's site office for real-time monitoring;
- (b) **Automatic sampling device and on-line analyser.** These equipment items would collect leachate discharge samples at frequent intervals and continuously analyse the quality of leachate discharge in order to enable EPD staff to monitor the LTP performance; and

Note 32: *In August 2016, the EPD referred the case to the Hong Kong Police Force for further investigation on whether inaccurate data or false statements had been deliberately provided to the EPD. According to the EPD, the Hong Kong Police Force had completed the investigation, and the result was that, after seeking legal advice, there was no adequate evidence to initiate prosecution arising from this investigation.*

- (c) ***Surveillance camera.*** The device would prevent theft and vandalism, and to act as a deterrent against possible malpractices and potential illegal activities (e.g. physical tampering or manipulation of operating data) in the operation of restoration facilities.

In April 2017, the data monitoring system of the LTP and LGP at PPVL was upgraded for transmitting the related operating data to EPD site office for real-time monitoring, obviating the need for cross-checking site records (e.g. daily log sheets) with aftercare monthly reports.

2.21 ***Installation progress of advanced equipment.*** As of March 2018, the installation dates of certain advanced equipment items (Note 33) were later than the target dates as set in the 2016 EPD Review, and some other equipment items had not yet been installed (see Table 3).

Note 33: *For the 3 restored landfills (namely Tseung Kwan O Stage I Landfill, Shuen Wan Landfill and Sai Tso Wan Landfill — see Table 2 in para. 2.3) installed only with an LGP, the EPD considered that the LGP design at these restored landfills was simpler than those installed at the other 5 restored landfills where LTPs had also been installed. Therefore the EPD had given priority to enhance the environmental monitoring systems at the 5 landfills installed with both LTP and LGP.*

Aftercare of restored landfills

Table 3

**Installation progress of advanced equipment at 5 restored landfills
installed with both LTP and LGP
(March 2018)**

Advanced equipment	Target date in 2016 EPD Review	Actual installation date	Target date in 2016 EPD Review	Actual installation date			
		Pillar Point Valley Landfill (Contract A3)		Tseung Kwan O Stage II/III Landfill (Contract A1)	Gin Drinkers Bay Landfill (Contract A2)	Jordan Valley Landfill (Contract B2)	Ma Yau Tong Central Landfill (Contract B2)
1. Reviewing and upgrading data monitoring system	3rd quarter of 2016	Apr 2017	End 2016	(Note 1)		Completed in Jan 2018 and already in-use	Completed in Jan 2018 for LGP and upgrading considered not necessary for LTP (Note 2)
2. Reviewing and installing automatic sampling device/ on-line analyser	1st quarter of 2017	Quotation exercise in progress	No target date	Quotation exercise in progress	Quotation exercise in progress	Already in-use	Completed in Jan 2018 and already in-use
3. Installing surveillance camera	3rd quarter of 2016	May 2016	3rd quarter of 2016	Dec 2016	Dec 2016	Considered unnecessary by EPD (Note 3)	Completed in Jan 2018 and already in-use

Legend: Shaded boxes indicate that, as of March 2018, advanced equipment had not yet been installed or the installation dates were later than the target installation dates as recommended in the 2016 EPD Review.

Source: *Audit analysis of EPD records*

Table 3 (Cont'd)

- Note 1: In March 2018, the EPD informed Audit that, subject to satisfactory performance of the new data monitoring system installed at the PPVL, Contractor A would conduct a feasibility study to examine the compatibility of the data monitoring system with the existing LTPs before upgrading them at the Tseung Kwan O Stage II/III Landfill and Gin Drinkers Bay Landfill.*
- Note 2: In December 2017, the EPD informed Audit that the LTP at Ma Yau Tong Central Landfill would only be used in the wet season and it would not be economical to install the data monitoring system, and the EPD considered that installation of surveillance cameras would serve the purpose of strengthening the monitoring of the operating data.*
- Note 3: In December 2017, the EPD informed Audit that the LTP at Jordan Valley Landfill adopted biological methods for treatment of leachate and the related landfill restoration contract did not stipulate requirements on the operating temperature of the LTP, and therefore the installation of surveillance cameras was considered unnecessary.*

2.22 Regarding the progress of installing advanced equipment at the restored landfills with LTP and LGP, in March 2018, the EPD informed Audit that:

- (a) the existing LTPs installed at restored landfills were proprietary-built some 20 years ago, and all instrumentations and data logging systems were analogue-based; and
- (b) to allow real-time monitoring, a considerable amount of time is required to identify the appropriate type of advanced equipment in order to ensure the compatibility of advanced equipment with the existing LTPs before the procurement of such equipment.

2.23 *Some landfills without upgraded data monitoring systems.* For the 8 restored landfills installed with LTP and/or LGP (see items 1, 2, 3, 7, 8, 10, 11 and 13 of Table 2 in para. 2.3), as of March 2018, the data monitoring systems at PPVL and Jordan Valley Landfill (the 2 landfills are installed with both LTP and LGP) had been upgraded. According to the EPD, the data monitoring system for Sai Tso Wan Landfill (installed only with an LGP — see Note 33 to para. 2.21) was upgraded in January 2018 for monitoring the flaring temperature of the LGP and the landfill gas flowrate. For the remaining 5 restored landfills, as of March 2018, Audit noted that the data monitoring systems at 2 restored landfills are yet to be upgraded by the EPD and the upgrading of systems for 3 restored landfills were considered not necessary, as follows:

Aftercare of restored landfills

Data monitoring systems yet to be upgraded

- (a) 2 restored landfills installed with both LTP and LGP where the data monitoring systems were yet to be upgraded (i.e. Tseung Kwan O Stage II/III Landfill and Gin Drinkers Bay Landfill — see Table 3 in para. 2.21);

Upgrading of data monitoring systems considered not necessary

- (b) 1 restored landfill (Ma Yau Tong Central Landfill) installed with both LTP and LGP where upgrading of the data monitoring system at LTP was considered not necessary by the EPD (see Note 2 to Table 3 in para. 2.21); and
- (c) 2 restored landfills (Tseung Kwan O Stage I Landfill and Shuen Wan Landfill) installed only with LGP where upgrading of data monitoring system was considered not necessary by the EPD (Note 34).

2.24 Given that the installation of advanced equipment at selected restored landfills as recommended by the 2016 EPD Review is to automate the EPD's monitoring work and to detect cases of non-compliance in a more timely manner, Audit considers that the EPD needs to expedite the progress of installing such advanced equipment. The EPD also needs to keep under review the operation of the installed equipment to assess their effectiveness in monitoring of contractors' aftercare work.

Note 34: *According to the EPD, the existing monitoring equipment at the two restored landfills could meet the monitoring need, as follows:*

- (a) *for Tseung Kwan O Stage I Landfill, the LGP operates between 8 a.m. and 4 p.m. everyday under the monitoring of EPD on-site staff, who would also conduct surprise checks during non-office hours and public holidays. The EPD would review the need for installing additional monitoring system when necessary; and*
- (b) *for Shuen Wan Landfill, the landfill gas was delivered to a nearby gas production plant of a gas supply company (see Note 3 to Table 2 in para. 2.3), and the LGP would only be operated in case of maintenance or inspection of the gas production plant.*

2.25 For the 5 restored landfills (see para. 2.23 (a) to (c)) where the upgrading of related data monitoring systems are yet to be completed or considered not necessary, site records (e.g. daily log sheets — see para. 2.18(b)) would remain an important means for the EPD to monitor the contractors' compliance with the statutory and contractual requirements. In Audit's view, before automated data monitoring systems are in place, the EPD needs to ensure that the contractors properly maintain the site records, and strengthen its monitoring actions (e.g. strengthening the EPD's surprise inspections) on contractors' compliance with the statutory and contractual requirements and the related record-keeping requirements.

***Need to strengthen monitoring of
overhaul works of restoration facilities***

2.26 In early 2016, the EPD found that the LTP at PPVL was not functioning properly and could not treat leachate in an efficient manner. Subsequently, the EPD instructed Contractor A to carry out overhaul works for the LTP to remedy the problem. In May 2016, in view of the proposed overhaul works and the forecast increase of leachate inflow in the forthcoming wet season, the EPD instructed Contractor A to suspend the LTP operation and arrange direct transfer of leachate by vehicles to the LTP of the EPD's West New Territories Landfill and to the Drainage Services Department (DSD)'s Pillar Point Sewage Treatment Works for off-site treatment (Note 35). In November 2016, Contractor A commenced the LTP overhaul works at his own cost. In January 2017, the overhaul works were completed and the LTP resumed operation. The above leachate transfer arrangement then ceased, with a total of about 366,000 cubic metres of leachate transferred and resulted in the deduction of \$5,155,000 from Contractor A for non-compliances with the required treatment capacity of the LTP (see para. 2.13(a)).

Note 35: *Under normal circumstances, leachate generated from a restored landfill would be firstly treated by an LTP to reduce the pollutant concentrations to within the limits stipulated under the related licence issued under the WPCO before discharging the treated leachate to a nearby public sewer, and the treated leachate would be conveyed to a DSD facility for further treatment before discharge to a nearby water body. According to the EPD, the heavy rain in May 2016 caused the leachate storage tanks at PPVL reaching the alert level and it took some time to transfer the leachate from PPVL to elsewhere. Contractor A discharged leachate into a nearby public sewer to avoid overflow of the leachate storage tanks, and this resulted in the leachate discharge volume in 10 days in May 2016 exceeding the maximum daily discharge limit stipulated in the licence issued under the WPCO (see para. 2.11(a)).*

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2.27 After the completion of overhaul works in January 2017, in April 2017, Contractor A found that an exhaust gas pipe duct of the LTP had been dislocated, resulting in loss of heat energy transmitted to the LTP and affecting the LTP's treatment performance. According to the EPD, while the leachate transfer arrangement was mainly caused by a series of heavy rainstorms in July 2017 (see para. 2.30), the dislocation of exhaust gas pipe duct was also one of the reasons causing the transfer of leachate from the PPVL to the DSD's Pillar Point Sewage Treatment Works from July to November 2017.

2.28 In March 2018, the EPD informed Audit that:

- (a) upon the discovery of the dislocated exhaust gas pipe duct, Contractor A implemented temporary measures in August 2017 to keep the LTP in operation. As the rectification works of the exhaust gas pipe duct were carried out in parallel with the scheduled maintenance period of the LTP, this had not caused additional downtime of the LTP; and
- (b) teething problems for overhaul works would commonly occur during the early stage of testing, and such a defect was not unreasonable and regarded as part of the repair and maintenance works in many other electrical and mechanical works projects.

2.29 While noting the EPD's explanation above, to minimise overhaul works' problems in future, Audit considers that the EPD needs to strengthen monitoring of contractors' overhaul works of restoration facilities.

Need to improve leachate treatment plant at Pillar Point Valley Landfill

2.30 According to the EPD, in July 2017, due to very heavy rainfall (Note 36) and the pipe-dislocation problem of the LTP overhaul works (see para. 2.27), the leachate inflow at PPVL far exceeded the LTP treatment capacity and reached the alert level of leachate storage tanks. In the same month, Contractor A proposed and obtained the EPD's consent to directly transfer leachate by vehicles from PPVL to the DSD's Pillar Point Sewage Treatment Works for off-site treatment. The transfer arrangement ceased in November 2017, with a total of about 134,000 cubic metres of leachate transferred. The above leachate transfer arrangement in 2017 had resulted in deduction of \$2,048,100 from Contractor A for non-compliances with the required treatment capacity of the LTP (see para. 2.13(a)).

2.31 Audit noted that, in mid-2017, Contractor A engaged a consultant to conduct a hydrogeological survey for PPVL to propose mitigation measures with a view to resolving the leachate inflow (due to unique geological condition — see Note 14 to para. 2.6) and overflow problem, including reviewing the need to construct additional groundwater pumps or leachate storage tanks. In February 2018, the survey was completed and recommended mitigation measures to resolve the problem (including installation of groundwater pumps). In Audit's view, the EPD needs to take measures to ensure early implementation of mitigation measures to resolve the leachate inflow/overflow problem at PPVL.

2.32 Furthermore, in October 2017, Contractor A informed the EPD that the higher concentration of impurities in the leachate at PPVL had led to deterioration in the quality of pre-treated leachate, and this consequently affected the LTP treatment efficiency and resulted in frequent shutdown of the LTP for maintenance. In November 2017, Contractor A installed a pre-treatment system at upstream of the LTP with a view to mitigating the problem. In Audit's view, the EPD needs to monitor the effectiveness of the leachate pre-treatment system for improving the LTP treatment efficiency at PPVL.

Note 36: *According to the EPD, based on the records of the Hong Kong Observatory, the total rainfall in July 2017 was 570 millimetres, which was 51% above the average monthly rainfall figure of 376.5 millimetres from 1981 to 2010.*

Scope for improving demerit point system

2.33 The existing demerit point system under the 5 landfill restoration contracts includes a provision for deducting points if the total nitrogen level of a leachate discharge sample exceeds the related limit stipulated under the contract. The related contractual limit is the same as that stipulated in the licence issued under the WPCO.

2.34 Audit notes that, for Contract A3:

- (a) between June 2016 and July 2017, there were 9 days during which offences had been committed by Contractor A for exceeding the total nitrogen level in treated leachate discharge (see para. 2.11(c));
- (b) for 7 of the 9 days, the EI Division collected leachate samples separately and delivered the samples to a private accredited laboratory for testing. The laboratory test results showed that the total nitrogen level in the treated leachate discharge exceeded the required limit, and the EI Division took action to deduct payment from Contractor A (see para. 2.13(b)); and
- (c) for the other 2 days, although the Court ruled that Contractor A had exceeded the total nitrogen level (i.e. also exceeding the contractual limit which is the same as the limit stipulated in the licence issued under the WPCO — see Note 21 to para. 2.11(c)), the EPD's EI Division had not taken contractual action to deduct points under the demerit point system and deduct contract payment from Contractor A.

2.35 Audit also notes that while the 5 landfill restoration contracts require contractors to comply with the requirements of any licences issued under the WPCO, apart from total nitrogen limit, the demerit point system does not cover other non-compliances with the licence requirements under the WPCO, including cases where the stipulated maximum daily discharge limit of leachate is exceeded (see para. 2.11(a)) and the 24-hour notification requirement is not observed (see para. 2.11(b)).

2.36 In response to Audit’s enquiry, in March 2018, the EPD informed Audit that:

- (a) the EI Division had assessed a contractor’s performance in 12 aspects (Note 37) on a regular basis and had reflected Contractor A’s extent of compliance with environmental law and regulations in the related half-yearly performance reports (Note 38). A contractor’s performance report would be taken into account when considering the award of further contracts to the same contractor in future;
- (b) any amendments to existing contracts would require mutual agreement between the EPD and its contractors, and unilateral decision might lead to potential litigation; and
- (c) the EPD considered it inappropriate and unfair to introduce such “double penalty system” into existing landfill restoration contracts but it can consider reviewing this for future contracts in consultation with relevant government tendering boards.

2.37 In Audit’s view, the EPD needs to conduct a review on whether a landfill restoration contractor’s conviction results can be used as evidence for deducting points under the demerit point system and deducting contract payments from the contractor in future contracts. Furthermore, since the contractor’s non-compliance with the relevant statutory environmental requirements is an important issue in assessing its performance, Audit considers that the EPD needs to review the feasibility of incorporating non-compliances with the relevant statutory environmental requirements in the demerit point system of a landfill restoration contract in future.

Note 37: *The 12 aspects are: (1) workmanship; (2) operation; (3) landfill aftercare; (4) environmental monitoring and pollution control; (5) progress; (6) site safety; (7) organisation; (8) general obligations; (9) industry awareness; (10) resources; (11) design; and (12) attendance to emergency. There are different sub-aspects under each aspect, and each aspect/sub-aspect is given 1 of the 5 ratings, namely “Very Good”, “Good”, “Satisfactory”, “Poor” or “Very Poor”, and an overall performance rating is given for the performance report.*

Note 38: *Under the “environmental monitoring and pollution control” aspect, there is a sub-aspect called “compliance with environmental laws and regulations”. While a “Good” rating was given for this sub-aspect for the half-yearly period from January to June 2016, a “Satisfactory” rating was given for the half-yearly period from July to December 2016. A “Poor” rating was given for the “environmental monitoring and pollution control” aspect for both half-yearly periods.*

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Scope for improving security measures at restored landfills

2.38 Under the 5 landfill restoration contracts, the contractors are required to maintain all facilities (e.g. warning signs and fencing) at restored landfills in good condition, including:

- (a) warning notices shall be erected and maintained at appropriate locations; and
- (b) fencing shall be erected and maintained to define the boundary of a landfill site and to prevent trespassers from entering the site.

2.39 Audit staff conducted site visits to three restored landfills (namely Ma Yau Tong Central Landfill in Kwun Tong District, Siu Lang Shui Landfill in Tuen Mun District and Tseung Kwan O Stage I Landfill in Sai Kung District) from November 2017 to January 2018, and found that there was scope for improving security measures at restored landfills. For example, suspected trespassers were observed at Ma Yau Tong Central Landfill (see Photograph 3) and Tseung Kwan O Stage I Landfill.

Photograph 3

Suspected trespassers and damaged fencing at Ma Yau Tong Central Landfill



Source: Photograph taken by Audit staff on 10 December 2017

- 2.40 During January to March 2018, the EPD informed Audit that:
- (a) the total length of the boundary of the 3 restored landfills (i.e. Siu Lang Shui Landfill, Ma Yau Tong Central Landfill and Tseung Kwan O Stage I Landfill) was about 7.2 kilometres. Some spots at the landfills were vulnerable and susceptible to damage due to fallen trees during adverse weather and vandalism by trespassers;
 - (b) unauthorised entry into a restored landfill by trespassers was a security and safety issue that might jeopardise the trespassers' personal safety and cause damage to restoration facilities, and there would also be a liability issue in case of personal injuries; and
 - (c) landfill restoration contractors had been carrying out on-going maintenance and repair works of fencing within a reasonable time, erecting warning signs and reporting vandalism cases to the Hong Kong Police Force. For the Ma Yau Tong Central Landfill as shown in Photograph 3 of paragraph 2.39, in view of the frequent trespassing and fencing damage at that landfill, both the EPD and Contractor B had been actively taking follow-up actions to prevent recurrence of trespassing and repair the damaged fencing.

2.41 As trespassing of restored landfills is a security and safety issue (see para. 2.40(b)), the EPD needs to consider taking further measures to improve security at restored landfills.

Audit recommendations

2.42 **Audit has *recommended* that the Director of Environmental Protection should:**

- (a) **expedite the progress of installing the advanced equipment at restored landfills as recommended by the 2016 EPD Review, and keep under review the operation of the installed equipment to assess their effectiveness in monitoring of contractors' aftercare work;**
- (b) **before automated data monitoring systems are in place, ensure that the contractors properly maintain the site records, and strengthen the**

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- EPD's monitoring actions on the contractors' compliance with the statutory and contractual requirements and the related record-keeping requirements;**
- (c) strengthen monitoring of contractors' overhaul works of restoration facilities;**
 - (d) take measures to ensure early implementation of mitigation measures to resolve the leachate inflow/overflow problem at PPVL;**
 - (e) monitor the effectiveness of the leachate pre-treatment system for improving the LTP treatment efficiency at PPVL;**
 - (f) conduct a review on whether a landfill restoration contractor's conviction results can be used as evidence for deducting points under the demerit point system and deducting contract payments from the contractor in future contracts;**
 - (g) review the feasibility of incorporating non-compliances with the relevant statutory environmental requirements in the demerit point system of a landfill restoration contract in future; and**
 - (h) consider taking further measures to improve security at restored landfills.**

Response from the Government

2.43 The Director of Environmental Protection agrees with the audit recommendations. He has said that the EPD will closely monitor:

- (a) the contractors' site records and compliance with the statutory and contractual requirements; and**
- (b) the effectiveness of the on-going mitigation measures undertaken at PPVL, including the effectiveness of the leachate pre-treatment system for improving the LTP treatment efficiency.**

PART 3: DEVELOPMENT OF GOVERNMENT RECREATIONAL FACILITIES AT RESTORED LANDFILLS

3.1 This PART examines the development of government recreational facilities at restored landfills. Three development projects (see para. 3.3) were selected for examination with a view to identifying room for improvement, focusing on issues relating to development of government recreational facilities at restored landfills.

Government recreational facilities at restored landfills

3.2 According to the EPD, there are restrictions on the beneficial use of restored landfills (e.g. excessive loading should be avoided due to ground settlement problem), and they are considered more suitable for recreational use. Since the early 2000s, the Government has planned/implemented projects for developing recreational facilities at 7 restored landfills (see Table 4 and their photographs in paras. 3.4, 3.24, 3.45 and Appendix F for details). These projects relate to the development of parks and gardens for the LCSD (Note 39) which is responsible for the management of the completed facilities upon their commissioning (Note 40).

Note 39: *According to the EPD, generally speaking: (a) the Lands Department has allocated the concerned piece of land to the EPD for the landfill restoration works and aftercare work, where the EPD would sub-allocate to the LCSD during the construction and operation periods of the recreational facilities; and (b) the above sub-allocation arrangement can be extended until the landfill aftercare work is completed, and thereafter, the LCSD can make direct applications to the Lands Department for the land allocation of the site.*

Note 40: *In 2013, Audit conducted a review to examine the LCSD's development and management of parks and gardens, including inspection, monitoring, repair and maintenance of such facilities. The results of the review were included in Chapter 4 of Report No. 60 of the Director of Audit of March 2013. Audit made a number of recommendations to address the identified improvement areas, and the LCSD has agreed to implement all the audit recommendations.*

**Development of government recreational facilities
at restored landfills**

Table 4

**Government recreational projects at restored landfills
(as of December 2017)**

Restored landfill	Recreational project	Area of facility (ha)	Works agent	Original Approved Project Estimate (APE) (Note 1) (Actual expenditure) (\$ million)	Increase in cost (\$ million)	Original target project completion date (Note 1) (Actual completion date)	Actual completion later than original target completion date by (month)
Under preliminary planning by HAB and LCSD							
1. Gin Drinkers Bay	Kwai Chung Park	25.5	(Note 2)	Still at preliminary planning stage despite completion of restoration facilities by EPD in September 2000			
Works completed and facility open for use by general public							
2. Tseung Kwan O Stage I	Wan Po Road Pet Garden (1.2 ha) and adjacent car park (0.1 ha)	1.3	HAD	12.8 (25.6)	12.8	Sep 2010 (Feb 2013)	29
3. Jordan Valley	Jordan Valley Park	6.3 (Note 3)	ArchSD	179.6 (192.1)	12.5	Dec 2009 (Mar 2010)	3
4. Sai Tso Wan	Sai Tso Wan Recreation Ground	3.0	EPD	39.9 (46.4)	6.5	Nov 2002 (Feb 2004)	15 (Note 4)
5. Ma Yau Tong West	Ma Yau Tong West Sitting-out Area	0.1	HAD	3.9 (5.1)	1.2	Oct 2010 (Sep 2011)	11
6. Ma Yau Tong Central	Ma Yau Tong Central Sitting-out Area	0.1	HAD	6.2 (4.6)	Nil	Jul 2011 (Nov 2010)	Nil
7. Ngau Chi Wan	Ngau Chi Wan Park	4.0	ArchSD	199.4 (169.5)	Nil	Mar 2010 (Feb 2010)	Nil
Total				441.8 (443.3)			

Source: Audit analysis of ArchSD, EPD and HAD records

Development of government recreational facilities at restored landfills

Table 4 (Cont'd)

Note 1: According to the HAD, there were six stages in construction: (i) feasibility study; (ii) preliminary design; (iii) detailed design; (iv) contract documentation and tendering; (v) construction; and (vi) post-construction service. The original APE and target project completion date are based on the following sources:

- (a) for items 3, 4 and 7: papers submitted to LegCo for seeking funding approval after the detailed design stage;*
- (b) for item 2: papers submitted by the LCSD and the EPD to their senior management/the HAB for seeking funding approval after the feasibility study stage. If there are more than one funding approval papers, the information contained in the first paper is shown in the Table; and*
- (c) for items 5 and 6: papers submitted by the LCSD to its senior management for seeking funding approval after the feasibility study stage. If there are more than one funding approval papers, the information contained in the first paper is shown in the Table.*

Note 2: In February 2018, the ArchSD informed Audit that it had provided technical advice to the LCSD on the Kwai Chung Park project and had not yet become the works agent for the project.

Note 3: According to the EPD, 5 ha of the Jordan Valley Park is located within the Jordan Valley Landfill (see item 7 of Table 1 in para. 1.11) and 1.3 ha is outside the landfill.

Note 4: According to the EPD:

- (a) the Sai Tso Wan project was the first project for developing the afteruse facilities at a closed restored landfill. No similar rates or contracts could be compared during the preparation of the paper submitted to LegCo. The tender prices of the returned tenders received in June 2002 had exceeded the original APE. In February 2003, the Financial Services and the Treasury Bureau approved the increase of APE from \$39.9 million to \$46.5 million;*
- (b) the actual project completion date being later than the original target completion date was mainly due to the longer-than-expected time for conducting prequalification/tender invitations and evaluation for engaging a contractor for the recreational project. The construction works completed in February 2004 was one month ahead of the target completion date of March 2004 stipulated under the relevant contract; and*
- (c) in 2014, the EPD handed over the management responsibility of the Sai Tso Wan Recreation Ground to the LCSD.*

Development of government recreational facilities at restored landfills

3.3 As shown in Table 4, the implementation of 5 government recreational projects at restored landfills (i.e. items 1 to 5) was that one project's development progress was slow (still at preliminary planning stage) and four projects had increases in costs and the actual project completion dates were later than the original target completion dates. Audit selected three projects as case studies with a view to identifying room for improvement, focusing on issues relating to development of government facilities at restored landfills, as follows:

- (a) development of Kwai Chung Park (paras. 3.4 to 3.21);
- (b) construction of Wan Po Road Pet Garden (paras. 3.22 to 3.43); and
- (c) construction of Jordan Valley Park (paras. 3.44 to 3.59).

Development of Kwai Chung Park

3.4 The Kwai Chung Park, covering an area of about 25.5 ha (including 4.5 ha allocated for temporary cricket grounds under construction and 3.9 ha for a BMX park completed in 2009 — see item 5 of Table 1 in para. 1.11), is located inside the Gin Drinkers Bay Landfill in Kwai Tsing District. Phase I development of the Park with basic facilities (Note 41) was completed in 1989 (see Photograph 4). Owing to potential landfill gas problems revealed in 1992, the Park had not been formally opened to the public since then. In 1999, the Park was handed over to the EPD for carrying out landfill restoration works. In January 2000, the LCSD took over the Kwai Chung Park development project from the former Regional Services Department. In September 2000, the EPD completed the restoration works and commenced the aftercare work. Up to December 2017, the project was still at preliminary planning stage. According to the LCSD, there were various technical difficulties and obstacles encountered in development of the huge landfill site surrounded with slopes, which had imposed constraints and restrictions on planning and preliminary design work.

Note 41: *The basic facilities constructed under Phase I development of Kwai Chung Park included access roads, footpath, lighting facilities and an administration office with construction cost of \$21.3 million.*

Photograph 4

**Kwai Chung Park site
(not yet opened for public use)**



Source: ArchSD records

3.5 The slow progress in developing the Kwai Chung Park had been covered in Chapter 4 (Development and management of parks and gardens) of Report No. 60 of the Director of Audit of March 2013. The LCSD has agreed with the audit recommendations of devising an action plan for future development of the Park with a view to putting into gainful use as soon as practicable, and exploring alternative sources of funding for the future development of the site. However, Audit's follow-up review revealed that the development progress of the Park was still less than satisfactory (see paras. 3.6 to 3.21). A chronology of key events in developing the Park is shown at Appendix G.

Need to expedite actions to develop Kwai Chung Park

3.6 As reported in the Audit Report of March 2013 (see para. 3.5), the LCSD put on hold the planning work for the development of Kwai Chung Park in 2010 (see item 15 of Appendix G). Audit's follow-up review found that, in 2013, in response to the Kwai Tsing District Council members' concerns about the development of the Kwai Chung Park, the LCSD proposed to a committee under the District Council the project scope of the Park (including a golf driving range with

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30 golf driving bays), and the committee endorsed the LCSD's proposed project scope.

3.7 In May 2014, the HAB issued a Project Definition Statement (Note 42) for the Kwai Chung Park to the ArchSD for the latter to prepare a Technical Feasibility Statement in order to confirm the technical feasibility of the proposed project. In July 2014, the ArchSD informed the HAB and the LCSD that:

- (a) the site could not physically accommodate the proposed golf driving range owing to the existence of numerous restoration facilities (e.g. landfill gas and leachate collection pipes and wells) over the site;
- (b) any structure higher than one storey could not be constructed on the site because of limited load bearing capacity and differential ground settlement problems;
- (c) a landfill gas hazard assessment (Note 43) should be conducted to evaluate the potential hazard that landfill gas might pose to the Park; and

Note 42: *According to Financial Circular No. 4/2012 "Requirement for Project Definition Statement and Technical Feasibility Statement for Capital Works Projects" issued in July 2012:*

- (a) the responsible policy bureau should prepare a Project Definition Statement;*
- (b) a works department should submit a Technical Feasibility Statement of a proposed capital works project to the Development Bureau for approval within four months from the receipt of a Project Definition Statement from the responsible policy bureau; and*
- (c) the responsible policy bureau should submit bids for the necessary resources for implementing the proposed works project under the Government's Capital Works Resource Allocation Exercise by providing the Financial Services and the Treasury Bureau with an approved Technical Feasibility Statement.*

Note 43: *According to the EPD, for any development located within 250 metres around a landfill site, the project proponent should conduct a landfill gas hazard assessment in accordance with the EPD's landfill gas hazard assessment guidance notes to assess the potential landfill gas hazards and recommend appropriate protection and mitigation measures during the design, construction and operation stages.*

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- (d) the HAB should arrange funding for carrying out the landfill gas hazard assessment (see (c) above) and also revise the Project Definition Statement by removing the proposed golf driving range from the project scope of the Park.

3.8 In September 2014, the ArchSD advised the LCSD that the estimated cost for carrying out a landfill gas hazard assessment for the Kwai Chung Park was \$0.6 million. In January 2015, the EPD informed the LCSD that, for similar past projects, preliminary landfill gas hazard assessments were carried out before preparing the Technical Feasibility Statement. In the same month, the LCSD informed the HAB that it was unable to arrange funding (Note 44) for the assessment due to the very stringent financial position. According to the LCSD, it tried to seek the required funding from the HAB but in vain.

3.9 In November 2016, in response to concerns of the Kwai Tsing District Council's members on the opening of the Park, the LCSD informed the District Council of the ArchSD's views of July 2014 that the site could not physically accommodate the proposed golf driving range owing to the existence of numerous restoration facilities over the site (see para. 3.7(a)). At the same meeting, the District Council passed a motion requesting the responsible bureaux/departments to deliberate and study the re-opening of the Kwai Chung Park to the public in a safe condition and to develop and optimise all the basic facilities of the Park as soon as possible in order to increase the greening areas and open spaces in Kwai Tsing District. The District Council also set up a working group to oversee the development of the Park.

3.10 With commitment to take forward this project, the Kwai Chung Park was included in the Policy Address of January 2017 as one of the 26 projects in the five-year plan for sports and recreation facilities targeted to be launched in or before 2022. After a site visit by the Kwai Tsing District Council's working group in mid-January 2017, the LCSD consulted the working group on the revised project scope in February and April 2017 respectively. In May 2017, the ArchSD informed the LCSD that a landfill gas hazard assessment for the Park (see para. 3.7(c) and (d)) could not proceed without the instruction and funding from the project proponent, and expressed concerns on whether the project could be launched according to the

Note 44: *In March 2018, the LCSD informed Audit that the cost for the technical assessment was normally not required to be borne by the LCSD.*

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five-year plan. In the same month, the LCSD sought the HAB's support on the preliminary project scope for the ArchSD to carry out the assessment with funding to be allocated from the LCSD.

3.11 In June 2017, upon the HAB's request, the LCSD sought clarification from the EPD and the ArchSD on the "order of precedence" for carrying out the landfill gas hazard assessment and preparing the Technical Feasibility Statement for the project. The EPD had no objection if the Technical Feasibility Statement would include a commitment in carrying out the hazard assessment at detailed planning stage. In the same month, the ArchSD informed the LCSD that:

- (a) it would have no objection if a commitment would be included in the Technical Feasibility Statement to carry out the landfill gas hazard assessment at a more detailed planning stage later; and
- (b) the scope, design and construction of the project would be subject to the findings and any mitigation measures to be proposed by the landfill gas hazard assessment. If significant changes were required, there would be adverse time and cost implications to the project.

3.12 In September 2017, with support of the Kwai Tsing District Council's working group (see para. 3.9), the District Council endorsed the LCSD's proposal to develop the Kwai Chung Park by two stages:

- (a) ***Stage 1 development.*** The development (mainly involving jogging trails and pet garden facilities) would cover areas of about 17.1 ha (excluding a total area of 8.4 ha occupied by the temporary cricket grounds (4.5 ha) and the BMX park (3.9 ha)). The golf driving range proposed in 2013 (see para. 3.6) had been dropped. This approach would enable the Park to be opened for public use as early as possible; and
- (b) ***Stage 2 development.*** After works commencement for Stage 1 development, the LCSD would proceed with the planning work for the remaining area of 8.4 ha of the Park occupied by the temporary cricket grounds and the BMX park.

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3.13 Based on the proposed revised project scope supported by the Kwai Tsing District Council at a meeting in September 2017, the LCSD issued a draft revised Project Definition Statement in September 2017 (with further information submitted in October 2017) to the ArchSD for preliminary comments. According to the LCSD, between October and December 2017, it worked with the EPD to provide supplementary information requested by the ArchSD. In December 2017 and mid-February 2018, the ArchSD provided comments on the draft revised Project Definition Statement.

3.14 In March 2018, the LCSD informed Audit that:

- (a) the most critical factor that determined the progress of development of the Kwai Chung Park would be competition for resources and the competing priorities among large number of capital projects under planning. All along, the LCSD continued to press ahead with the planning work for the Park to the extent possible under the prevailing mechanism. Consultation with the Kwai Tsing District Council's working group (see para. 3.9) had been conducted throughout the process in order to put forward the project;
- (b) in order to put the Park into gainful use as early as practicable, about 4.5 ha in the upper platform of the Park was allocated to Licensee A (see Table 5 in para. 4.3) in March 2016 for developing temporary cricket grounds. It was expected that the cricket grounds would be opened for use in the second quarter of 2018 after completion of construction works. Upon commissioning, some time slots would also be available for booking by organisations such as schools, sports associations and district-based organisations for promoting and development of the sport of cricket, particularly at the community level;
- (c) in implementing capital works projects under the LCSD's purview, it had all along relied on the professional and technical advice from relevant works department (e.g. the ArchSD) as the technical advisor and works agent at various stages till completion of the projects; and
- (d) since the Audit Report of March 2013 (see para. 3.5), the LCSD had stepped up efforts to follow up the audit recommendations by devising an action plan for future development of the Park with a view to putting into gainful use as soon as practicable, and exploring alternatives for the future development of the site. Despite the technical difficulties encountered in

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developing the huge landfill site surrounded by slopes, the LCSD had worked out different plans including:

- (i) allocation of part of the site for developing temporary cricket grounds to put the site into gainful use while planning development of other facilities;
- (ii) revision of the project scope in collaboration with the ArchSD and the EPD having regard to the site constraints and views of the Kwai Tsing District Council, and adoption of a phased approach to develop the Park with a view to speeding up the process; and
- (iii) inclusion of the Park in the five-year plan for sports and recreation facilities as announced in the Policy Address of January 2017 (see para. 3.10) to demonstrate the Government's commitment in taking forward the project.

3.15 Seventeen years had elapsed since the completion of restoration facilities by the EPD in September 2000. Audit noted that, as of February 2018, the HAB had not revised the Project Definition Statement of May 2014 (see para. 3.7(d)) for the ArchSD to prepare a Technical Feasibility Statement for the Kwai Chung Park. The development of the Park was still at preliminary planning stage.

3.16 As of February 2018, except that the BMX park of 3.9 ha had been opened for public use (see para. 3.4), 21.6 ha (85% of the total 25.5-ha area) covered by the Kwai Chung Park site had not been opened for public use for over 17 years since the completion of restoration facilities by the EPD in September 2000.

3.17 The slow progress in developing the Kwai Chung Park is unsatisfactory. The Government needs to expedite actions to develop the Park.

Audit recommendations

3.18 **Audit has *recommended* that the Government should expedite actions to develop the Kwai Chung Park, including:**

- (a) **the Director of Leisure and Cultural Services should complete the revision of the project scope for the Kwai Chung Park as early as possible;**
- (b) **the Secretary for Home Affairs should expedite the revision of the Project Definition Statement of the Kwai Chung Park and issue it to the Director of Architectural Services for preparing a Technical Feasibility Statement for the project; and**
- (c) **the Director of Architectural Services should, upon receipt of the revised Project Definition Statement for the Kwai Chung Park, complete the Technical Feasibility Statement in a timely manner.**

Response from the Government

3.19 The Director of Leisure and Cultural Services agrees with the audit recommendation in paragraph 3.18(a).

3.20 The Secretary for Home Affairs agrees with the audit recommendation in paragraph 3.18(b). He has said that the HAB will expedite the development of the Kwai Chung Park. After receiving information of the revised project scope from the LCSD, the HAB will revise the Project Definition Statement and request the ArchSD to prepare a Technical Feasibility Statement for the project.

3.21 The Director of Architectural Services agrees with the audit recommendation in paragraph 3.18(c).

Construction of Wan Po Road Pet Garden

3.22 In 2007, a working group under the Sai Kung District Council proposed to develop a 1.2-ha pet garden at Tseung Kwan O Stage I Landfill near Wan Po Road (hereinafter referred to as “Pet Garden”) under the District Minor Works Programme (see para. 1.12(a)). The project scope included a grass ground cover together with a hard-paved area for pet activities, pet latrines and sitting-out areas, and a car park (of 0.1 ha) adjacent to the Pet Garden was also planned. According to the LCSD, it was the lead department to work with the Sai Kung District Council in implementing

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the project and took into account the views of the District Council to meet the local community needs in determining the scope of projects under the District Minor Works Programme. The HAD (through its Works Section) appointed a term consultant (Consultant A) in January 2008 under a term consultancy (awarded in February 2007 after conducting an open expression-of-interest and shortlisting exercise) to provide consultancy services for the feasibility study, design, tendering, site supervision and contract administration for this project.

3.23 In November 2008, Consultant A informed a committee of the Sai Kung District Council that, based on the feasibility study conducted, the estimated cost of the Pet Garden project (excluding the car park) was \$11 million (Note 45) and the construction works would commence in November 2009 with a works period of 10 months (i.e. target works completion in September 2010). The committee endorsed the proposed project estimate and construction schedule. In April 2009, under delegated authority from the FC of LegCo, the LCSD approved funding of \$11 million (i.e. the APE) for the Pet Garden project (excluding the car park) under a block vote for the District Minor Works Programme (Note 46). The funding approval paper stated that the Government planned to start construction works in November 2009 for completion in September 2010. The funding for constructing the adjacent car park would be provided by the EPD under another block vote of the CWRP, subject to a ceiling of \$1.8 million.

3.24 In the event, in December 2010 (Note 47), the LCSD awarded a works contract (Contract C) to a contractor (Contractor C) for the construction of the Pet Garden and an adjacent car park serving the Pet Garden under the supervision of

Note 45: *The \$11 million comprised \$9.6 million for construction of the Pet Garden, \$0.7 million for consultancy fee, \$0.4 million for site supervision fee and \$0.3 million for landfill gas hazard assessment.*

Note 46: *Before July 2012, the cost of each project under the Programme was limited to \$21 million, and with the FC's approval, the cost ceiling has been increased to \$30 million since July 2012. Under delegated authority from the FC, the funding approval limit for the Permanent Secretary for Home Affairs was \$21 million (before July 2012) or \$30 million (since July 2012) for each project, and that for the Director of Leisure and Cultural Services was \$14 million (before July 2012) or \$20 million (since July 2012) for each project.*

Note 47: *In December 2010, the LCSD issued the letter of acceptance to Contractor C and the works contract was signed in January 2011.*

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Consultant A (Note 48). In February 2013, the construction works were completed at a total cost of \$25.6 million, 29 months later than the original target completion date of September 2010 and \$12.8 million (or 100%) higher than the original APE of \$12.8 million (Note 49). In June 2013, the Pet Garden was opened for use by the general public (see Photograph 5).

Photograph 5

Wan Po Road Pet Garden



Source: EPD records

Note 48: *There was a delay of 14 months in awarding the contract, comparing the actual date of December 2010 against the target date of October 2009. According to the HAD, it was mainly due to: (a) a delay in inviting tenders of 7 months from August 2009 to March 2010 due to revision in design; (b) under-estimation of 3 months for tender stage. The consultant's feasibility study had only allowed 3 months for the tender stage which would normally take 6 months; and (c) a delay of 2.5 to 3 months due to additional procedures to apply for extra funding from the HAB and the Sai Kung District Council.*

Note 49: *The total increase of APE by \$12.8 million, from \$12.8 million to \$25.6 million, was approved by the HAB as follows:*

- (a) increase of \$3.8 million in November 2010;*
- (b) increase of \$6.2 million in February 2013; and*
- (c) increase of \$2.8 million in November 2013.*

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3.25 Audit examination has found room for improvement in the construction of the Pet Garden in the following areas:

- (a) need to ascertain up-to-date site conditions before tendering (paras. 3.26 to 3.29);
- (b) need to enhance the accuracy in estimating project cost and time allowed for tender stage (paras. 3.30 to 3.32);
- (c) additional works requirements after works commencement (paras. 3.33 to 3.35); and
- (d) need to share lessons learnt from construction of the Pet Garden (paras. 3.36 and 3.37).

Need to ascertain up-to-date site conditions before tendering

3.26 Audit noted that there was slow progress of Consultant A in finalising the works design for the project and major changes were made to the works design during construction stage due to change in actual site levels as compared with the survey data from Consultant A's topographical survey conducted before tendering in April 2009. The salient points are as follows:

Design and tender stage

- (a) in 2007, the EPD provided topographical information of the related landfill area to Consultant A for reference and reminded him to conduct an updated topographical survey (Note 50) to ascertain the actual site conditions for carrying out the design and works, as the site had undergone and would continue to undergo ground settlement in a differential manner. According to the HAD, Consultant A commenced its design work mainly based on the EPD's records and drawings before obtaining funding approval for the project;

Note 50: *A topographical survey mainly involves measurement of actual site levels and site area, and identification of existing utilities within the site.*

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- (b) in April 2009, Consultant A engaged a land surveyor to conduct the topographical survey at \$9,000 after obtaining funding approval for the project (see para. 3.23). According to the HAD, the survey found that the actual site levels were different from records provided by the EPD in 2007, and the differences were considerable (e.g. the site level difference was 0.7 metre at one of the surveyed points);
- (c) in August 2009, Consultant A informed the EPD that a drainage pipe was not correctly reflected in an EPD's drainage layout plan provided by the EPD in May 2009 (Note 51). According to the HAD, the EPD provided updated drawings to Consultant A in August 2009;
- (d) in October 2009, the HAD issued a letter to Consultant A urging him to submit the tender documents with a view to meeting the target works commencement date of November 2009;
- (e) in January 2010, Consultant A submitted to the HAD a revised footpath design layout and indicated that revisions were required to suit the site topographical condition. In the same month, the HAD issued a letter to Consultant A indicating that the topographical condition should have been verified at an early stage to meet the works programme, and significant revisions of the design layout at such a late stage were disappointing;

Construction stage after contract award

- (f) after awarding the contract in December 2010, from January to March 2011, Contractor C conducted the topographical survey and found that the actual site levels were significantly lower than those shown on the contract drawings (Note 52);

Note 51: *According to the EPD, it informed Consultant A in September 2009 that the drainage pipe was already shown on another layout plan provided to Consultant A by the EPD in May 2009.*

Note 52: *According to Contract C, Contractor C shall conduct a topographical survey to check the accuracy of site levels shown on the contract drawings and notify Consultant A immediately of any inaccurate levels before carrying out any earthworks on site.*

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- (g) in March 2011, Contractor C informed Consultant A of the above survey results and requested the consultant to resolve the design to enable the commencement of works. In June 2011, the HAD issued a letter to Consultant A urging for submission of revised design drawings and expressed grave concern on whether the works could be timely completed on the scheduled contractual completion date of September 2011, and the late design revisions might further hinder the works progress; and
- (h) in August 2011, Consultant A provided the revised design drawings to Contractor C, who resumed the works in the same month. In September 2011, Contractor C submitted claims for extension of time for awaiting Consultant A's revised design drawings. According to Consultant A's assessment, Contractor C was entitled to an extension of time for 3.5 months. According to the HAD, based on Consultant A's assessment, an additional cost of \$1.1 million was incurred from the works arising from the above re-design.

3.27 In March 2018, the HAD informed Audit that:

- (a) Consultant A's original works design at the early design stage was based on the EPD's records and drawings (see para. 3.26(a)). The delay in contract award (see Note 48 to para. 3.24) was caused by design revisions due to substantial site settlement (see para. 3.26(b)) and updated information on the drainage system provided by the EPD (see para. 3.26(c)). As a result, Consultant A had to make major changes to the works design to suit the actual site levels (e.g. adding stairs and ramps to connect different site levels at two of the garden entrances, and re-designing drainage layout and retaining walls of the boundary fencing);
- (b) as a standard practice, for sitting-out area projects (including the Pet Garden) under the District Minor Works Programme, the HAD had been carrying out topographical survey and would continue to do so to identify existing site levels and site features at an early stage for use in the preparation of design proposals;
- (c) as a standard practice, consultants were required to carry out topographical survey for all sitting-out area projects before conducting works design and contractors were required to verify all site levels, dimensions or alignments shown on the contract drawings before commencement of works. In the

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Pet Garden project, as a further step, Contractor C was required under the contract to submit topographical survey records before commencement of works;

- (d) although Consultant A already conducted a topographical survey in April 2009 and revised the works design to suit the as-surveyed site levels, the actual site levels were found to be different when works commenced on site in January 2011; and
- (e) according to Contractor C's topographical survey results in March 2011, the difference between the site levels recorded in 2009 and the actual site levels measured in 2011 was substantial (up to 1.59 metres). The continuous ground settlement at the project site was unusual. In hindsight, the extent of design revisions during the construction stage could have been reduced if Consultant A had conducted another topographical survey to ascertain the site levels before tendering for the works (although this would probably cause further delay in the design stage). However, if the works site did continue to settle between the tendering stage and commencement date of site works, which could take about 6 months, there would still be a risk of having to re-design when construction works commenced. In such a scenario, an additional topographical survey before tendering would not reduce the need to re-design in the later stage.

3.28 When implementing works projects at works sites susceptible to ground settlement (e.g. restored landfills) in future, the HAD needs to take measures to ascertain up-to-date site conditions before tendering with a view to minimising the design revision during construction stage.

3.29 In this connection, Audit noted the HAD's concern that the continuous ground settlement at the Pet Garden project site was unusual (see para. 3.27(e)). Audit considers that the EPD, in collaboration with the HAD, needs to conduct a review on the unusual ground settlement of the project site with a view to identifying whether other areas of the Tseung Kwan O Stage I Landfill have such settlement problem and ascertaining whether such settlement would lead to any adverse impacts on the EPD's restoration facilities and aftercare work.

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Need to enhance the accuracy in estimating project cost and time allowed for tender stage

3.30 In March 2010, Consultant A estimated that the tender price for Contract C was \$11.7 million (Note 53) and the HAD invited tenders for the contract. In April 2010, seven tenders were received and the prices of the returned tenders ranged from \$15.1 million to \$23.5 million, exceeding the pre-tender estimate by 29% to 101% (Note 54). In October 2010, after completing the tender analysis report in August 2010, the HAD informed the LCS D of the tender results. In November 2010, under delegated authority from the FC, the HAB approved the LCS D's proposal to increase the APE of the project by \$3.8 million from \$11 million to \$14.8 million (Note 55). In December 2010, the LCS D awarded the contract to Contractor C at \$15.1 million (Note 56) with scheduled works completion date of September 2011.

3.31 In March 2018, the HAD informed Audit that:

Project cost estimate

- (a) regarding the under-estimation of tender price, the Pet Garden project was a pilot project in 2007 under which Consultant A had to provide the project cost estimate and no separate quantity surveyor was engaged to offer independent advice on the consultant's cost estimate. Drawing from the lessons learnt from the project, there was room for improvement where the estimate should be re-visited again by an independent quantity surveyor before issuance of tenders to ensure that any changes in works design had

Note 53: *The \$11.7 million comprised \$9.6 million for construction of the Pet Garden and \$2.1 million for construction of the adjacent car park.*

Note 54: *According to the tender analysis report, the increase in returned tender price was mainly due to: (a) change in scope of works including addition of concrete footings to suit the existing drainage system; (b) major revision of alignment of walking trail to meet the existing site levels; (c) additional fire service installation; and (d) additional finishing works and provisional items.*

Note 55: *The \$14.8 million comprised \$13.4 million for construction of the Pet Garden, \$0.9 million for consultancy fee, \$0.4 million for site supervision fee and \$0.1 million for landfill gas hazard assessment.*

Note 56: *The \$15.1 million comprised \$13.4 million for construction of the Pet Garden (see Note 55) and \$1.7 million for construction of the adjacent car park. The funding for constructing the car park was provided by the EPD.*

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been duly reflected in the pre-tender estimate in March 2010 (see Note 54 to para. 3.30);

- (b) to better estimate project cost, the HAD had put in place the following improvement measures:
 - (i) since April 2008, all consultancies executed by the HAD under the District Minor Works Programme had included separate quantity surveying consultants to provide comprehensive advice on project cost; and
 - (ii) in collaboration with the quantity surveying consultants, all term architectural consultants would be required to prepare updated pre-tender estimates before issuance of tenders to ensure that the latest project cost estimates would be reflected in the final design proposals for tendering; and

Time allowed for tender stage

- (c) Consultant A's feasibility study had only allowed 3 months for the tender stage which would normally take 6 months to complete, leading to under-estimation of 3 months for the tender stage.

3.32 In Audit's view, when implementing works projects (including those at restored landfills) in future, the HAD needs to enhance the accuracy in estimating the project cost and time allowed for tender stage.

Additional works requirements after works commencement

3.33 According to the HAD, after award of Contract C in December 2010, additional works items were carried out by Contractor C as instructed by Consultant A to suit the revised works design and according to comments offered by the relevant government departments. In the event, Contractor C was granted an extension of time for 4.5 months and the total cost of additional works items was \$7.6 million. According to the HAD:

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- (a) the additional works items included the addition of surveillance cameras, electrical installations, pet latrines, surface channels and covers, plumbing installations, a ramp and protective barrier at the car park, and the modification of gas extraction wells. Out of the additional \$7.6 million, \$4.4 million were related to adjusting the works design to the actual site conditions (including \$1.1 million (see para. 3.26(h)) related to changes in works design arising from ground settlement during the design stage, which was unforeseeable when preparing the works tender documents); and
- (b) the remaining \$3.2 million were related to additional works items which were originated from discussions with the Sai Kung District Council during the construction stage, or were intended for meeting operational needs or improving the works design. There are practical difficulties to attribute individual additional works items and costs to a specific government department.

3.34 In March 2018, the LCSD and the EPD informed Audit that:

LCSD

- (a) restored landfills had complicated site conditions which required expertise in resolving the technical issues. Given the complex site conditions and the potential safety issues associated with using restored landfills as open space, the LCSD relied heavily on the works agent (i.e. the HAD in the Pet Garden project), its term consultants and the contractors as well as other departments concerning technical aspects of the sites (i.e. the EPD in the Pet Garden project) to provide the necessary technical advice and support in implementing the project;
- (b) as the Pet Garden project proceeded and more design details became available, appropriate fine-tuning to the works design was required to address public safety and maximise the site utilisation. Therefore, taking into account the latest detailed design, the LCSD fine-tuned the design by revising the toilet design and requesting the provision of an additional dog latrine at about \$0.3 million to better utilise the available space for serving the users of the Pet Garden; and

EPD

- (c) the EPD had not raised any new requirements or requested any additional works items to be carried out by Contractor C.

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3.35 The additional works items of \$7.6 million in Contract C accounted for over 50% of the original contract sum of \$15.1 million (see para. 3.30). In this connection, Audit noted that, in July 2008, the Development Bureau informed the FC that, for strengthening the financial management and enhancing budgetary control of capital works projects, the Government's objective was to contain the need for changes to user and programme requirements to those that were absolutely essential and necessary to prevent cost overrun due to client-initiated changes. In Audit's view, when implementing works projects (including those at restored landfills) in future, the HAD and the LCSD need to take measures to ensure that all works requirements are incorporated into the tender documents and avoid making changes to works requirements after contract award.

Need to share lessons learnt from construction of the Pet Garden

3.36 In January 2013, the LCSD, as the lead department to work with the Sai Kung District Council in implementing the Pet Garden project, conducted an internal review on the construction process of the project. The key review findings included:

- (a) there were specific works requirements at restored landfills, including the maximum allowable loading of afteruse facilities to be developed on site and the need to protect the EPD's restoration facilities from damage during construction; and
- (b) owing to the comparatively more complicated nature of works at restored landfills, both Consultant A and Contractor C had difficulties in handling the Pet Garden project. Although the HAD's Works Section (being the project manager) was expected to provide expert advice on the project, the limited resources had hindered it from providing timely assistance and proper technical advice to both Consultant A and Contractor C.

3.37 Audit notes that the development of more afteruse facilities will take place at various restored landfills (e.g. the Kwai Chung Park and development projects funded under the Restored Landfill Revitalisation Funding Scheme in future). In Audit's view, there are merits for the HAD and the LCSD to share the lessons learnt (e.g. conducting experience-sharing sessions) from the construction of the Pet Garden project with the relevant bureaux/departments and non-governmental bodies with a

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view to avoiding recurrence of the encountered problems in future afteruse projects at restored landfills.

Audit recommendations

3.38 **Audit has *recommended* that the Director of Home Affairs should:**

- (a) **when implementing works projects at works sites susceptible to ground settlement (e.g. restored landfills) in future, take measures to ascertain up-to-date site conditions for design work before tendering;**
- (b) **when implementing works projects (including those at restored landfills) in future, take measures to enhance the accuracy in estimating the project cost and time allowed for tender stage; and**
- (c) **in collaboration with the departments concerned, share the lessons learnt from the construction of the Wan Po Road Pet Garden project with the relevant bureaux/departments and non-governmental bodies with a view to avoiding recurrence of the encountered problems in future afteruse projects at restored landfills.**

3.39 **Audit has *recommended* that the Director of Environmental Protection should, in collaboration with the Director of Home Affairs, conduct a review on the unusual ground settlement of the project site of Wan Po Road Pet Garden with a view to identifying whether other areas of the Tseung Kwan O Stage I Landfill have such settlement problem and ascertaining whether such settlement would lead to any adverse impacts on the EPD's restoration facilities and aftercare work.**

3.40 **Audit has *recommended* that the Director of Home Affairs and the Director of Leisure and Cultural Services should, when implementing works projects (including those at restored landfills) in future, take measures to ensure that all works requirements are incorporated into the tender documents and avoid making changes to works requirements after contract award.**

Response from the Government

3.41 The Director of Home Affairs agrees with the audit recommendations in paragraphs 3.38(a) and (b), 3.39 and 3.40. She has said that:

- (a) for future works projects involving restored landfills or sites susceptible to ground settlement, where time and resources permit, the HAD will recommend its consultants to ascertain up-to-date site conditions before tendering (particularly in situations where ground settlement has already been observed in a topographical survey carried out by a consultant at an early stage and the design stage lasts for a long duration);
- (b) to enhance the accuracy in estimating project cost, the HAD will continue to engage separate quantity surveying consultants to provide comprehensive advice on project cost, and require all its term architectural consultants to prepare updated pre-tender estimates in collaboration with the quantity surveying consultants before issuance of tenders. When vetting consultants' feasibility reports, the HAD will also closely examine the time allowed for the tender stage and ensure that the proposed timetable is practical;
- (c) the HAD will provide the necessary assistance to the EPD in carrying out the review as recommended in paragraph 3.39 concerning the project site of the Pet Garden project. When carrying out the review, the EPD may approach the LCSD and the ArchSD (i.e. the LCSD's maintenance agent) if prevailing information of the Pet Garden is required;
- (d) when implementing works projects in future, the HAD will ensure that all works requirements are incorporated into the tender documents as far as possible and minimise changes to works requirements following contract award; and
- (e) regarding the audit recommendation in paragraph 3.38(c), the HAD will be ready to share the lessons learnt from the construction of the Pet Garden project with the relevant bureaux/departments and non-governmental bodies upon referral by the EPD.

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3.42 The Director of Environmental Protection agrees with the audit recommendation in paragraph 3.39. He has said that the EPD will consider conducting a review on the ground settlement at Tseung Kwan O Stage I Landfill when a new afteruse project is to be implemented at this site.

3.43 The Director of Leisure and Cultural Services agrees with the audit recommendation in paragraph 3.40. She has said that:

- (a) regarding the audit recommendation in paragraph 3.38(c), the LCSD is the client department and heavily relies on the works agent and other departments (see para. 3.34(a)). Thus, the HAD and the EPD may be in a better position to share lessons learned and the LCSD will be ready to render support as appropriate; and
- (b) apart from unforeseeable variation works arising from actual site conditions, when implementing works projects (including those at restored landfills) in future, the LCSD will take measures to ensure that all works requirements are incorporated into the tender documents wherever practicable, and avoid making changes to works requirements after contract award.

Construction of Jordan Valley Park

3.44 In his Policy Address of 2005, the Chief Executive of the Hong Kong Special Administrative Region announced that the construction of the Jordan Valley Park (JVP) at the Jordan Valley Landfill would be one of the 25 projects for priority implementation. The LCSD was the client department and the ArchSD was the works agent for the Project.

3.45 During mid-2006 to mid-2007, the ArchSD appointed three consultants for the JVP project, comprising:

- (a) a lead consultant for design and construction supervision;
- (b) a quantity surveyor for preparation of tender documents and valuing the cost of works; and

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- (c) a specialist independent checker for reviewing the design and layout plans and, in view of the special nature of this project, checking compliance with the EPD's technical specification for carrying out works on restored landfills.

In July 2007, the FC of LegCo approved the JVP project at an APE of \$179.6 million for completion in December 2009. In mid-August 2007, the ArchSD invited tenders for carrying out the construction works. In December 2007 (Note 57), the ArchSD awarded a contract (Note 58) to a contractor (Contractor D) at \$137.7 million. In the event, the works were substantially completed in March 2010 (Note 59). The JVP, covering an area of 6.3 ha, was commissioned in August 2010 (see Photograph 6).

Photograph 6

Jordan Valley Park



Source: EPD records

Note 57: *In December 2007, the ArchSD issued the letter of acceptance to Contractor D and the works contract was signed in January 2008.*

Note 58: *It was a lump-sum contract with certain quantities in the Bills of Quantities firm and other quantities provisional (for which measurement is required). Price fluctuation adjustment was not provided in this contract.*

Note 59: *According to ArchSD records, the works were completed in March 2010 (i.e. six months later than the original completion date of September 2009 under the contract) mainly due to extensions of time granted for inclement weather.*

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3.46 In June 2013, the Financial Services and the Treasury Bureau approved the ArchSD's request to increase the APE of the JVP project by \$14.4 million (Note 60) from \$179.6 million to \$194 million. In March 2014, the accounts of the JVP project were finalised at \$192.1 million. The increase in project cost was mainly due to the increase in contract cost. The actual contract expenditure was \$178 million (Note 61), which was \$40.3 million higher than the original contract sum of \$137.7 million (see para. 3.45). The increase of \$40.3 million was due to:

- (a) additional works totalled \$23.8 million certified by ArchSD's consultants, comprising:
 - (i) variation works of \$9.4 million due to the revisiting of the design of buildings and fence wall footings locating above the capping layer, leachate system, landfill gas system and sub-soil drain system (see Figure 3 in para. 1.7) of the landfill (see paras. 3.47 to 3.57);
 - (ii) variation works of \$7.2 million for compliance with statutory requirements (e.g. fire safety under the Buildings Ordinance (Cap. 123)) and requirements and comments on provision of utilities from other government departments (e.g. Water Supplies Department);
 - (iii) variation works of \$4.8 million requested by the LCSD mainly to improve facilities of the radio-controlled model car racing circuit (hereinafter referred to as "model car circuit") located inside the JVP based on advice of related local professional groups collected on their on-site visits during construction stage (in addition to advice collected during planning stage); and
 - (iv) additional measures of \$2.4 million for taking measures to monitor the extent of ground settlement at the landfill and related works; and

Note 60: *Under delegated authority from the FC, the Financial Services and the Treasury Bureau is empowered to approve increase of APE of a works project by not more than \$15 million.*

Note 61: *The difference between the contract cost of \$178 million and the increased APE of \$194 million was mainly due to consultancy fee of \$8 million.*

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- (b) claims settled by a settlement agreement of \$16.5 million, which mainly related to disputes on valuation for works carried out by Contractor D.

3.47 In November 2005, the EPD informed the LCSD (information also copied to the ArchSD) of the requirements and restrictions applied to restored landfills, including deep excavation was not advised during construction and excavation into the landfill capping would not be allowed. The EPD had also requested the ArchSD to provide detailed design and layout plans for its comments when the plans were available. In July 2006, the ArchSD engaged a consultant for the design and tender preparation for the JVP project, who received the record drawings from the EPD in August 2006 and technical specification in March 2007. In April 2007, with the information provided by the EPD, the consultant completed the detailed design and started preparation of tender drawings. In June 2007, the ArchSD appointed a specialist independent checker for checking compliance with the EPD's technical specification for works on restored landfills (see para. 3.45(c)). According to the ArchSD, due to time constraint, the ArchSD could only consult the EPD of the checker's conclusion on checking the design and layout plans after inviting tenders (Note 62) for the contract in mid-August 2007 (the tender closed in late September 2007).

3.48 ***Blocks of buildings located above capping system.*** On 24 October 2007, after receiving the design and layout plans from the ArchSD, the EPD advised the ArchSD that many aspects of the design had deviated from the design requirements. The ArchSD found that 4 of the 13 blocks of buildings and the model car circuit had been located above the landfill gas pipes and sub-soil drain system (hereinafter referred to as building location issue — Note 63). As a result, the ArchSD requested its consultant to review the overall design with the landfill restoration contractor of the Jordan Valley Landfill (Contractor B). On 27 November 2007, the ArchSD issued a letter urging its consultant to speed up the review. On the same date, based on the tender report submitted by the ArchSD on 13 November 2007, the Permanent Secretary for Financial Services and the Treasury (Treasury) approved, on

Note 62: *According to the ArchSD, the tender documents had specified that the contractor should not over-excavate the existing landfill surface.*

Note 63: *In March 2018, the ArchSD informed Audit that it could not find any records from the files showing the exact time of identifying the building location issue.*

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the recommendation of the Central Tender Board (Note 64), the award of the contract. On 5 December 2007, Contractor B informed the ArchSD that, if the landfill gas system, leachate system and sub-soil drain system had to be relocated, the cost of relocation would be huge. On 11 December 2007, after considering that the building location issue could be resolved at post-contract stage, the ArchSD issued the letter of acceptance and awarded the contract to Contractor D.

3.49 *Increase of imported fill for raising ground level of buildings and fence wall footings.* In March 2008, after considering the consultant's revised design, the ArchSD decided that, of the 4 blocks of buildings and the model car circuit with building location issue, 2 blocks would be relocated within the site and the other 2 blocks and the model car circuit would be carried out with modification of the design to suit site conditions (i.e. raising the external ground level of buildings with imported fill). In May 2008, based on the advice from Contractor B, the ArchSD concluded that raising the levels of fence wall footings, the model car circuit and the external ground level of all 13 blocks of buildings with imported fill would be required (the ArchSD informed Audit in March 2018 that this was the most cost-effective solution). In the event, the value of the related modification works was \$9.4 million (Note 65). A chronology of key events on the building location issue is shown in Appendix H.

Need to allow sufficient time to consult EPD before inviting tenders

3.50 Audit noted that, in November 2005, the EPD had requested the ArchSD to provide the detailed design and layout plans of the JVP project for its comments when available. In April 2007, the ArchSD's consultant completed the detailed design, which was later certified by the specialist independent checker appointed by the ArchSD in June 2007. In mid-August 2007, the ArchSD issued the tender documents which included the design and layout plans (mainly including the construction of a total of 13 blocks of buildings and the model car circuit on the site)

Note 64: *According to the Stores and Procurement Regulations, works departments should consult the Central Tender Board for awarding a works contract costing over \$100 million. The Central Tender Board, chaired by the Permanent Secretary for Financial Services and the Treasury (Treasury), considers and advises the chairperson of the Board on the acceptance of tenders.*

Note 65: *According to the ArchSD, such expenditure would have been incurred irrespective of whether the variation had been included in the tender or was ordered after contract commencement.*

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prepared by the ArchSD's consultant and approved by the ArchSD. According to the ArchSD, due to time constraint, the ArchSD could only consult the EPD of the design and layout plans after issuing tender in mid-August 2007. After the close of the tender in September 2007, the ArchSD noted the building location issue and, on 27 November 2007, issued a letter urging the consultant to speed up reviewing the overall design with Contractor B (see para. 3.48). In the event, in May 2008, after award of the contract, the ArchSD revised the design, including raising the external ground level of all 13 blocks of buildings with imported fill (see para. 3.49).

3.51 In February and March 2018, the ArchSD informed Audit that:

- (a) projects of this scale would usually take about 16 months to complete the design process and tender documentation. However, as this project had a fast-track programme which needed to be implemented in a very tight timeframe (13 months had instead been taken for the design and tendering, including 2 months for an extra checking of the design by the specialist independent checker), many design development/coordination activities had to be proceeded in parallel;
- (b) under this fast-track programme, the ArchSD had exercised appropriate steps in tackling all the constraints encountered, and that close liaison and negotiation with different parties involved had been carried out effectively and efficiently;
- (c) there was no precedent case of dealing with a landfill site in a highly compressed timeframe for reference;
- (d) in the design process, the ArchSD had reminded its consultant that the design should mitigate any possible conflict due to interfacing of the existing restoration facilities, and the ArchSD and its consultant had closely liaised with the EPD and Contractor B through letters, memorandums, e-mails, meetings and joint site visits; and
- (e) the ArchSD had vetted its consultant's design according to its internal vetting mechanism and had engaged a specialist independent checker to check the compliance with the EPD's technical specification for works on the landfill.

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3.52 Audit considers that, when implementing works projects at restored landfills (with specific construction requirements and restrictions) in future, the ArchSD needs to allow sufficient time for seeking the EPD's advice on design and layout plans before inviting tenders.

Need to inform Central Tender Board of subsequent substantial design changes

3.53 Audit noted that, before issuing the letter of acceptance to Contractor D on 11 December 2007, the ArchSD had already been aware of the building location issue and that design changes were needed in view that:

- (a) after issue of the tender, the ArchSD had requested the consultant to review the design on 4 blocks of buildings and the model car circuit located above existing landfill gas system, leachate system and sub-soil drain system with Contractor B. On 27 November 2007, the ArchSD issued a letter urging the consultant to speed up the review; and
- (b) on 5 December 2007, Contractor B based on its review of the ArchSD consultant's design and layout plans, informed the ArchSD that the cost of relocating the underground restoration facilities would be huge (Note 66).

In the event, in May 2008, the ArchSD decided that raising the levels of fence wall footings, the model car circuit and the external ground level of all 13 blocks of buildings with imported fill would be required.

3.54 Audit noted that the ArchSD had not informed the Central Tender Board of the need to change the design as set out in tender documents.

3.55 In February 2018, the ArchSD informed Audit that, in late November 2007, it had internally discussed whether the contract should be awarded or postponed, and in mid-December 2007, considering that possible changes would not be substantial, it

Note 66: *In February 2018, the ArchSD informed Audit that: (a) from Contractor B's view, the relocation of the underground restoration facilities was only an option; and (b) the ArchSD considered that it was more cost effective and less substantial to modify the footing design and raise the external ground level of buildings with imported fill.*

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decided not to postpone the award of the contract after taking into account the following considerations:

- (a) the Government would suffer a greater loss if the project were to be re-tendered in view of the rising trend of construction costs; and
- (b) it was not possible to resolve all site constraints before contract commencement, especially for a fast-track programme.

3.56 In Audit's view, when substantial subsequent design changes are found after issue of tenders, the ArchSD needs to report the changes and provide suggested course of actions with justifications to the Central Tender Board for consideration.

Need to share lessons learnt from construction of JVP

3.57 Similar to the Pet Garden project, there are merits for the ArchSD to identify the lessons learnt from the construction of the JVP and share them with the relevant bureaux/departments and non-governmental bodies (e.g. through experience-sharing sessions) with a view to enhancing the management of projects at restored landfills in future.

Audit recommendations

3.58 **Audit has recommended that the Director of Architectural Services should:**

- (a) **when implementing works projects at restored landfills (with specific construction requirements and restrictions) in future, allow sufficient time for seeking the EPD's advice on design and layout plans before inviting tenders;**
- (b) **when substantial subsequent design changes are found after issue of tenders, report the changes and provide suggested course of actions with justifications to the Central Tender Board for consideration; and**

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- (c) identify the lessons learnt from the construction of the JVP and share them with the relevant bureaux/departments and non-governmental bodies with a view to enhancing the management of projects at restored landfills in future.**

Response from the Government

3.59 The Director of Architectural Services agrees with the audit recommendations. She has said that the ArchSD will identify the lessons learnt for the construction of the JVP and work out an action plan for sharing them with the relevant bureaux/departments and non-governmental bodies.

PART 4: MONITORING OF NON-GOVERNMENTAL BODIES' AFTERUSE FACILITIES AT RESTORED LANDFILLS

4.1 This PART examines the EPD's monitoring of non-governmental bodies' afteruse facilities at restored landfills, focusing on:

- (a) monitoring of land licence conditions (paras. 4.2 to 4.20); and
- (b) Restored Landfill Revitalisation Funding Scheme (paras. 4.21 to 4.39).

Monitoring of land licence conditions

4.2 With delegated authority from the Lands Department under the Land (Miscellaneous Provisions) Ordinance (Cap. 28), the EPD grants land licences to applicants (mainly non-governmental organisations and National Sports Associations) to develop and operate recreational facilities at restored landfills. Most of the land licences set out the requirements on the development and operation of facilities for compliance by the licensees, including:

Development of facilities

- (a) completion dates of facilities;
- (b) the need to liaise with utility undertakings for the provision and installation of utilities for the facilities;

Operation of facilities

- (c) operation of a high-quality facility on a non-profit-making basis;
- (d) submission of audited financial statements to the Government upon request; and

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- (e) the need to maximise the facility utilisation, promote and strengthen the development of relevant sports activities, and provide intensive sports training to the community.

4.3 As of December 2017, the EPD had granted five land licences to five licensees for developing and operating recreational facilities at 4 restored landfills (as two land licences were issued for Gin Drinkers Bay Landfill). As shown in Table 5, 2 licensees had not yet completed the development of facilities and 3 licensees had opened the facilities for use. According to the EPD, the five licensees provide afteruse facilities on a self-financing basis for use by the general public and/or members of the licensees in order to better utilise the vacant land at restored landfills.

**Monitoring of non-governmental bodies' afteruse facilities
at restored landfills**

Table 5

**Land licences granted by EPD
(December 2017)**

Restored landfill	Licensee	Facility	Licence area (ha)	Licence start date	Licence expiry date	Duration (year)
(A) Facility not yet completed						
1. Gin Drinkers Bay	Licensee A	Temporary cricket grounds	4.5	23.3.2016	22.3.2019	3
2. Tseung Kwan O Stage I	Licensee B	Football training centre	12.5	6.9.2016	5.9.2026	10
(B) Facility opened for use						
3. Shuen Wan	Licensee C (who is also Contractor B — Note 1)	Temporary golf driving range	15.6	1.10.2003	30.9.2018	15
4. Gin Drinkers Bay	Licensee D	BMX park	3.9	3.7.2008	2.7.2029	21
5. Pillar Point Valley	Licensee E	Temporary shooting range	0.2 (Note 2)	21.7.2016	20.7.2018	2

Source: EPD records

Note 1: According to the EPD, in 1998, Licensee C proposed to develop the Shuen Wan Restored Landfill into a temporary golf driving range on a self-financing basis before the commencement of long-term recreational development at the landfill site. The former Provisional Regional Council and the EPD appointed Licensee C for the design, construction and operation of the facility on a self-financing basis in March 1999. Subsequent to the dissolution of the former Provisional Regional Council in 1999, the LCSD and the EPD continued to monitor the facility operation. Upon the expiry of the above appointment in September 2003, the EPD granted a land licence for the first time to Licensee C and the licence period was two years. The licence was renewed seven times afterwards (extension of one to three years in each renewal) up to September 2018.

Note 2: Under the land licence with Licensee E, the licensee was required to construct two temporary shooting ranges (0.2 ha and 0.4 ha respectively). In December 2016, Licensee E informed the EPD that it would not use the 0.4-ha area for any activities.

Remarks: According to EPD, it does not maintain information on the construction cost of the facilities, which are borne by the related licensees.

Monitoring of non-governmental bodies' afteruse facilities at restored landfills

4.4 Audit examination has found that there is room for improvement in the EPD's monitoring of land licence conditions, as follows:

- (a) non-compliances with conditions of land licences (see paras. 4.5 to 4.10);
- (b) scope for improving inspection form and conditions of land licences (see paras. 4.11 to 4.14); and
- (c) need to formulate guidelines on the circumstances for requesting licensees to submit audited financial information (see paras. 4.15 to 4.18).

Non-compliances with conditions of land licences

4.5 **Delays in completing facilities.** The target completion dates for the afteruse facilities were set out in the land licences. As of December 2017, the facilities at two restored landfills had not been completed, with delays of 6 and 15 months respectively (see Table 6).

Table 6

**Delays in completing afteruse facilities by licensees
(December 2017)**

Afteruse facility (Restored landfill)	Target completion date stipulated in land licence	Works status	Delay (Note)
(a) Temporary cricket grounds (at Gin Drinkers Bay)	23.9.2016	Works in progress	15 months
(b) Football training centre (at Tseung Kwan O Stage I)	30.6.2017	Works in progress	6 months

Source: EPD records

Note: The delay is counted up to 31 December 2017.

Monitoring of non-governmental bodies' afteruse facilities at restored landfills

4.6 During December 2017 to March 2018, the EPD informed Audit that:

- (a) as of December 2017, the development of the temporary cricket grounds (item (a) in Table 6) and the football training centre (item (b) in Table 6) had commenced, and the delay in completion was mainly due to the need to connect the necessary power and water supply for the facilities and more-than-expected time required to provide submissions for meeting the requirements of the relevant statutory authorities (e.g. Buildings Department and Fire Services Department) and obtain their approvals; and
- (b) the EPD had been actively monitoring the development progress of afteruse facilities and providing assistance to the licensees within the EPD's capacity and resource availability for completing the afteruse facilities (e.g. approaching the Water Supplies Department to facilitate submission and approval of water-supply applications, according priority in vetting of licensees' design submissions, and actively participating in site coordination meetings).

4.7 While the EPD said that it had been providing assistance to the licensees in completing the afteruse facilities, as of December 2017, the related facilities were still in progress with works delays of 6 and 15 months respectively. In Audit's view, the EPD needs to keep under review the licensees' development progress of afteruse facilities with a view to completing the facilities in a timely manner.

4.8 ***Operation and maintenance of afteruse facilities.*** For the BMX park at Gin Drinkers Bay Landfill, there are two tracks (i.e. main track and development track). The land licence requires the licensee to operate a high-quality BMX facility and maximise the facility utilisation. Audit noted that there were complaints on the poor quality and lack of maintenance of the BMX park. The main track of the BMX park was closed for maintenance for over one year from October 2016 to December 2017. According to the EPD, the long-time closure was owing to difficulties encountered by the licensee in carrying out a tendering exercise and awarding the improvement and maintenance contract for the required repair works.

Monitoring of non-governmental bodies' afteruse facilities at restored landfills

4.9 In March 2018, the EPD informed Audit that:

- (a) it would be a licensee's responsibility (and in his interest) to maintain an afteruse facility up to a standard that meets the users' needs and aspirations; and
- (b) given the diversified nature of afteruse facilities, it was beyond the EPD's expertise to maintain the standards and quality of sports facilities or to monitor a licensee to do so. While the EPD could check a licensee's compliance with the licence conditions, it did not have the expertise and capacity to ensure that a licensee would operate a high-quality facility and maximise the facility utilisation.

4.10 While noting the EPD's difficulties in paragraph 4.9, Audit considers it important to ensure that the licensees comply with the licence conditions. In Audit's view, the EPD needs to take measures to monitor the licensees' compliance with licence conditions, including seeking the assistance and support of the relevant bureaux and departments (e.g. the HAB and the LCSD) if necessary.

Scope for improving inspection form and conditions of land licences

4.11 ***Scope for improving inspection form for monitoring licensees' compliance with licence conditions.*** According to the EPD, its site staff have from time to time conducted inspections to monitor licensees' compliance with licence conditions and recorded the results in an inspection form. However, Audit noted that the inspection form was designed mainly for the purpose of environmental monitoring and did not cover specific inspection items related to monitoring of the licensees' compliance with licence conditions (e.g. development progress of afteruse facilities and general maintenance condition of the licence area). There is scope for improvement in this regard.

4.12 ***Scope for improving conditions of land licences.*** Audit notes that some land licences contain conditions that are qualitative in nature, including operation of a high-quality facility, the need to maximise the facility utilisation, promotion and strengthening the development of relevant sports activities, and provision of intensive sports training to the community. However, quantitative/objective measures are not

Monitoring of non-governmental bodies' afteruse facilities at restored landfills

specified in these conditions, rendering it difficult to assess whether the licensees meet such conditions.

4.13 In March 2018, the EPD informed Audit that:

- (a) the setting of quantitative/objective measures might discourage licensees from continuing the provision of afteruse facilities. It was also not appropriate to use utilisation figures as a benchmark. It was preferable to provide such facilities at restored landfills rather than leaving the land vacant; and
- (b) as there was no public money involved in the development and operation of afteruse facilities at restored landfills (involving many development constraints), imposing overly demanding criteria would likely deter interest of prospective applicants.

4.14 In Audit's view, in order to facilitate the monitoring of quality of the recreational facilities provided by the licensees, safeguard the interest and safety of the public in using the recreational facilities, and enable the licensees to better understand the licence requirements, the EPD needs to explore the feasibility of incorporating quantitative/objective measures (e.g. Key Performance Indicators) in land licences when issuing or renewing licences in future.

Need to formulate guidelines on the circumstances for requesting licensees to submit audited financial information

4.15 Under the land licences issued by the EPD:

- (a) for Licensees B and C, they are required to submit audited financial statements for the operation and maintenance of afteruse facilities (showing the capital cost, recurrent cost, revenue and surplus/deficit) to the HAB (for Licensee B) or the EPD (for Licensee C); and
- (b) for Licensees A, D and E, upon the EPD's written request, the licensees shall submit to the EPD the audited financial statements on their operation and maintenance of the afteruse facilities.

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4.16 Audit noted that the afteruse facilities were being constructed by Licensees A and B as of December 2017 (see Table 5 in para. 4.3) and there was no requirement under the land licences for them to submit audited financial statements to the Government during the development stage of afteruse facilities. For the 3 licensees in the operation stage, only Licensee C had submitted audited financial statements to the EPD and, according to the EPD, it was satisfied with Licensee C's financial condition. Audit noted that the EPD had not requested Licensees D and E to submit audited financial statements although they had commenced operation of the afteruse facilities.

4.17 In March 2018, the EPD informed Audit that:

- (a) unlike Licensee C (which was a private company), the other four licensees were National Sports Associations; and
- (b) when these four licensees were carrying out construction works or continuing their normal operation, this would be a proof of their financial viability. Requesting all licensees to submit audited financial statements without a good justification might unnecessarily place a financial burden on the licensees.

4.18 In Audit's view, the EPD needs to formulate guidelines on the circumstances for requesting licensees to submit audited financial information for monitoring their operations and financial viability.

Audit recommendations

4.19 **Audit has recommended that the Director of Environmental Protection should:**

- (a) **keep under review the licensees' development progress of afteruse facilities with a view to completing the afteruse facilities in a timely manner;**

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- (b) **take measures to monitor the licensees' compliance with licence conditions, including seeking the assistance and support of the relevant bureaux and departments (e.g. the HAB and the LCSD) if necessary;**
- (c) **incorporate in the EPD's inspection form specific inspection items related to monitoring of the licensees' compliance with licence conditions;**
- (d) **explore the feasibility of incorporating quantitative/objective measures (e.g. Key Performance Indicators) in land licences when issuing or renewing licences in future; and**
- (e) **formulate guidelines on the circumstances for requesting licensees to submit audited financial information for monitoring their operations and financial viability.**

Response from the Government

4.20 The Director of Environmental Protection agrees with the audit recommendations. He has said that the EPD will:

- (a) continue its efforts to facilitate and monitor the development progress of afteruse facilities. According to the latest construction progress as of March 2018, the temporary cricket grounds at Gin Drinkers Bay Landfill and the football training centre at Tseung Kwan O Stage I Landfill (see Table 6 in para. 4.5) will be completed in the second quarter of 2018 and opened for public use;
- (b) work with the relevant bureaux and departments to monitor the licensees' compliance with licence conditions;
- (c) review and update the existing EPD's inspection form for incorporating essential inspection items specific to land licences so as to further enhance the monitoring of the licensees' compliance with the licence conditions; and
- (d) consult the relevant bureaux and departments in taking forward the audit recommendations in paragraph 4.19(d) and (e).

Restored Landfill Revitalisation Funding Scheme

4.21 In November 2006, the EPD informed the Landfill Afteruse Policy Group (Note 67) that:

- (a) the Landfill Afteruse Working Group previously formed in 1995 did not have a well-defined procedure for inviting parties for developing afteruse facilities at restored landfills, and each case had been treated in ad-hoc manner;
- (b) more structured procedures for relevant bureaux/departments in agreeing on the afteruse of landfills and in granting restored landfill sites to appropriate parties were necessary for the smooth implementation of projects for afteruse of landfills in future; and
- (c) the EPD would take up the chairmanship of the new Policy Group and indicated that it would prepare a proposal on the procedures in (b) above for discussion by the Policy Group in early 2007.

In December 2010, the EPD prepared a guideline on considering the merits of each application for afteruse of restored landfills (Note 68). In 2014, the Landfill Afteruse Policy Group was dissolved subsequent to the launch of the Restored Landfill Revitalisation Funding Scheme (Funding Scheme).

Note 67: *In November 2006, the EPD formed the Landfill Afteruse Policy Group to coordinate the Government's actions on development of recreational facilities at restored landfills. The Policy Group, chaired by a Deputy Director of the EPD, comprises other members from various government bureaux and departments including the HAB, the Financial Services and the Treasury Bureau, the LCSD, the Planning Department and the Lands Department. This Policy Group replaced the Landfill Afteruse Working Group formed in 1995 by the then Recreation and Culture Branch.*

Note 68: *According to the EPD, an application would be assessed with respect to six criteria: (a) benefit to the community and environment; (b) proposed land use and its compatibility with its vicinity; (c) acceptance of the proposed project to the local community; (d) engineering and environmental feasibility; (e) management capability of the project proponent; and (f) business and financial viability of the project.*

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4.22 In his Policy Address of January 2014, the Chief Executive announced that the Government had earmarked \$1 billion to launch the Funding Scheme to provide funding for developing recreational, environmental or other community facilities on about 18 ha of restored landfill sites available for similar uses. The objectives of the Funding Scheme are to:

- (a) put restored landfills into good and innovative uses;
- (b) expedite the development of gainful use at restored landfills so that the community can benefit from them at the earliest opportunity; and
- (c) promote active public participation in the development of suitable facilities at the restored landfills.

4.23 Funding support will be provided to applicants who receive in-principle approval by the Secretary for the Environment, as follows:

- (a) a capital grant to cover the cost of capital works will be granted to successful applicants, subject to a cap of \$100 million per project; and
- (b) if justified, a time-limited grant to meet the starting costs and operating deficits (if any) for a maximum of the first two years of operation may be granted to successful applicants, subject to a cap of \$5 million per project.

4.24 To take forward the Funding Scheme:

- (a) the Secretary for the Environment appointed a Steering Committee (Note 69) in May 2014 to advise him on the operational arrangements of the Scheme, merits of the applications received and the funding support to be granted, as well as to monitor progress of supported applications and other related matters on the Scheme;

Note 69: *The Steering Committee, led by a non-official chairman, comprises 12 non-official members and 5 official members from the HAB, the ArchSD, the EPD, the HAD and the LCSD.*

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- (b) subject to the satisfaction of the Steering Committee with an applicant's detailed proposals, the Steering Committee would recommend the Secretary for the Environment to grant in-principle approval to the applicant to develop the proposed projects; and
- (c) the EPD would provide secretariat support to the Steering Committee and would be responsible for administration of the Scheme, including the processing of applications from non-profit-making organisations or National Sports Associations, issue of land licences to successful applicants and monitoring of the project progress.

Delays in implementing the Funding Scheme

4.25 In May 2014, some members of the Steering Committee suggested that applications for afteruse of the seven restored landfills should be invited in batches so that the operating details of the Funding Scheme could be refined after having gained experience with the implementation of the first batch. In March 2015, the Steering Committee endorsed the EPD's proposal that applications under the Funding Scheme would be invited in three batches (see Table 7).

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at restored landfills**

Table 7

**Three batches of restored landfills for inviting applications
under the Funding Scheme
(February 2018)**

Batch	Restored landfill (Entire landfill area — Note 1)	Area (in ha) available for application under Funding Scheme
1	(a) Pillar Point Valley (65 ha) (b) Tseung Kwan O Stage I (68 ha) (c) Ma Yau Tong Central (11 ha)	4.5 2.3 1.6
2 (Note 2)	(a) Tseung Kwan O Stage II/III (42 ha) (b) Ma Yau Tong West (6 ha) (c) Ngau Tam Mei (2 ha) (d) Siu Lang Shui (12 ha)	1.5 1.0 1.0 1.0
3 (Note 2)	Any landfills unallocated from Batches 1 and 2	As appropriate
Total		12.9 (Note 3)

Source: EPD records

Note 1: The status of current and planned afteruse of these restored landfills as of February 2018 is shown in Table 1 of paragraph 1.11.

Note 2: In March 2018, the EPD informed Audit that the list of restored landfills for application under Batches 2 and 3 of the Funding Scheme would be subject to further discussion and decision of the Steering Committee and the availability of manpower within the EPD.

Note 3: According to the EPD:

- (a) the 18 ha of land as mentioned in the Policy Address of 2014 (see para. 4.22) was an estimated figure at that time that would be available for afteruse; and*
- (b) before the official launching of the Funding Scheme in 2015, the EPD conducted a survey of the actual area available for application under Batch 1 of the Scheme.*

4.26 In June 2014, the EPD informed the LegCo Panel on Environmental Affairs (EA Panel) of a tentative action timetable for taking forward the Funding Scheme for Batch 1 (covering 3 restored landfills). However, Audit noted that there was delay in the implementation of Batch 1 (see Table 8 for details). As of December 2017, applications for Batches 2 and 3 had not yet been invited (see para. 4.28).

**Monitoring of non-governmental bodies' afteruse facilities
at restored landfills**

Table 8

Delays in implementation of Batch 1 of the Funding Scheme

Tentative timeframe submitted to LegCo in June 2014	Key action	Actual completion date	Delay (as of Dec 2017)
Dec 2014 to Apr 2015	(a) To seek FC's approval for non-recurrent funding of \$40 million	May 2015	1 month
	(b) To invite preliminary proposals	Nov 2015	7 months
	(c) To conduct briefings and site visits for all interested parties	Nov 2015 to Jan 2016	7 to 9 months
May 2015 to Aug 2015	(d) To conduct vetting and assessment by the Steering Committee	Feb 2017 to Dec 2017	18 to 28 months
	(e) To grant approval-in-principle to successful applicants	Not yet completed as of Dec 2017	28 months (counting up to Dec 2017)
From Sep 2015 onwards (Note)	(f) To conduct detailed planning, architectural, landscape and engineering design by successful applicants	Not yet completed as of Dec 2017	According to the EPD, no specific target dates were set for completing these actions
	(g) To consult relevant District Councils		
	(h) To seek funding approval pursuant to the established arrangements		
	(i) To grant formal approval to successful applicants		
	(j) To implement the projects by successful applicants		

Source: Audit analysis of EPD records

Note: According to the EPD's paper submitted to LegCo EA Panel in June 2014, the actual time required for detailed planning, engineering design and project implementation would depend on the complexity and scale of the proposed project concerned, and some of the less complex and smaller scale projects might proceed faster than the stated timeline.

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4.27 As shown in Table 8, as of December 2017, there were delays in implementing 5 key actions (i.e. items (a) to (e) in Table 8) under the Funding Scheme, ranging from 1 to 28 months. While 4 key actions had been completed, the other 6 key actions (items (e) to (j) in Table 8) had yet to be completed. As of December 2017, the vetting and assessment of applications had been completed and two potential applicants for developing afteruse facilities of two restored landfills (i.e. Ma Yau Tong Central Landfill and Tseung Kwan O Stage I Landfill) had been identified. However, no in-principle approval (see item (e) in Table 8) had been granted as of December 2017, giving rise to the longest delay of 28 months.

4.28 Furthermore, Audit noted that, in March 2015, the Steering Committee endorsed the EPD's proposal that applications for the Funding Scheme under Batches 2 and 3 (see Table 7 in para. 4.25) would be invited in the second quarter of 2016 and the first quarter of 2017 respectively. However, as of December 2017, the EPD was still processing the applications under Batch 1, and applications under Batches 2 and 3 had not been invited.

4.29 In March 2018, the EPD informed Audit that, subsequent to the LegCo EA Panel meeting in June 2014, it was considered desirable to introduce various refinements in the implementation of the Funding Scheme, leading to some deviations from the tentative action timeframe submitted to the EA Panel. According to the EPD, the refinements included:

- (a) more detailed documentation (such as a detailed application form, a guide to applications, technical information kits and a dedicated website) was prepared to facilitate the applicants to take due consideration of the site characteristics and the assessment requirements of the applications;
- (b) interviews with short-listed applicants were considered necessary during assessment of applications under Batch 1, such that the Steering Committee might seek clarification from close contenders and assess their applications more carefully; and
- (c) further engagement with the relevant District Councils (in September 2015 and January 2017) at an early stage of the Funding Scheme was considered necessary, such that views of the local community could be timely considered in the assessment process (i.e. item (d) in Table 8 of para. 4.26).

Monitoring of non-governmental bodies' afteruse facilities at restored landfills

4.30 In Audit's view, there is a need for the ENB and the EPD to make additional efforts in implementing the Funding Scheme with a view to achieving the objective of expediting the development of gainful use at restored landfills so that the community can benefit from them at the earliest opportunity (see para. 4.22(b)).

Need to conduct review on measures to address development constraints at PPVL

4.31 In January 2017, in the course of vetting applications under the Funding Scheme, the EPD consulted a committee of the Tuen Mun District Council on the seven applications received under the Funding Scheme for afteruse of the area at PPVL (see Figure 4 in para. 2.6). The committee raised concern on the lack of direct access, utilities and infrastructure at PPVL, and suggested the Government to consider providing the above basic infrastructure at PPVL before applications were invited again. At the same committee meeting, the EPD said that the Government was processing the applications for afteruse of the area at PPVL under the Funding Scheme, and in case no application was successful eventually, the Government would consider the committee's suggestions, including operating appropriate projects at PPVL by itself and relocating the existing facilities at other locations to the PPVL in order to vacate the land occupied by such facilities for other uses.

4.32 For the three restored landfills under Batch 1 of the Funding Scheme (see Table 7 in para. 4.25), potential applicants were identified for two restored landfills (see para. 4.27) but not the PPVL. In February 2017, the Steering Committee considered that all applications for afteruse of the area at PPVL could not fully meet the established assessment criteria, and hence no application would be shortlisted for further assessment. The Steering Committee also concurred with the views and suggestions expressed by the Tuen Mun District Council's committee in January 2017 (see para. 4.31). In response, the EPD said that it would review the technical constraints of the PPVL site and consider how best to address the issues concerned for future afteruse of the site. However, as of December 2017, the EPD had not commenced a review for the purpose.

4.33 In March 2018, the EPD informed Audit that it was currently focusing its resources to work on the two afteruse projects at Ma Yau Tong Central Landfill and Tseung Kwan O Stage I Landfill where potential applicants had been identified by the Steering Committee. To facilitate the development of afteruse facilities at the PPVL,

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Audit considers that the EPD needs to conduct a review on measures to address the development constraints at PPVL as early as possible.

Need to consider formulating guidelines on related party transactions

4.34 According to the LegCo EA Panel paper of June 2014 for the Funding Scheme (see para. 4.26):

- (a) approved project should be non-profit-making in nature. Successful applicant will be required to set up a dedicated account for each individual project. Any revenue earned from the project has to be ploughed back to the dedicated account for operation of the project and any surplus, if available, upon completion of the project or on expiry of the land licence, should be returned to the Government where applicable; and
- (b) a land licence will be granted by the EPD to the successful applicant (who then becomes “the licensee”) to occupy the restored landfill site for a fixed period for the proposed use. The EPD will closely monitor the licensee’s operation to ensure their compliance with the terms and conditions set out in the land licence and approval conditions recommended by the Steering Committee. The successful applicant must also comply with procurement requirements stipulated by the EPD and the Steering Committee, who may impose suitable conditions in addition to the general procurement procedures. Upon commissioning of the developed facility, the licensee will be required to submit annual reports with audited accounts for monitoring purpose.

4.35 Audit notes that the EPD has not formulated any guidelines for its officers to assess the reasonableness and appropriateness of related party transactions as disclosed in a licensee’s audited accounts. In view that substantial financial support from the Government will be provided to the successful applicant (a maximum capital grant of \$100 million per project — see para. 4.23(a)) and the applicant is required to operate on a non-profit-making basis (see para 4.34(a)), the EPD needs to formulate guidelines for its officers to assess whether related party transactions of a licensee under the Funding Scheme are reasonable and appropriate.

Audit recommendations

4.36 **Audit has recommended that the Secretary for the Environment and the Director of Environmental Protection should make additional efforts in implementing the Restored Landfill Revitalisation Funding Scheme with a view to achieving the objective of expediting the development of gainful use at restored landfills so that the community can benefit from them at the earliest opportunity.**

4.37 **Audit has recommended that the Director of Environmental Protection should:**

- (a) **conduct a review on measures to address the development constraints at PPVL as early as possible; and**
- (b) **formulate guidelines for EPD officers to assess whether related party transactions of a licensee under the Restored Landfill Revitalisation Funding Scheme are reasonable and appropriate.**

Response from the Government

4.38 The Secretary for the Environment and the Director of Environmental Protection agree with the audit recommendation in paragraph 4.36. They have said that the ENB and the EPD will seek additional resources in order to launch other batches of the Funding Scheme as soon as possible.

4.39 The Director of Environmental Protection agrees with the audit recommendations in paragraph 4.37.

Appendix A
(para. 1.2(b) refers)

Commissioning and closure years of 13 closed landfills

Closed landfill	District	Commissioning year	Total waste received (million tonnes)	Closure year
1. Gin Drinkers Bay	Kwai Tsing	1960	3.50	1979
2. Ngau Tam Mei	Yuen Long	1973	0.15	1975
3. Shuen Wan	Tai Po	1973	15.00	1995
4. Ma Tso Lung	North	1976	0.20	1979
5. Ngau Chi Wan	Wong Tai Sin	1976	0.70	1977
6. Sai Tso Wan	Kwun Tong	1978	1.60	1981
7. Siu Lang Shui	Tuen Mun	1978	1.20	1983
8. Tseung Kwan O Stage I	Sai Kung	1978	15.20	1995
9. Ma Yau Tong West	Kwun Tong	1979	0.60	1981
10. Ma Yau Tong Central	Kwun Tong	1981	1.00	1986
11. Pillar Point Valley	Tuen Mun	1983	11.00	1996
12. Jordan Valley	Kwun Tong	1986	1.50	1990
13. Tseung Kwan O Stage II/III	Sai Kung	1988	12.60	1994
Total			64.25	

Source: EPD records

Appendix B
(paras. 1.8 and 2.7 refer)

Details of landfill restoration contracts and restoration works

Restored landfill	Contractor	Contract	Contract award date	Restoration works		Actual capital cost (\$ million)	Actual operating cost up to 2016-17 (\$ million)	Actual operating cost in 2016-17 (\$ million)
				start date	completion date			
1. Tseung Kwan O Stage I	Contractor A	Contract A1	May 1997	Jul 1997	Jan 1999	369.3 (Note 1)	296.6 (Note 1)	21.1 (Note 1)
2. Tseung Kwan O Stage II/III								
3. Gin Drinkers Bay		Contract A2	Feb 1999	Mar 1999	Sep 2000	332.2 (Note 1)	268.9 (Note 1)	18.9 (Note 1)
4. Ma Tso Lung					May 2000			
5. Ngau Tam Mei								
6. Siu Lang Shui					Apr 1999			
7. Pillar Point Valley		Contract A3	Aug 2004	Oct 2004	Jul 2006	199.2	140.3	10.7 (Note 2)
8. Shuen Wan	Contractor B	Contract B1	Nov 1996	Dec 1996	Dec 1997	167.7	84.0	4.1
9. Ngau Chi Wan		Contract B2	Feb 1997	Mar 1997	Aug 1998	249.3 (Note 1)	267.6 (Note 1)	13.1 (Note 1)
10. Jordan Valley					Dec 2000			
11. Ma Yau Tong Central					May 1998			
12. Ma Yau Tong West								
13. Sai Tso Wan					Apr 1997			
Total						1,317.7	1,057.4	67.9

Source: EPD records

Note 1: According to the EPD, breakdown of capital and operating costs for individual landfills is not available, as the capital and operating costs included sharing of staff and overhead costs among different landfills under the same landfill restoration contract.

Note 2: In 2016-17, the original operating cost was \$16 million and the EPD deducted \$5.3 million for Contractor A's non-compliances with requirements of Contract A3. Therefore, a net sum of \$10.7 million was paid to Contractor A for the related aftercare work.

Appendix C
(paras. 1.11 and 1.12(b) refer)

**Area information of afteruse of restored landfills
(February 2018)**

Restored landfill	Area (in ha)			
	Total (a)	Opened for afteruse (b)	Committed for afteruse but not yet opened (c)	Remaining (Note 1) (d) = (a) – (b) – (c)
1. Tseung Kwan O Stage I	68.0	1.3	12.5	54.2
2. Pillar Point Valley	65.0	0.2	0.0	64.8
3. Shuen Wan	55.0	15.6	34.4 (Note 2)	5.0
4. Tseung Kwan O Stage II/III	42.0	8.9	0.0	33.1
5. Gin Drinkers Bay	29.0	3.9	21.6 (Note 3)	3.5
6. Siu Lang Shui	12.0	0.0	0.0	12.0
7. Jordan Valley	11.0	5.0	0.0	6.0
8. Ma Yau Tong Central	11.0	0.1	0.0	10.9
9. Sai Tso Wan	9.0	3.0	0.0	6.0
10. Ngau Chi Wan	8.0	4.0	0.0	4.0
11. Ma Yau Tong West	6.0	0.1	0.0	5.9
12. Ma Tso Lung (Note 4)	2.0	2.0	0.0	0.0
13. Ngau Tam Mei	2.0	0.0	0.0	2.0
Total	320.0	44.1	68.5	207.4

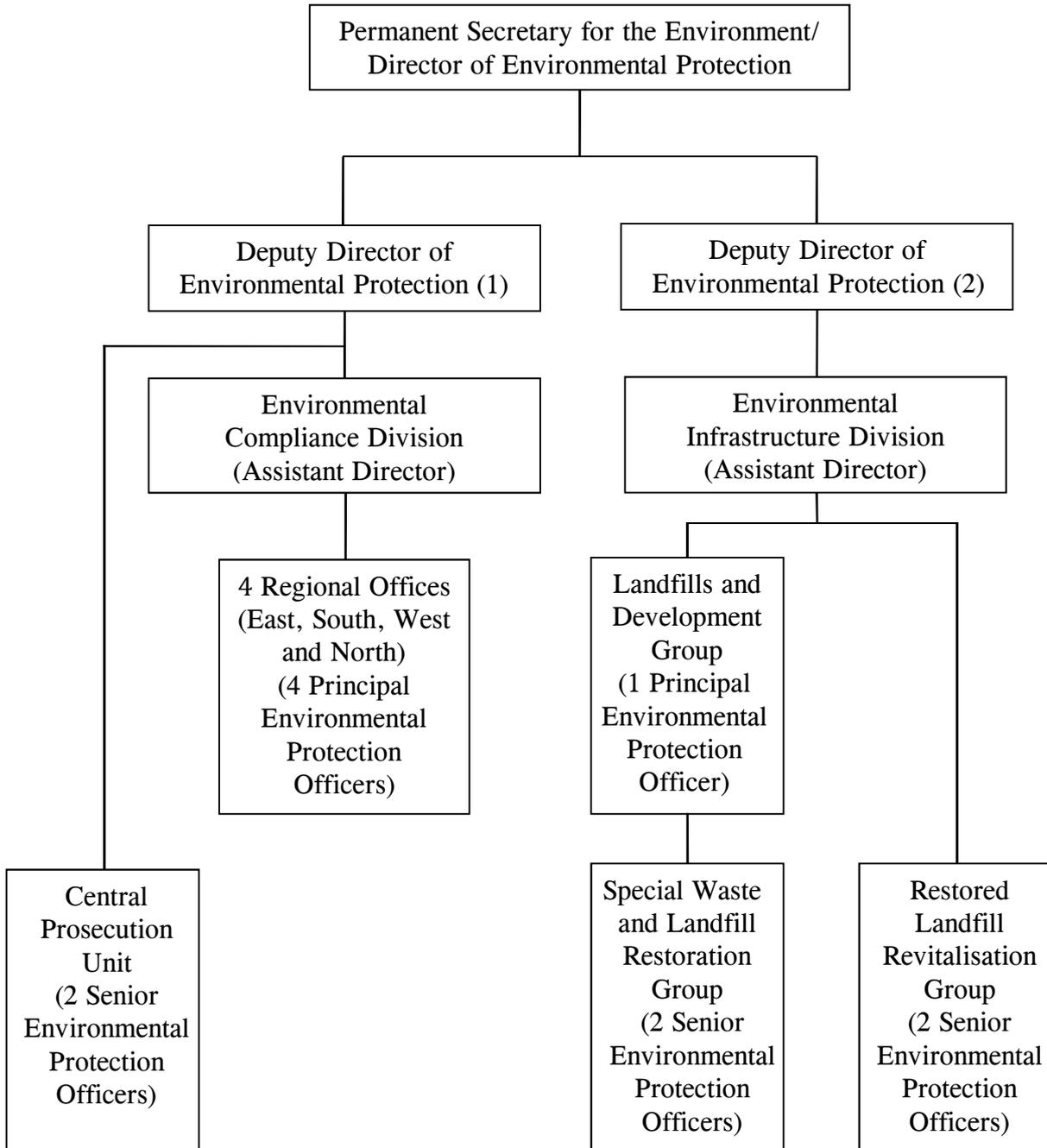
112.6

Source: EPD records

Appendix C
(Cont'd)
(paras. 1.11 and 1.12(b) refer)

- Note 1: According to the EPD, the remaining areas in column (d) include:*
- (a) those reserved for the Restored Landfill Revitalisation Funding Scheme (12.9 ha — see Table 7 in para. 4.25);*
 - (b) those occupied by the EPD's and landfill restoration contractors' site offices, restoration facilities, access roads, trees and landscaping features; and*
 - (c) other specified uses (including 22.8 ha of the Tsing Shan Firing Range located within the Pillar Point Valley Landfill and 2.3 ha of the Siu Lang Shui Landfill designated as a Site of Special Scientific Interest for over-wintering of butterflies).*
- Note 2: An area of 50 ha at Shuen Wan Landfill was earmarked for the Government's implementation of a land exchange scheme for the development of a private golf course, where 15.6 ha of the 50 ha had already been opened as a temporary golf driving range. Therefore, the "area committed for afteruse but not yet opened" was 34.4 (50 minus 15.6) ha.*
- Note 3: An area of 25.5 ha at Gin Drinkers Bay Landfill was earmarked for development of the Kwai Chung Park, where 3.9 ha of the 25.5 ha had already been opened for the BMX park. Therefore, the "area committed for afteruse but not yet opened" was 21.6 (25.5 minus 3.9) ha.*
- Note 4: In June 1996, the Lands Department granted the site at Ma Tso Lung Landfill to a non-governmental organisation for operating a campsite, and the organisation was required under the land grant to allow unrestricted access to the Government's officers and its contractors to carry out necessary inspections and works at the site. In March 1999, the EPD commenced construction of restoration facilities at the landfill site. In May 2000, the EPD completed the works and handed over the site to the organisation in August 2000. In April 2010, the renewal of the land grant was not supported as the site fell within the proposed Kwu Tung North New Development Area which would likely be developed in due course. The site was covered by a short-term tenancy commencing from July 2012 until such time the tenancy is terminated (after giving of three months' advance notice either by the Government or the organisation). Under the tenancy, the Government's officers and its contractors are allowed unrestricted access to carry out necessary inspections and works at the site.*

**Environmental Protection Department:
Organisation chart (extract)
(December 2017)**



Source: EPD records

Appendix E
(para. 2.10 refers)

Key events of Contractor A's non-compliances with statutory and contractual requirements at Pillar Point Valley Landfill (December 2015 to November 2017)

Month	Key event
(a) Dec 2015 to Mar 2016	In light of complaints on suspected malpractice of Contractor A (see para. 2.8), the EPD's investigations found that the LGP at PPVL had operated below the required temperature from December 2015 to March 2016 (non-compliance in 28 days during the period), resulting in deduction of \$221,400 from Contractor A (see para. 2.13(c)).
(b) May 2016	<ul style="list-style-type: none"> (i) In 10 days, Contractor A discharged leachate that exceeded the licensed maximum daily limit, resulting in a fine of \$100,000 (see para. 2.11(a)). (ii) In 2 days, Contractor A failed to notify the EPD within 24 hours of incidents where the leachate discharge exceeded the maximum daily limit in (i) above, resulting in a fine of \$20,000 (see para. 2.11(b)). (iii) In view of the proposed overhaul works and the forecast increase of leachate inflow in the forthcoming wet season, the EPD instructed Contractor A to suspend the LTP operation and Contractor A arranged the direct transfer of leachate by vehicles to the LTP of the EPD's West New Territories Landfill and to the Drainage Services Department's Pillar Point Sewage Treatment Works for off-site treatment. The leachate transfer arrangement continued until January 2017, resulting in deduction of \$5,155,000 from Contractor A (see para. 2.26).
(c) Jun 2016	<ul style="list-style-type: none"> (i) Contractor A had discharged leachate that exceeded the licensed total nitrogen level until July 2017 (non-compliance in 9 days during the period), resulting in a fine of \$88,000 (see para. 2.11(c)). (ii) Contractor A had discharged leachate that exceeded the total nitrogen level required under the contract until August 2017 (non-compliance in 20 days during the period), resulting in deduction of \$227,300 from the contractor (see para. 2.13(b)). (iii) The EPD completed a review on the robustness of environmental monitoring practices at its waste facilities (including restored landfills), recommending improvement measures to be implemented (see para. 2.14).
(d) Nov 2016	Contractor A commenced the LTP overhaul works that were completed in January 2017 (see para. 2.26).
(e) Jul to Nov 2017	In July 2017, due to very heavy rainfall and the pipe-dislocation problem of the LTP overhaul works, the leachate inflow at PPVL far exceeded the LTP treatment capacity and reached the alert level of leachate storage tanks. Contractor A obtained EPD's consent to directly transfer leachate by vehicles from PPVL to the Pillar Point Sewage Treatment Works for off-site treatment. The transfer arrangement ceased in November 2017, resulting in deduction of \$2,048,100 from Contractor A (see para. 2.30).

Source: EPD records

Photographs of four government recreational facilities at restored landfills

Photograph 7

Sai Tso Wan Recreation Ground



Source: EPD records

Photograph 8

Ma Yau Tong West Sitting-out Area



Source: EPD records

Photograph 9

Ma Yau Tong Central Sitting-out Area



Source: EPD records

Photograph 10

Ngau Chi Wan Park



Source: EPD records

**Chronology of key events in the development of
Kwai Chung Park
(1979 to 2017)**

Year	Key event	
(A) Events reported in Audit Report of March 2013 (see para. 3.5)		
<i>Background</i>		
1979	1.	The Gin Drinkers Bay Landfill was closed.
1980	2.	The site was handed over to the former New Territories Development Department for development.
1989	3.	Phase I development of the site (Kwai Chung Park) was completed. Basic facilities were built (e.g. access road, footpath, lighting facilities and administration office).
1992	4.	The Park was handed over to the former Regional Services Department (Note) for further development.
	5.	Due to potential landfill gas problems, the Park had not been formally opened to the public. Phase II development of the Park was withheld.
1994 to 1998	6.	Airport railway was under construction. The railway went across the Park. Development of the Park was held in abeyance.
1999 and 2000	7.	The Park was handed over to the EPD for carrying out landfill restoration works.
	8.	The EPD completed the restoration works and commenced the aftercare work.
<i>Development responsibility taken over by the LCSD</i>		
2000	9.	The LCSD took over the Phase II development project of the Park.
2001 and 2002	10.	The LCSD explored developing the Park into a football training centre, but found that the proposal did not work due to site constraints.
2003 to 2009	11.	The LCSD explored different development options, including: (a) opening part of the Park facing Tsuen Wan Road to the public; (b) developing a community garden cum sitting-out area in the Park; (c) developing a model car racing track in the Park; (d) developing a multi-purpose lawn in the Park; and (e) developing part of the Park into a leisure ground (including a cycling ground). However, the options could not go ahead due to various reasons.
	12.	Approval was given for developing a BMX park in the Kwai Chung Park site after obtaining funding from a sponsor.

Appendix G
(Cont'd)
(paras. 3.5 and 3.6 refer)

Year	Key event	
2009 and 2010	13.	The LCSD received a proposal to develop cricket pitches at the Kwai Chung Park site on a self-financing basis.
	14.	The proponent withdrew the proposal owing to financial considerations.
2010	15.	The LCSD put on hold the planning work for the development of the Kwai Chung Park. A large part had been left unused.
(B) New events noted in this follow-up audit review		
2013	16.	A committee under the Kwai Tsing District Council endorsed the LCSD's proposed project scope of the Kwai Chung Park (including a golf driving range with 30 golf driving bays).
2014	17.	The HAB issued a Project Definition Statement to the ArchSD for the latter to prepare a Technical Feasibility Statement.
	18.	The ArchSD informed the HAB and the LCSD that the Kwai Chung Park site could not physically accommodate the proposed golf driving range, and requested the HAB to revise the Project Definition Statement.
2016	19.	The Kwai Tsing District Council passed a motion requesting the responsible bureaux/departments to deliberate and study the re-opening of the Kwai Chung Park to the public in a safe condition and to develop and optimise all the basic facilities of the Park as soon as possible in order to increase the greening areas and open spaces in Kwai Tsing District.
2017	20.	In the Policy Address of January 2017, the Kwai Chung Park was included as one of the projects in the five-year plan for sports and recreation facilities.
	21.	The Kwai Tsing District Council endorsed the LCSD's proposal to develop the Kwai Chung Park by two stages.
	22.	The LCSD issued a draft revised Project Definition Statement to the ArchSD for preliminary comments.

Source: HAB, ArchSD and LCSD records

Note: The Regional Services Department was dissolved in 1999. Its functions relating to leisure and cultural services have been taken over by the LCSD since 2000.

Appendix H
(para. 3.49 refers)

**Chronology of key events on building location issue
in the development of Jordan Valley Park
(November 2005 to May 2008)**

	Month	Key event
1.	Nov 2005	The EPD informed the LCSD (information also copied to the ArchSD) of the requirements and restrictions applied to restored landfills, including deep excavation was not advised during construction and excavation into the landfill capping would not be allowed. The EPD also asked the ArchSD to provide the detailed design and layout plans for its comments when available.
2.	Jul 2006	The ArchSD engaged a consultant for the design and tender preparation of the Project. According to the consultancy brief, the consultant had to pay special attention on minimising any possible conflict due to the interfacing of existing restoration facilities.
3.	Aug 2006	The ArchSD's consultant received a copy of the record drawings from the EPD.
4.	Mar 2007	Upon request of the ArchSD's consultant, the ArchSD and its consultant received a copy of the technical specification of the landfill restoration works from the landfill restoration contractor (Contractor B).
5.	Apr 2007	The ArchSD's consultant completed the detailed design.
6.	Jun 2007	After forwarding the draft document for engaging a specialist independent checker to the EPD for comment in March 2007 and receiving the EPD's comment in early April 2007, the ArchSD appointed a specialist independent checker in June 2007 to check compliance with the EPD's technical specification for works on restored landfills.
7.	Aug 2007	After the FC approved the APE for the JVP project in July 2007, the ArchSD invited tenders on 17.8.2007 (with tender documents specifying that the contractor should not over-excavate the existing landfill surface, and the design and layout plans mainly included 13 blocks of buildings (e.g. toilets and a greenhouse) and a model car circuit) for the contract works. The tender closed in late September.
8.	Oct and Nov 2007	On 22.10.2007, the EPD, upon receiving the complete set of tender drawings (some received on 25.9.2007 and others on 18.10.2007) from the ArchSD, passed them to Contractor B. On 24.10.2007, the EPD advised the ArchSD that many aspects of the design had deviated from the design requirements. The ArchSD found that 4 of the 13 blocks of buildings and the model car circuit had been located above the landfill gas pipes and sub-soil drain system (Note 1).

Appendix H
(Cont'd)
(para. 3.49 refers)

	Month	Key event
8.	Oct and Nov 2007 (Cont'd)	The ArchSD requested its consultant to review the overall design with the landfill restoration contractor of the Jordan Valley Landfill (Contractor B). On 27.11.2007, the ArchSD issued a letter urging its consultant to speed up the review. On the same date, based on the tender report submitted by the ArchSD on 13.11.2007, on the recommendation of the Central Tender Board, the Permanent Secretary for Financial Services and the Treasury (Treasury) approved the award of the contract.
9.	Dec 2007	On 5.12.2007, Contractor B informed the ArchSD that if the landfill gas system, leachate system and sub-soil drain system had to be relocated, the relocation cost would be huge (Note 2). On 11.12.2007, after considering that the building location issue could be resolved at post-contract stage, the ArchSD issued the letter of acceptance to Contractor D.
10.	Mar 2008	After considering the consultant's revised design, the ArchSD decided that, of the buildings and structures with building location issue, 2 would be relocated within the site, and the remaining 2 and the model car circuit would be carried out with modification of the design (e.g. raising the external ground level of building with imported fill).
11.	May 2008	Based on the advice from Contractor B, the ArchSD concluded that raising the levels of fence wall footings, the model car circuit and the external ground level of all 13 blocks of buildings with imported fill would be required (Note 3).

Source: Audit analysis of ArchSD records

Note 1: In March 2018, the ArchSD informed Audit that it could not find any records from the files showing the exact time of identifying the building location issue.

Note 2: In February 2018, the ArchSD informed Audit that: (a) from Contractor B's view, the relocation of the underground restoration facilities was only an option; and (b) the ArchSD considered that it was more cost effective and less substantial to modify the footing design and raise the external ground level of buildings with imported fill.

Note 3: In March 2018, the ArchSD informed Audit that this was the most cost-effective solution.

Acronyms and abbreviations

APE	Approved Project Estimate
ArchSD	Architectural Services Department
Audit	Audit Commission
BMX	Bicycle motocross
CWRF	Capital Works Reserve Fund
DBO	Design-build-operate
DSD	Drainage Services Department
EA Panel	Panel on Environmental Affairs
EC Division	Environmental Compliance Division
EI Division	Environmental Infrastructure Division
ENB	Environment Bureau
EPD	Environmental Protection Department
FC	Finance Committee
ha	Hectare
HAB	Home Affairs Bureau
HAD	Home Affairs Department
JVP	Jordan Valley Park
LCSD	Leisure and Cultural Services Department
LegCo	Legislative Council
LGP	Landfill gas flaring plant
LTP	Leachate treatment plant
PPVL	Pillar Point Valley Landfill
WPCO	Water Pollution Control Ordinance

CHAPTER 2

**Commerce and Economic Development Bureau
Customs and Excise Department
Office of the Communications Authority
Consumer Council**

**Consumer protection against
unfair trade practices, unsafe goods, and
short weights and measures**

**Audit Commission
Hong Kong
3 April 2018**

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. 70 of the Director of Audit contains 8 Chapters which are available on our website at <http://www.aud.gov.hk>

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CONSUMER PROTECTION AGAINST UNFAIR TRADE PRACTICES, UNSAFE GOODS, AND SHORT WEIGHTS AND MEASURES

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CONSUMER PROTECTION AGAINST UNFAIR TRADE PRACTICES, UNSAFE GOODS, AND SHORT WEIGHTS AND MEASURES

Executive Summary

1. Hong Kong is a renowned shoppers' paradise with a total retail sales value of \$436.6 billion in 2016. According to the Commerce and Economic Development Bureau (CEDB), the primary objectives in consumer protection policy are: (a) to ensure that consumer products are safe and offered in accordance with good trade practices, and avenues for redress are available; and (b) to facilitate consumer access to legal remedies. The Customs and Excise Department (C&ED) is responsible for enforcing four consumer protection Ordinances: (i) the Trade Descriptions Ordinance (TDO — Cap. 362) which prohibits application of false trade descriptions and common unfair trade practices against consumers of goods and services; (ii) the Weights and Measures Ordinance (WMO — Cap. 68) which prohibits the use of false or defective weighing and measuring equipment for the purpose of trade; (iii) the Consumer Goods Safety Ordinance (CGSO — Cap. 456) which requires that consumer goods supplied for local consumption are reasonably safe; and (iv) the Toys and Children's Products Safety Ordinance (TCPSO — Cap. 424) which requires that toys and children's products supplied for local consumption are reasonably safe. In 2016-17, the C&ED deployed 246 staff and spent \$121.2 million on the enforcement of the four Ordinances. The Communications Authority, with the support of the Office of the Communications Authority (OFCA), is responsible for the enforcement of the TDO in relation to the provision of licensed telecommunications or broadcasting services. As at 31 October 2017, OFCA deployed 38 staff to carry out the enforcement work among other duties. The Consumer Council (CC) is a statutory body established to protect consumer interests through other measures such as conciliating consumer disputes, disseminating information and rendering advice to consumers, and organising consumer education activities. The CC is not a law enforcement agency and does not possess the power of investigation or adjudication. Instead, the CC handles complaints by means of conciliation, providing a platform for consumers and traders to resolve disputes by mutually acceptable agreements. The CC, with an establishment of 150 staff as at 31 March 2017, received recurrent subventions of \$115.4 million from the Government for 2016-17. The Audit

Executive Summary

Commission (Audit) has recently conducted a review to examine the efforts made by the C&ED, OFCA and CC to protect consumer interests with a view to identifying areas of improvement.

Enforcement work against unfair trade practices

2. *Implementation of the 2012 Amendment Ordinance.* The Trade Descriptions (Unfair Trade Practices) (Amendment) Ordinance 2012 was enacted in July 2012 to, among other things: (a) extend the coverage of the TDO to prohibit false trade descriptions in respect of services (in addition to goods); and (b) introduce criminal offences to deter the common unfair trade practices specified in the TDO. After the 2012 Amendment Ordinance came into full operation on 19 July 2013, the Government briefed the Legislative Council (LegCo) Panel on Economic Development on the implementation progress from 2014 to 2016. At the Panel meeting of May 2016, two Members considered that the prosecution rate was low compared to the number of complaints. In response, the C&ED explained that: (i) it was not suitable to deduce the prosecution rate on the basis of the number of complaints because some complaints did not involve contravention of the TDO and some involved the same traders and were hence processed as one investigation case; and (ii) the C&ED had initiated prosecution in 220 cases (16% of 1,363 completed investigations), including 7 successfully prosecuted service-related cases and 213 goods-related cases with 95% successful prosecution rate (paras. 1.5(b), 2.2 and 2.3(b)).

3. *Need to conduct a comprehensive review on the enforcement of the amended TDO.* In 2015 and 2016, OFCA conducted reviews of the enforcement of the amended TDO and found that it was more difficult to collect sufficient evidence against misconduct relating to services than goods and the criminal regime under the TDO required more stringent rule of evidence to prove an offence beyond reasonable doubt. Audit analysis of the enforcement statistics from July 2013 to December 2017 revealed that: (a) for OFCA, the prosecution rate for services was low (3%); and (b) for the C&ED, the prosecution rate for goods (27%) was more than three times higher than that for services (6%). According to the C&ED, there were a number of factors affecting the prosecution rates other than insufficient evidence (e.g. complainants' withdrawal of their complaints). In Audit's view, there is a need to ascertain the major contributing factors of the lower prosecution rate for services in order to enhance the effectiveness of the amended TDO. In light of the difficulty in collecting sufficient evidence against misconduct and the lower prosecution rate for

Executive Summary

services, and with the lapse of over four years since the implementation of the amended TDO, it is opportune to undertake a comprehensive review on the enforcement issues (paras. 2.4, 2.6 and 2.7).

4. ***Inadequacies in the information exchange and case referral between the enforcement agencies and CC.*** In December 2012, the Government informed the LegCo Panel on Economic Development that in connection with the implementation of the 2012 Amendment Ordinance, an electronic platform would be established for referral of cases between the C&ED and CC. The electronic platform (in the form of computer system interface) was established by enhancements to the computer systems of the CC and C&ED at a total cost of \$2 million which were completed in August 2014 and February 2016 respectively. The CC had shared unfair trade practice information with the C&ED since September 2014. On the other hand, the C&ED made minor enhancement to its existing system in 2014 to receive information. After the roll-out of its enhanced system in February 2016, the C&ED had not used the computer system interface for referring cases to the CC for conciliation. Moreover, the C&ED only started to use the computer system interface to share case information with the CC in February 2018. According to the C&ED, further system enhancements were required for referring cases to the CC for conciliation. Audit also noted that OFCA was not involved in setting up the electronic platform for information exchange and case referral (paras. 2.8 to 2.11, 2.13 and 2.14).

5. ***Enforcement work of the C&ED.*** The C&ED's enforcement work of the TDO is divided between its Intellectual Property Investigation Bureau (IPIB) and Trade Descriptions Investigation Bureau (TDIB). The two bureaux deployed 190 staff and spent \$92.9 million on the enforcement of the TDO in 2016-17. The IPIB is responsible for the enforcement of the TDO in relation to the supply of services and specified types of goods (notably ginseng, dried seafood and mobile phones which may involve syndicate crimes) while the enforcement responsibility for other goods rests with the TDIB. Their enforcement work includes: (a) handling of complaints; (b) patrol operations; (c) investigations; and (d) administering prosecutions and sanctions. In 2017, there were 6,922 TDO-related complaints, and the IPIB and TDIB completed 1,997 and 1,491 investigations, and instigated 22 and 50 prosecutions under their respective purview. Significant convicted cases in recent years included misleading pricing of goods at ginseng/dried seafood shops, aggressive commercial practices at a beauty parlor and a fitness centre, and false trade descriptions of goods sold at supermarkets (paras. 1.6, 2.7(b), 2.21, 2.22 and 2.30).

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6. ***Areas for improvement in the IPIB's enforcement work.*** Timeliness in conducting investigations is important to protect consumer interests as unfair trade practices could be promptly curbed to prevent more consumers from being preyed upon. Based on the C&ED's computer records of 2,960 investigations completed from July 2013 to 2 November 2017, Audit found that the IPIB had taken more than one year to close 1,532 (52%) investigation case files. According to the C&ED, the time required for each investigation depended on a number of factors (such as its complexity) and all investigations were completed within the statutory time limit for prosecution (para. 2.23). However, Audit's sample check of 50 investigation cases has revealed the following issues:

- (a) ***Need to step up supervisory oversight of investigation progress and fieldwork.*** According to the IPIB's Work Manual, supervisors shall monitor the progress of the investigation cases by reference to the progress reports submitted by case officers. For 7 of the 50 cases examined, 56 progress reports were submitted from 2014 to 2017. Audit found that:
 - (i) 5 (9%) reports were not signed off by supervisors concerned;
 - (ii) 19 (34%) reports were signed off more than 9 months after submission;
 - and (iii) 7 (12%) signed-off reports were undated. There was no assurance that timely supervisory checks had been properly conducted in these 31 reports. The Work Manual also requires supervisory check on surveillance/decoy operations. However, in 42 of the 50 cases examined which involved such operations, there was no record showing that supervisory check had been conducted for 214 operations in 38 (90%) cases (para. 2.26); and

- (b) ***Need to meet the internal time standards in handling investigation cases.*** To facilitate the intelligence collection and analysis work by the C&ED's Intelligence Bureau, the IPIB has set internal time standards for the submission of bimonthly reports on investigation results and reporting closed case information to the Intelligence Bureau. Audit examination of 50 investigations revealed that:
 - (i) of 726 reports on investigation results submitted from January 2014 to October 2017, 120 (16.5%) had exceeded the two-month submission time standard by 1.1 to 6.3 months; and
 - (ii) in 35 (70%) cases examined, the one-month time standard for reporting closed case information to the Intelligence Bureau was exceeded by 1.2 to 13.5 months (para. 2.27).

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7. ***Areas for improvement in the TDIB's enforcement work.*** The C&ED received 3,260 and 4,242 goods-related complaints from the public in 2016 and 2017 respectively. The C&ED has set a performance target in its Controlling Officer's Report (COR) to commence investigation into urgent complaints within 24 hours upon receipt of complaints. According to the C&ED, urgent complaints include those cases lodged by short-haul visitors or involving mobile/temporary stalls, that may require immediate investigation or action to be taken. The TDIB has also set time standards for completing investigations, i.e. within 4 months for cases not resulting in enforcement actions (e.g. seizure) and 6 months for cases with enforcement actions taken (paras. 1.9, 2.30 and 2.31). Audit examination has revealed the following issues:

- (a) ***Need to improve complaint handling and reporting achievement of key performance target in COR.*** Based on the information obtained from the TDIB, of the 3,260 goods-related complaints in 2016, 45 (1.4%) were classified as urgent cases requiring commencement of investigations within 24 hours upon receipt of the complaints. Audit found that the 24-hour time target for commencing investigation was not met in 12 cases. In response to Audit's enquiry, the C&ED in February and March 2018 said that: (i) 31 of the 45 cases had been misclassified as urgent cases (comprising the 12 cases found by Audit to have taken longer than 24 hours to commence investigations and another 19 cases with actions taken within 24 hours); (ii) the 31 cases were misclassified because for 19 cases involving temporary stalls, the durations of their operations were later found to be not temporary (longer than 24 hours); (iii) for another case involving a tourist, the complaint was lodged by e-mail after she had left Hong Kong; (iv) for the remaining 11 cases, they did not involve short-haul visitors or temporary stalls; and (v) only 14 cases (45 less 31) were confirmed urgent and all of them had met the 24-hour target. In Audit's view, the fact that the 31 urgent cases were only discovered by the C&ED to have been misclassified during this audit after the 24-hour performance target had been reported as 100% achieved based on 45 urgent cases suggested inadequate checking of: (i) the nature of the complaints in their classification; and (ii) the supporting records for reporting performance (paras. 2.31 and 2.32); and
- (b) ***Need to improve the timeliness in completing investigation work.*** Audit found that of 4,990 completed investigation cases for complaints received between July 2013 and December 2017, 1,946 (39%) cases could not meet the time standards, including 5 of the 14 urgent complaint cases of 2016.

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Among the 1,946 cases, the time taken to complete 38% of 1,328 cases not resulting in enforcement actions and 50% of 618 cases with enforcement actions taken had exceeded their respective time standards by more than 90 days. Audit examination of 30 cases not meeting the time standards revealed that the long time taken in carrying out test purchases and sending samples for laboratory testing had contributed to the delays. For example, in three cases that took more than two months to conduct test purchases after commencement of investigation, there was no documented justification for the long time taken. At present, there is no exception report generated by the C&ED's computer system to facilitate the monitoring of the delayed investigation cases (paras. 2.33 to 2.35).

Enforcement work against unsafe goods, and short weights and measures

8. The Consumer Protection Bureau (CPB) of the C&ED is responsible for enforcing the CGSO and TCPSO against unsafe goods, and the WMO against short weights and measures. Its enforcement work includes: (a) handling of complaints on alleged offences; (b) conducting proactive spot checks and surveillance at retail shops; (c) conducting investigations on irregularities detected; and (d) administering prosecutions and sanctions. It deployed 56 staff and spent \$28.3 million on enforcing the three Ordinances in 2016-17. In 2017, the CPB received a total of 562 complaints, conducted 4,758 spot checks and completed 929 investigations under the three Ordinances (paras. 1.6 and 3.2 to 3.7).

9. *Areas for improvement in spot checks.* The objectives of spot checks are to detect the sale of unsafe goods under the CGSO and TCPSO, and short-weighted goods under the WMO. Audit has analysed the results of 6,740 CGSO-related, 7,371 TCPSO-related and 8,073 WMO-related spot checks conducted from 2013 to 2017 (paras. 3.8 and 3.13) and found the following issues:

- (a) *Need to address the issue of high proportion of cases with target products not found in CGSO and TCPSO-related spot checks.* Target products were not found in a high proportion of spot checks (81% for CGSO-related products and 55% for TCPSO-related products). While some overseas recalled products might not be available in the local market, Audit noted that some general types of products were also reported by CPB staff to be not found in spot checks, e.g. disposable gloves were reported not found in

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6 (38%) of 16 CGSO-related spot checks and infant toothbrush was reported not found in 41 (68%) of 60 TCPSO-related spot checks. The Intelligence Bureau of the C&ED facilitates the CPB in compiling a Company/Product List. The List is used as a reference for carrying out surveillance on the target product types as set out in the quarterly work plans. However, in 5% of the CGSO-related spot checks and 29% of the TCPSO-related spot checks, the target shops were found by CPB staff to have been vacated/closed or not having sufficient quantity of the target products for sample testing (paras. 3.9 and 3.10);

- (b) ***Need to conduct more CGSO and TCPSO-related spot checks on online sales.*** While the CPB has included goods supplied online in its spot check programme since April 2013, the number of spot checks on online sales averaged 8 a year compared to some 2,800 a year on retail shops. The detection rates of suspected offences were 16% for spot checks on online sales versus 1.1% on retail shops. In line with the growing popularity of online sales transactions, the C&ED needs to conduct more spot checks in this regard (para. 3.11);
- (c) ***Need to address the decreasing detection rates of WMO-related spot checks.*** The detection rate of suspected offences as a percentage of WMO-related spot checks decreased from 5.1% in 2013 to 0.5% in 2017. Audit analysed the 163 spot checks with suspected offences detected from 2013 to 2017 and found that 161 (99%) were by way of test purchases. While the spot check results suggested that test purchase was a more effective detection tool than equipment check, the proportion of test purchases among spot checks decreased from 64% in 2013 to 16% in 2017 (paras. 3.13 and 3.15); and
- (d) ***Need for timely approval of WMO-related work plans and adequate spot checks for target trades.*** According to the C&ED, WMO-related spot checks were performed in accordance with quarterly work plans which set out the target trades selected on a risk basis. However, all of the quarterly work plans for 2015 to 2017 were approved 9 to 34 days (averaging 13 days) after the commencement of the relevant quarters. Moreover, there was no laid-down guideline on the proportion of spot checks for the target trades. In 7 of 11 quarters from 2015 to September 2017, the percentages of spot checks for some target trades were less than those of the non-target trades (paras. 3.16 and 3.17).

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10. ***Areas for improvement in investigation work.*** Time is of the essence in enforcing the CGSO and TCPSO against unsafe goods and the WMO against short weights and measures. The C&ED has set performance targets in the COR for commencing investigations into: (a) urgent complaints within 24 hours upon receipt of complaints; and (b) priority complaints within 3 working days upon assessment of complaints. According to the C&ED, for CGSO or TCPSO-related cases, urgent complaints include cases: (i) involving injury; (ii) from complainants who have requested the C&ED to immediately conduct on site investigations with adequate justifications; or (iii) involving retailers who may terminate their short-term tenancy agreements at any time. Priority complaints include cases: (i) involving public/media concerns; (ii) from complainants asking for a reply on the progress of investigations; or (iii) involving products suspected of posing significant hazards to consumers. The CPB has also set internal time standards for completing: (a) CGSO and TCPSO-related investigations within 4 months for cases not resulting in enforcement actions and 6 months for cases with enforcement actions taken; and (b) within 3 and 4 months respectively for WMO-related investigations (paras. 3.3, 3.18 and 3.20). Audit examination has revealed the following areas for improvement in the CPB's investigation work:

- (a) ***Need to improve complaint handling and reporting achievement of key performance target in COR.*** Based on the information obtained from the CPB, of the 160 CGSO or TCPSO-related complaints in 2016, 72 (45%) were classified as urgent cases requiring commencement of investigations within 24 hours upon receipt of the complaints. Audit found that the 24-hour time target for commencing investigation was not met in 39 cases. In response to Audit's enquiry, the C&ED in March 2018 said that: (i) 70 of the 72 cases had been misclassified as urgent cases (comprising the 39 cases found by Audit to have taken longer than 24 hours to commence investigations and another 31 cases with actions taken within 24 hours); (ii) 47 of the 70 misclassified cases fell within the definition of priority cases as they either involved significant hazards (32 cases), public/media concerns (4 cases) or complainants requesting a progress reply (11 cases); (iii) the remaining 23 (70 less 47) cases were not in the nature of an urgent or priority case and hence fell within the low-priority category; and (iv) only 2 cases (72 less 70) were confirmed urgent and all of them had met the 24-hour target. In Audit's view, the fact that the 70 urgent cases were only discovered by the C&ED to have been misclassified during this audit after the 24-hour performance target had been reported as 100% achieved based on 72 urgent cases suggested inadequate checking of: (i) the nature of the complaints in their

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classification; and (ii) the supporting records for reporting performance (paras. 3.18 and 3.19); and

- (b) ***Need to improve the timeliness in completing investigation work.*** Audit analysed the 4,978 completed investigations in relation to the three Ordinances for the period from 2013 to September 2017 and noted that inability to meet the specified time standards was a cause for concern, particularly in respect of the CGSO and TCPSO-related cases, being 56% and 65% respectively. Ageing analysis showed that the extent of delays was also more significant for the CGSO and TCPSO-related cases, e.g. 52% and 62% respectively of those cases with enforcement actions taken were delayed for over 90 days (averaging 164 days). Audit examination of 60 completed investigations not meeting the time standards revealed that: (i) unsafe goods and other offences were confirmed by laboratory tests in 45 (75%) cases against which the C&ED took prosecution actions, or issued warning letters and/or safety control notices. While there was no time-barred prosecution case, the delays in meting out punishments to deter similar offences and/or issuing safety control notices to warn the public of the risks in buying/using the related products undermined consumer protection; and (ii) the long time taken in conducting test purchases, sending samples for laboratory testing and conducting raid operations had contributed to the delays. For example, in 13 (22%) cases, samples were sent for laboratory testing more than two months after test purchases but there was inadequate documentation of the justification for the long time taken in 11 cases. At present, there is no exception report generated by the C&ED's computer system to facilitate the monitoring of the delayed investigation cases (paras. 3.20 to 3.22).

Other consumer protection measures

11. ***Consumer protection measures by the CC.*** The CC handles complaints by means of conciliation. In 2016-17, the CC received 25,039 complaints and the resolution rate of pursuable cases was about 74%. In the process of complaint handling, the CC may identify from repeated complaints lodged against a trader which has adopted some undesirable trade practices. The CC may decide to publicly name and reprimand such trader(s) or disapprove such practices in a certain industry. Moreover, the CC is committed to empowering consumers to protect themselves through disseminating consumer information and organising seminar and talks

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(paras. 4.2, 4.5, 4.16 and 4.34). Audit examination of CC records has revealed the following areas for improvement:

- (a) ***Inadequacies in taking follow-up actions on complaints.*** Audit sample check of 30 complaint cases revealed that: (i) there were omissions in issuing reminder letters to traders which did not respond to the CC's inquiry letters in 3 cases and delays in issuing such reminders in another 2 cases; (ii) in 4 cases, there were inadequate follow-up actions with the traders which did not respond to the reminder letters; and (iii) in 5 cases, the complainants were only informed of the case progress more than 30 days after the traders had not responded to the reminder letters (paras. 4.9 and 4.10);
- (b) ***Inadequate monitoring of long-outstanding complaint cases.*** Audit analysis of 2,526 complaints received from January 2012 to September 2017 which were in progress as at 17 November 2017 revealed that 396 (16%) cases had been outstanding for almost three years or more. According to the CC, 289 (73%) of the 396 cases were pending supervisors' review and approval for case closure due to an error in the CC's computer system which would not affect the interest of the complainants. However, follow-up actions for the remaining 107 cases were pending (paras. 4.11 and 4.12);
- (c) ***Need to enhance the computer system to support identification of traders with repeated undesirable trade practices.*** While the CC's computer system could generate reports showing traders/industries with the highest numbers of complaints in every month, there is no analysis of whether the complaints are related to their undesirable trade practices which are one of the factors for considering naming and public reprimand action. Moreover, the lack of data mining capability of the system makes it difficult to extract other useful information such as dispute resolution rates of traders for analysis. As such, there is a risk that some serious cases of undesirable trade practices may not have been brought up by the system for considering further actions. In an analysis of the CC's computer records, Audit noted that two traders had not been brought up for considering further actions despite an increasing number of complaints against them for undesirable trade practices and the low dispute resolution rate for one of them (paras. 4.18(c) and 4.19); and

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- (d) *Need to take forward the revamp project of CHOICE magazine.* According to the CC, CHOICE magazine plays a vital role in assisting consumers to make astute choices and make purchases in a safe, informed and responsible manner. However, the sale of CHOICE magazine had dropped by 23% from an average of 27,428 copies a month in 2009-10 to 21,033 a month in 2016-17. Moreover, the online version of the magazine, which was launched in 2004, had a slow pick-up rate due to the unfriendliness of the online subscription platform. According to a consultancy review completed in 2016 and the CC's internal review in 2017, a major revamp of the magazine was deemed necessary to sustain its value to the public (paras. 4.36 to 4.38).

12. *Low usage of a voluntary mediation scheme implemented by OFCA.* To address issues of billing disputes in the telecommunications services, OFCA has implemented a voluntary mediation scheme, namely the Customer Complaint Settlement Scheme (CCSS) to help resolve billing disputes in deadlock between the telecommunications service providers and their customers. The CCSS can handle over 400 cases a year if operating in full capacity. However, the number of cases referred to the CCSS from November 2012 to October 2017 averaged only 74 cases a year, representing a utilisation rate of about 18.5%. There is a need for OFCA to make greater efforts to promote the usage of the CCSS (paras. 4.26 and 4.28).

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:**

- (a) **the Commissioner of Customs and Excise and the Director-General of Communications should conduct a comprehensive review on the enforcement issues of the amended TDO (para. 2.15);**
- (b) **the Commissioner of Customs and Excise should:**
- (i) **work with the CC to ensure the timely completion of enhancements to the computer system interface for case referral (para. 2.16);**

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- (ii) **take measures to improve the conduct of investigations by the IPIB and the timeliness in completing investigation work by the TDIB and the CPB (paras. 2.36(a) and (d), and 3.24(e));**
 - (iii) **take measures to improve complaint handling such as the processing and classification of complaints (paras. 2.36(b) and 3.24(c));**
 - (iv) **strengthen the checking of supporting records for reporting the achievement of performance targets in the COR (paras. 2.36(c) and 3.24(d)); and**
 - (v) **take measures to improve the effectiveness of spot checks by the CPB (para. 3.24(a) and (b));**
- (c) **the Director-General of Communications should review the need for sharing of unfair trade practice information with the CC and make greater efforts to promote the usage of the CCSS (paras. 2.17(a) and 4.30(a)); and**
- (d) **the CC should:**
- (i) **tighten monitoring to ensure that complaint cases are dealt with in a timely manner (para. 4.14(e));**
 - (ii) **enhance the analytical capability of its computer system to facilitate the identification of serious and repeated cases of undesirable trade practices (para. 4.24(a)); and**
 - (iii) **continue the efforts to take forward the revamp project of CHOICE magazine (para. 4.42).**

Response from the Government and the Consumer Council

14. The Government and the CC 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.

Consumer protection

1.2 Hong Kong is a renowned shoppers' paradise. The wide range of quality goods and services available at competitive prices not only benefit local residents, but also attract tourists spending in Hong Kong. According to the Census and Statistics Department, Hong Kong's total retail sales value (indicative of consumer spending) amounted to \$436.6 billion in 2016. The Government is committed to safeguarding the legitimate interests of consumers, both local residents and visitors alike. The Commerce and Economic Development Bureau (CEDB) has the policy responsibility for consumer protection. According to the CEDB, the primary objectives in consumer protection policy are: (a) to ensure that consumer products are safe and offered in accordance with good trade practices, and avenues for redress are available; and (b) to facilitate consumer access to legal remedies.

Legal framework

1.3 The laws for the general protection of consumers include the following four Ordinances which are enforced by the Customs and Excise Department (C&ED):

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- (a) ***The Trade Descriptions Ordinance (TDO — Cap. 362)***. The Ordinance prohibits common unfair trade practices deployed against consumers of goods and services (see exclusions in Note 1), including: (i) application of false trade descriptions; (ii) misleading omissions of material information; (iii) aggressive commercial practices (e.g. causing a consumer to take a transactional decision he would not have taken otherwise through the use of harassment, coercion or undue influence); (iv) bait advertising (e.g. advertising for the supply of products at a specified price if the trader has no reasonable grounds for believing that it will be able to offer those products for sale at that price for a reasonable period and in reasonable quantities); (v) bait and switch (e.g. making an offer to sell products at a specified price with the intention of promoting a different product); and (vi) wrongly accepting payment (i.e. accepting payment without the intention to supply the contracted products);

- (b) ***The Weights and Measures Ordinance (WMO — Cap. 68)***. The Ordinance prohibits the possession and use of false or defective weighing and measuring equipment for the purpose of trade. It also requires that goods sold by weight or measure in the course of trade must be sold by net weight or measure and not short of quantity purported to be supplied;

- (c) ***The Consumer Goods Safety Ordinance (CGSO — Cap. 456)***. The Ordinance requires manufacturers, importers and suppliers of consumer goods (see exclusions in Note 2) to ensure that the goods they supply for local consumption are reasonably safe. Subsidiary legislation under the

Note 1: *The TDO does not apply to immovable property and financial products or services sold or supplied by a person regulated, licensed, registered, recognised or authorised under specific Ordinances (e.g. the Insurance Ordinance (Cap. 41) or the Securities and Futures Ordinance (Cap. 571)), being goods or services the sale or supply of which by that person is itself regulated under such Ordinances and under which the person is regulated, licensed, registered, recognised or authorised. In addition, commercial practices engaged by a person acting in the capacity of a professional person (e.g. a certified public accountant as defined by section 2(1) of the Professional Accountants Ordinance (Cap. 50)) listed in Schedule 3 of the TDO are not regulated, except for the offences of sections 4 and 5 in relation to goods, and false trade descriptions of goods under section 7.*

Note 2: *Consumer goods as defined in the Ordinance do not include goods such as food, motor vehicles, electrical products and any other goods the safety of which is controlled by specific legislation.*

Ordinance requires warning or caution on the packaging or labels to be provided in both English and Chinese; and

- (d) *The Toys and Children's Products Safety Ordinance (TCPSO — Cap. 424)*. The Ordinance provides for safety standards for toys and children's products (Note 3) manufactured, imported or supplied for local consumption to ensure that the products are reasonably safe. Subsidiary legislation under the Ordinance sets out the control on the concentration of six types of phthalates (Note 4) in certain toys and children's products and requires bilingual safety labelling with respect to safekeeping, use, consumption or disposal of toys and children's products, and identification marking in English and/or Chinese.

1.4 Specific ordinances have also been enacted to protect different aspects of consumer interests. Enforcement responsibilities of these sector-specific laws rest with the authorities specified by the respective laws. For example, in respect of consumer health, the Department of Health is responsible for enforcing the Pharmacy and Poisons Ordinance (Cap. 138) and the Chinese Medicine Ordinance (Cap. 549) which regulate the safety, quality and efficacy of pharmaceutical products and proprietary Chinese medicines respectively (Note 5). For electrical products, the Electrical and Mechanical Services Department is responsible for enforcing the Electricity Ordinance (Cap. 406) which prescribes safety requirements for such products to protect consumer safety. In respect of contract-related matters, the Sales of Goods Ordinance (Cap. 26) provides that goods sold should be of "merchantable quality" and empowers the buyer to reject defective goods where he/she has not had a reasonable opportunity to examine the goods, and the Supply of Services (Implied

Note 3: *There are 12 classes of children's products stipulated under Schedule 2 of the Ordinance, e.g. bunk beds for domestic use, children's paints, and playpens for domestic use. A product also falls within the scope of the Ordinance if it is intended to facilitate the feeding, hygiene, relaxation, sleep, sucking or teething of a child under 4 years of age and contains any plasticised material.*

Note 4: *Phthalates are commonly used as plasticisers in plastic products. Studies have shown that long time exposure to some phthalates through prolonged mouthing may result in adverse health effects, including toxicity to the liver, kidney, as well as the reproductive and development systems.*

Note 5: *The Audit Commission conducted a review on the legislative control of Chinese and western medicines under these two Ordinances and the results of which were reported in Chapters 4 and 5 of the Director of Audit's Report No. 53 of October 2009.*

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Terms) Ordinance (Cap. 457) provides that a contract for supply of services should be carried out with reasonable care and skill and within a reasonable time. The Unconscionable Contracts Ordinance (Cap. 458) empowers the courts to give relief in certain contracts found to be unconscionable (Note 6).

Enhancing the regulatory regime

1.5 With a view to ensuring that the regulatory regime continues to promote a fair, safe and informed market and to boost the confidence of citizens and tourists in shopping in Hong Kong, the Government, in conjunction with the Consumer Council (CC — see para. 1.13), has from time to time conducted reviews of existing measures to protect consumer rights. These reviews have led to major legislative amendments to the TDO to strengthen consumer protection in various aspects:

- (a) ***The 2008 legislative amendments.*** The Trade Descriptions (Amendment) Ordinance 2008 was enacted in June 2008 to prohibit the following four types of unscrupulous trade practices:
 - (i) false representations regarding after-sale services and warranties for goods;
 - (ii) misleading price indications (e.g. partial or total obscuring of any letter, word, numeral or character that indicates the price of goods, or the quantity unit to which the price relates);
 - (iii) misleading pricing for five types of electronic products, namely, mobile phone, digital camera, digital audioplayer, digital camcorder and portable multimedia player (Note 7); and

Note 6: *For example, if a court finds that a contract or any part thereof to have been unconscionable in the circumstances relating to the contract at the time when it was made, the court may refuse to enforce the contract or alter any unconscionable part.*

Note 7: *For example, the amended TDO requires that a seller must inform a consumer, before the latter making a payment, whether the price of a product covers the essential accessories.*

- (iv) false or misleading representations regarding connection with and endorsement by another person.

Eight items of subsidiary legislation were also made to enhance protection for consumers in the purchase of jewellery items and electronic products, including assigning definitive meanings to platinum, diamond and fei cui (翡翠), and imposing certain disclosure requirements in relation to the retail sale of natural fei cui, diamond, platinum, gold and gold alloy, and regulated electronic products listed in item (iii) above. The Amendment Ordinance and the new subsidiary legislation took effect in March 2009; and

- (b) ***The 2012 legislative amendments.*** The Trade Descriptions (Unfair Trade Practices) (Amendment) Ordinance 2012 (hereinafter referred to as the 2012 Amendment Ordinance) was enacted in July 2012 to:

- (i) extend the TDO's coverage to prohibit false trade descriptions in respect of services made in consumer transactions (in addition to its previous coverage on sale of goods only) as enshrined in section 4 (i.e. marking and provision of information), section 5 (i.e. information to be given in advertisements), section 7 (i.e. offences in respect of trade description of goods) and section 7A (i.e. offences in respect of trade description of services) of the amended TDO;
- (ii) prohibit five specified unfair trade practices, namely misleading omissions, aggressive commercial practices, bait advertising, bait and switch, and wrongly accepting payment (see para. 1.3(a)) as enshrined in sections 13E, 13F, 13G, 13H and 13I of the amended TDO. The amended sections 4, 5, 7, 7A (see (i) above) and sections 13E to 13I are collectively referred to as the fair trading sections. Traders convicted of an offence under the fair trading sections of the TDO are liable to a maximum penalty of imprisonment for five years and a fine of \$500,000;
- (iii) empower the Communications Authority (CA — see para. 1.10) to enforce the fair trading sections in relation to the commercial practices of licensees under the Broadcasting Ordinance (Cap. 562) and the Telecommunications Ordinance (Cap. 106) that are directly

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connected with the provision of a broadcasting service or telecommunications service under the respective Ordinances; and

- (iv) introduce a civil compliance-based mechanism under which the law enforcement agencies may, as an alternative to criminal prosecution, accept an undertaking from a trader which the enforcement agencies believe has engaged, is engaging or is likely to engage in a prohibited unfair trade practice to stop that practice. The purpose is to encourage compliance by traders and to stop identified non-compliant practices expeditiously.

The 2012 Amendment Ordinance came into full operation on 19 July 2013. To facilitate compliance and enhance transparency, the C&ED and the CA published a set of Enforcement Guidelines on 15 July 2013, which provides guidance on the operation of the fair trading sections of the Ordinance and states the manner in which the enforcement agencies exercise their powers. Generally speaking, in accordance with section 16E of the TDO, the CA will take up cases in which suspected violations relate to the provision of licensed telecommunications services and broadcasting services under the Telecommunications Ordinance and Broadcasting Ordinance respectively. All other cases, including those in which suspected violations relate to goods (or goods bundled with services), will be taken up by the C&ED.

Consumer protection work of the C&ED

1.6 ***Organisation and resources.*** The C&ED is headed by the Commissioner of Customs and Excise. The Department comprises five branches. The Consumer Protection Bureau (CPB) under the Trade Controls Branch of the C&ED is responsible for the enforcement of the WMO, CGSO and TCPSO. The Trade Descriptions Investigation Bureau (TDIB), also under the Trade Controls Branch, is responsible for the enforcement of the TDO in relation to the supply of goods. The Intellectual Property Investigation Bureau (IPIB) under the Intelligence and Investigation Branch (Note 8) of the C&ED is responsible for the enforcement of the TDO in relation to the supply of services and specified types of goods (e.g. mobile phones, dried seafood

Note 8: *Unlike the Trade Controls Branch which is mainly staffed by members of the Trade Controls Officer grade, the Intelligence and Investigation Branch is mainly staffed by members of the Customs and Excise Service which is a disciplined service established under the Customs and Excise Service Ordinance (Cap. 342).*

and Chinese herbal medicine of unclear pricing units). An extract of the organisation chart of the C&ED is at Appendix A. The manpower and expenditure involved in the enforcement of the four consumer protection Ordinances by the C&ED for the period 2014-15 to 2016-17 are as follows:

Table 1
Manpower and expenditure involved
in the enforcement of the four Ordinances by the C&ED
(2014-15 to 2016-17)

Ordinance	Manpower for enforcement/ expenditure involved	Year		
		2014-15	2015-16	2016-17
TDO	Manpower (number of staff)	187	190	190
	Expenditure involved (\$ million)	87.6	95.1	92.9
WMO	Manpower (number of staff)	21	21	21
	Expenditure involved (\$ million)	9.4	9.8	10.3
CGSO	Manpower (number of staff)	19	19	19
	Expenditure involved (\$ million)	8.7	9.1	9.5
TCPSO	Manpower (number of staff)	16	16	16
	Expenditure involved (\$ million)	7.8	8.1	8.5
Total	Manpower (number of staff)	243	246	246
	Expenditure involved (\$ million)	113.5	122.1	121.2

Source: C&ED records

1.7 **Enforcement work.** To detect non-compliance with the consumer protection legislation, the C&ED conducts proactive spot checks on the accuracy of weighing and measuring equipment, compliance with the safety requirements for toys and children's products and consumer goods, compliance with the orders for provision of information on precious stones, metals and regulated electronic products, and compliance with the requirements on trade descriptions and trade practices. Besides,

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the C&ED conducts investigations in response to specific information from various sources (e.g. complaints and media reports), and follows up non-compliance detected in its spot checks. In 2017, the C&ED received 6,922 TDO-related complaints, 406 WMO-related complaints, 117 CGSO-related complaints and 39 TCPSO-related complaints. The C&ED has established Quick Response Teams to handle urgent complaints lodged by short-haul visitors or local consumers. In support of the enforcement work, the C&ED has put in place the following measures:

- (a) ***Procedural guidelines.*** The C&ED has issued Work Manuals to guide staff of the CPB, TDIB and IPIB in performing their duties. The Work Manuals set out the operational procedures and internal time standards as work targets for spot checks and investigations. The C&ED has also issued a Code of Practice which sets out the procedures for taking administrative and prosecution actions (Note 9) by the Trade Controls Branch; and

- (b) ***Management information systems.*** The C&ED has two major computer systems for administering spot checks and investigations, namely, the Trader Information Management System (TIMS — Note 10) and the Case Processing System (CAPS — Note 11). One of the sub-systems of TIMS is used for capturing data of spot checks and subsequent follow-up actions. CAPS is a central database which maintains progress of each case from the time an investigation file is opened up to its conclusion. It also captures details relating to investigations, prosecution and disposal of seized items.

Note 9: *The administrative actions include the issue of warning and advisory letters to traders, and safety control notices requiring parties concerned to take remedial actions, namely, notice to warn, prohibition notice, recall notice and requirement notice.*

Note 10: *TIMS was implemented in 2005 to converge several standalone trader information systems to provide a consolidated data repository for better data sharing. With the approved funding of \$8.9 million in June 2014, the C&ED enhanced TIMS in February 2016 (see para. 2.10).*

Note 11: *CAPS was originally implemented in December 2001 to help the C&ED monitor the processing of investigation cases. With the approved funding of \$45.72 million in 2011, the C&ED replaced CAPS in June 2013 with a new system which is equipped with analysis and monitoring tools for enhanced investigation capability and case management control.*

1.8 **Publicity and education.** To promote traders' awareness of product safety and their obligations in complying with the related Ordinances, the C&ED has conducted education-oriented seminars for department stores, chain shops, trade and industry associations, and small and medium enterprises. In 2016, 40 seminars/briefing sessions were held to help traders understand the fair trading sections of the TDO and the consequences of non-compliance. To raise public awareness of consumer rights and to remind retailers of their legal obligations, the C&ED has launched publicity campaigns by distributing pamphlets with the salient points of the TDO to local consumers and visitors at tourist areas and shops as well as the passenger arrival halls of various control points.

1.9 **Performance measures.** The key performance targets and indicators on enforcing the four consumer protection Ordinances as reported by the C&ED in its Controlling Officer's Reports (CORs) for 2014 to 2016 are shown in Tables 2 and 3 respectively (key performance indicators for 2017 are also included in Table 3 for comparison purpose).

Table 2
Key performance targets
(2014 to 2016)

Key performance target	Target	2014	2015	2016
		Actual		
(a) Commencing investigations into urgent complaints (Note 1) against short weights and measures and unsafe products within 24 hours upon receipt of complaints	100%	100%	100%	100%
(b) Commencing investigations into priority complaints (Note 2) against short weights and measures and unsafe products within three working days upon assessment of complaints	100%	100%	100%	100%
(c) Commencing investigations into urgent complaints (Note 3) against unfair trade practices within 24 hours upon receipt of complaints	100%	100%	100%	100%
(d) Commencing investigations into priority complaints (Note 4) against unfair trade practices within three working days upon assessment of complaints	100%	100%	100%	100%

Source: C&ED records

Note 1: According to the C&ED, for WMO-related cases, urgent complaints include those cases: (a) from complainants who have requested the C&ED to immediately conduct on site investigations with adequate justifications; (b) involving tourists who are going to leave Hong Kong shortly and are willing to cooperate with the C&ED; or (c) involving retailers who may terminate their short-term tenancy agreements at any time. For CGSO and TCPSO-related cases, in addition to (a) and (c) above, urgent complaints include those cases involving injury.

Note 2: According to the C&ED, for WMO-related cases, priority complaints include those cases: (a) involving public/media concerns; (b) involving seasonal goods and mobile hawkers; or (c) from complainants asking for a reply on the progress of investigations. For CGSO and TCPSO-related cases, in addition to (a) and (c) above, priority complaints include those cases involving products suspected of posing significant hazards to consumers.

Note 3: This performance target was introduced in 2014. According to the C&ED, urgent complaints include those cases: (a) lodged by short-haul visitors; or (b) involving mobile/temporary stalls, that may require immediate investigation or action to be taken.

Note 4: This performance target was introduced in 2014. According to the C&ED, priority complaints include cases such as those involving: (a) public interests or concerns; or (b) temporary stalls or traders which may terminate their short-term tenancy agreements within a few days.

Table 3
Key performance indicators
(2014 to 2017)

Indicator	2014	2015	2016	2017
Weights and measures				
Spot checks	1,588	1,878	1,648	1,715
Seizure cases	49	13	25	19
Value of seizures (\$'000)	261.7	60.1	199.8	100.2
Toys and children's products safety				
Spot checks	1,417	1,529	1,607	1,603
Seizure cases	2	4	6	35
Value of seizures (\$'000)	28.8	27.6	15.8	160.6
Consumer goods safety				
Spot checks	1,146	1,439	1,460	1,440
Seizure cases	13	37	7	12
Value of seizures (\$'000)	278.4	430.4	116.5	2,076.9
Fair trading in articles (trade descriptions)				
Spot checks	4,052	4,128	4,060	4,000
Seizure cases	62	61	34	18
Value of seizures (\$'000)	2,774	4,673	1,776	2,944

Source: C&ED records

Remarks: According to the C&ED, manpower was deployed to enforce the export control on powdered formula and to implement the amended TDO in 2014 which led to the decrease in WMO, CGSO and TCPSO-related spot checks for that year. The number of spot checks under the three Ordinances had increased since 2015 after the manpower of the CPB returned to normal.

Consumer protection work of the CA

1.10 **Organisation and resources.** The CA is an independent statutory body established on 1 April 2012 under the Communications Authority Ordinance (Cap. 616) as the unified regulator of both the telecommunications and broadcasting sectors in Hong Kong (Note 12). The role and functions of the CA are executed by its executive arm and secretariat, i.e. the Office of the Communications Authority (OFCA), which is a trading fund department headed by the Director-General of Communications. The enforcement of the fair trading sections of the TDO (see para. 1.5(b)) in relation to the provision of licensed telecommunications or broadcasting services under the Telecommunications Ordinance or the Broadcasting Ordinance is carried out by the Market and Competition Branch (MCB) of OFCA which had an establishment of 38 staff as at 31 October 2017. An extract of the organisation chart of OFCA is at Appendix B.

1.11 **Enforcement work.** According to the Enforcement Guidelines for the TDO jointly issued by the C&ED and the CA (see para. 1.5(b)), OFCA will, as it has been the case all along, closely monitor developments in the telecommunications and broadcasting markets, and where the circumstances warrant, carry out the necessary operations in exercise of the powers conferred on the CA under the TDO. OFCA will examine every consumer complaint that it receives to determine whether the complaint can be pursued for further investigation. OFCA accepts complaints from various channels (e.g. by phone, post, fax, e-mail, online submission or in-person). OFCA has issued an internal Office Manual providing guidelines on handling of complaints, investigations, taking of interview statements, handling of exhibits, preparation for prosecution, issuing of warning/advisory letters, etc., for staff's compliance. OFCA has also maintained a computer system to record details of the complaints received, investigation progress and case outcome.

1.12 **Other consumer protection measures.** Apart from the enforcement of the TDO, OFCA handles tasks and projects on consumer protection, which mainly include:

Note 12: *As at 31 December 2017, the CA comprised the chairman, the vice-chairperson (the Permanent Secretary for Commerce and Economic Development (Communications and Creative Industries)) and 10 members (including the Director-General of Communications).*

- (a) supporting the telecommunications industry to implement a voluntary scheme to mediate billing disputes between service providers and their customers;
- (b) monitoring the implementation and effectiveness of various codes of practice and guidelines for the telecommunications industry; and
- (c) organising an annual consumer education campaign to relay various consumer messages to the public through a variety of programmes and activities.

Role of the CC

1.13 The CC was established in April 1974. It was incorporated as a body corporate with the enactment of the Consumer Council Ordinance (Cap. 216) in July 1977. The governing body of the CC is its Council (Note 13). According to the Consumer Council Ordinance, the Council shall appoint a person to hold office as its Chief Executive (CE), and the functions of the CC are to protect and promote the interests of consumers of goods and services, and purchasers, mortgagors and lessees of immovable property mainly by:

- (a) collecting, receiving and disseminating information concerning goods, services and immovable property;
- (b) receiving and examining complaints by and giving advice to consumers of goods and services, and purchasers, mortgagors and lessees of immovable property;

Note 13: *As at 31 December 2017, the Council comprised the chairman, the vice-chairman, 20 members and 29 co-opted members. The Council is given the authority to exercise powers conferred upon it by the Consumer Council Ordinance. The Council may appoint Committees and Working Groups and may delegate to them the exercise of its power and performance of its functions. As at 31 December 2017, 12 Committees and Working Groups were established to deal with specific areas of consumer issues, including product testing (the Research and Testing Committee), trade practices (the Trade Practices and Consumer Complaints Review Committee) and legal protection (the Legal Protection Committee).*

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- (c) taking such action as it thinks justified by information in its possession, including tendering advice to the Government or to any public officer; and
- (d) encouraging business and professional associations to establish codes of practice to regulate the activities of their members.

1.14 The CC is funded mainly by recurrent subventions from the Government. For 2016-17, the government subvention to the CC amounted to \$115.4 million, which accounted for 95% of the total income of the CC. As at 31 March 2017, the CC had an establishment of 150 staff. An extract of the organisation chart of the CC is shown at Appendix C. The work of the CC ranges from developing new consumer protection initiatives to conducting studies on trade practices and matters affecting consumer interests. While the CC has no law enforcement power against any traders for any malpractice, it may initiate actions to name and reprimand a trader in serious cases of undesirable trade practices. It conciliates consumer disputes, disseminates information and renders advice to consumers, and organises consumer education activities. It also tests products, conducts in-depth studies and surveys, publishes a consumer magazine “CHOICE”, and examines and responds to consultation papers and reports on consumer-related issues. To facilitate consumer access to legal remedies, the CC administers the Consumer Legal Action Fund as its trustee. The fund was established in 1994 to provide legal assistance to consumers aggrieved by the acts or omissions of traders in cases involving significant consumer interests (Note 14).

Audit review

1.15 In 2008, the Audit Commission (Audit) completed a review of “Consumer Council: Corporate governance and protecting and promoting consumer interests”. The results were included in Chapter 3 of the Director of Audit’s Report No. 51 of October 2008. In 2009, Audit conducted a review of “Customs and Excise Department: Enforcement work of the Consumer Protection Bureau”, the results of which were included in Chapter 2 of the Director of Audit’s Report No. 52 of March 2009. The CC and the Government agreed with the audit recommendations in

Note 14: *The Fund was established in 1994 with an initial government grant of \$10 million. Further funding of \$10 million was granted by the Government in May 2010. As at 31 March 2017, the Fund had a balance of around \$9 million.*

the two audit reviews. In October 2017, Audit commenced a review to examine the efforts made by the C&ED, OFCA and CC to protect consumer interests, focusing on the following areas:

- (a) enforcement work against unfair trade practices (PART 2);
- (b) enforcement work against unsafe goods, and short weights and measures (PART 3); and
- (c) other consumer protection measures (PART 4).

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

Acknowledgement

1.16 Audit would like to acknowledge with gratitude the assistance and full cooperation of the staff of the CEDB, C&ED, OFCA and CC.

PART 2: ENFORCEMENT WORK AGAINST UNFAIR TRADE PRACTICES

2.1 The TDO regulates unfair trade practices including false trade descriptions, misleading omissions, aggressive commercial practices, bait advertising, bait and switch, and wrongly accepting payment (see para. 1.3(a)). This PART examines the enforcement of the TDO, focusing on the following issues:

- (a) implementation of the 2012 Amendment Ordinance which covers the unfair trade practices of both goods and services (paras. 2.2 to 2.20);
- (b) enforcement work of the C&ED (paras. 2.21 to 2.37); and
- (c) enforcement work of OFCA (paras. 2.38 to 2.44).

Implementation of the 2012 Amendment Ordinance

2.2 After the full operation of the 2012 Amendment Ordinance on 19 July 2013, the CEDB, C&ED and OFCA had provided reports to the Legislative Council (LegCo) Panel on Economic Development on the implementation progress from 2014 to 2016. The salient points of these reports are summarised below:

- (a) ***Enforcement strategy.*** The enforcement agencies of the TDO (i.e. the C&ED and OFCA) had been adopting a three-pronged approach in enforcing the fair trading sections of the TDO:
 - (i) ***Compliance promotion.*** By conducting briefings for and proactive visits to different business sectors, the enforcement agencies provided traders with advice and guidance on the legal requirements under the TDO;
 - (ii) ***Enforcement.*** The enforcement agencies took necessary and timely enforcement actions to combat non-compliant conduct and thereby instil public confidence. As the TDO covered a wide range of goods and services, in order to facilitate traders' compliance and optimise the use of enforcement resources, the enforcement agencies

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accorded priority to handling cases that might have significant implications on consumers, the trade or the community at large (Note 15); and

- (iii) ***Public education and publicity.*** The enforcement agencies in coordination with the CC had launched extensive publicity and education programmes, raising consumers' awareness of the unfair trade practices, promoting the concept of "smart consumption", and also promoting good practices amongst traders; and
- (b) ***Complaint and enforcement statistics.*** From July 2013 to April 2016, the C&ED, OFCA and the CC respectively received 16,424, 2,182 and 9,877 complaints involving suspected breaches of the TDO (see Table 4 for a breakdown of the complaints according to the offences involved). Of the 16,424 complaints received, the C&ED found no contravention of the TDO and hence did not take further action on 5,947 complaints. For another 982 complaints, although evidence of breaching the TDO was not found, the C&ED reminded the traders to comply with the TDO. Detailed investigations were launched into 8,787 complaints and the remaining 708 complaints were referred to relevant bodies for follow-up action or under preliminary examination at the time. The 8,787 (i.e. 16,424 – 5,947 – 982 – 708) complaints together with those proactively developed by the C&ED were consolidated into 1,432 cases (more than one complaint might be involved in certain cases). After completing 1,363 investigations at the time, the C&ED issued warning or advisory letters in 199 cases, instigated prosecution in 220 cases and accepted written undertakings under the civil compliance-based mechanism in 10 cases. For another 7 cases, the C&ED had applied to the court for forfeiture of the goods concerned without initiating prosecution. The remaining 927 cases were closed due to insufficient evidence. Of the 2,182 complaints received by OFCA, 2,004 were closed due to no contravention of the TDO. For another

Note 15: *Such cases generally involve conduct that: (a) has significant public interests or concerns; (b) is repeated, intentional, organised or constitutes a serious contravention; (c) results or may result in significant consumer detriment; (d) is targeted at disadvantaged or vulnerable consumer groups; (e) suggests a pattern of non-compliance by the trader or is indicative of a risk of future misconduct; (f) indicates a significant, new or emerging market trend or is likely to become widespread in an industry or across industries; and/or (g) conduct against which enforcement actions taken may likely bring about worthwhile educative or deterrent effect.*

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126 complaints, although evidence of breaching the TDO was not found, OFCA issued advisory letters to remind traders to comply with the statutory requirements. OFCA initiated prosecution in one case and was at the time still examining the remaining 51 cases. As for the CC, 6,689 of the complaints received were pursuable, among which 6,134 had been closed (settled upon the CC's conciliation or referred to relevant bodies for follow-up action) and the remaining 555 were under conciliation up to April 2016.

Table 4

**Number of complaints received alleging breaches of the TDO
(July 2013 to April 2016)**

Complaint by offences involved	C&ED	OFCA	CC
	(Number)		
False trade descriptions	10,083	1,101	4,446
Misleading omissions	2,108	939	1,560
Aggressive commercial practices	551	51	1,314
Bait advertising	185	13	199
Bait and switch	69	19	525
Wrongly accepting payment	3,247	449	1,833
Others (e.g. cases outside the scope of the TDO)	181	242	Not applicable
Total	16,424	2,182 (Note)	9,877

Source: C&ED, OFCA and CC records

Note: As some complaints received by OFCA involved more than one allegation of suspected breach of the TDO, the total number of cases according to the offences involved was greater than the total number of complaints received.

LegCo Members' views/concerns on enforcement of the amended TDO

2.3 During the discussions of the Government's update on implementation of the amended TDO at the meetings held in June 2015 and May 2016, some Members

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of the LegCo Panel on Economic Development made enquiries and expressed views/concerns on complaints and enforcement actions. The Government's response in this regard is summarised below:

- (a) ***Panel meeting of June 2015.*** At the meeting, three Members asked for the details of the TDO-related complaints and the sectors with which the C&ED had encountered enforcement difficulties, particularly whether they covered the beauty industry and prepaid services. In response, the C&ED:
- (i) explained that the Department had been receiving 16 complaints and 62 enquiries each day on average when the amended TDO came into effect, ebbing to 13 complaints and 14 enquiries in the six months prior to the Panel meeting. The number of complaints held steady but more cases became actionable, and a marked decrease in enquiries showed broader understanding of the amended TDO;
 - (ii) elaborated that complaints related to goods outnumbered those related to services by three times and only 4 out of 122 prosecutions instigated from July 2013 to May 2015 were related to services;
 - (iii) admitted that investigating complaints related to services was invariably complex due to absence of physical commodities, and transgressions did not manifest at the outset;
 - (iv) pointed out that since unscrupulous traders would pick their prey selectively, the C&ED had to launch undercover operations to gather evidence; and
 - (v) assured that it had made meaningful headway in weeding out undesirable conduct in the beauty industry (Note 16); and

Note 16: *The C&ED has stepped up efforts on compliance promotion and consumer education in respect of the beauty and fitness services (where prepaid services were common) since 2016. For example, the C&ED has held a number of meetings with the relevant traders since mid-2016 to disseminate messages on unfair trade practices. An episode on the TDO featuring unfair trade practices in the beauty industry was also broadcast via television programme "Police Magazine" in December 2016.*

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- (b) *Panel meeting of May 2016.* At the meeting, a Member (Note 17) asked for more information about the prosecution cases handled by the C&ED and considered that the prosecution rate was too low with respect to the number of complaints (i.e. 220 prosecutions as against 16,424 complaints received from July 2013 to April 2016). Another Member also considered the prosecution rate rather low and worried that the penalties imposed on convicted cases were too lenient and the enforcement actions were not adequate to achieve the deterrent effect on unscrupulous traders whilst not affecting honest traders. The Member urged the Government to review the enforcement tools and make appeals on cases as appropriate. In response, the C&ED explained that:
- (i) although the Department had received a total of 16,424 complaints during the period, about 6,000 of them involved no contravention of the TDO. In addition, among the 8,787 complaints followed up by detailed investigation, some involved the same traders and were hence processed as one investigation case. As such, it was not suitable to deduce the prosecution rate on the basis of the number of complaints;
 - (ii) the Department had initiated prosecution on 220 (16%) of the 1,363 completed investigations, with 95% of them resulting in successful prosecutions. 7 of the prosecution cases were related to supply of services and all of them had been prosecuted successfully. The remaining 213 prosecution cases were related to supply of goods with 95% of them being prosecuted successfully; and
 - (iii) penalties for each case were decided by the court. The Department of Justice (DoJ) might make appeals on cases with sufficient grounds.

2.4 *OFCA's reviews of its enforcement of the amended TDO.* In 2015 and 2016, OFCA conducted reviews of the enforcement of the amended TDO and reported the results to the CA. Key findings of the reviews are summarised below:

Note 17: *The Member also expressed concern on the small number of successful prosecution cases at the Policy Address briefing of the LegCo Panel on Economic Development on 2 February 2015.*

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- (a) ***More difficult to collect sufficient evidence against misconduct relating to services than goods.*** In contrast with goods which were tangible and could be produced as direct evidence *per se*, services were intangible and it was more complicated to collect sufficient evidence against misconduct of traders to prove their engagement in unfair trade practices;

- (b) ***Higher standard of proof under the criminal regime of the amended TDO.*** Before the implementation of the amended TDO, OFCA took enforcement action against misleading or deceptive conduct of telecommunications licensees under section 7M of the Telecommunications Ordinance. In terms of the scope of prohibited conduct, section 7M encompassed all the unfair trade practices prohibited under the amended TDO except those relating to aggressive commercial practices (see para. 1.3(a)(iii)). In terms of evidential standard, the criminal regime under the TDO required more stringent rule of evidence in order to prove an offence beyond reasonable doubt. As a result, it was more difficult to establish an offence on unfair trade practices under the TDO than that under the repealed section 7M of the Telecommunications Ordinance which only required a civil standard of proof on the basis of balance of probabilities; and

- (c) ***Way forward.*** OFCA would continue its enforcement efforts and review its enforcement strategies and practices with a view to further enhancing the enforcement of the TDO.

2.5 ***C&ED's reviews of its enforcement of the amended TDO.*** In response to Audit's enquiry on whether the C&ED had conducted a review on the enforcement of the amended TDO similar to that of OFCA, the C&ED in March 2018 said that since the implementation of the amended TDO in July 2013, the Department had on various occasions reviewed the enforcement effectiveness, operational efficiency, manpower resources, and publicity plan under the three-pronged approach (see para. 2.2(a)) to strive to combat unfair trade practices and protect consumers' rights.

2.6 ***Audit analysis of prosecution rate.*** To obtain an up-to-date picture of the implementation of the amended TDO, Audit analysed the enforcement statistics provided by the C&ED and OFCA (see Table 5).

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Table 5

Enforcement statistics of the amended TDO (July 2013 to December 2017)

Enforcement agency	C&ED		OFCA
	Goods	Services	Services
Type of complaints	(Number)		
(a) Complaints received	18,521	10,247	2,845
(b) Detailed investigation cases completed (Note) (b) = (c) + (d) + (e) + (f) + (g)	1,167	407	39
(c) Cases with prosecution instigated	314	26	1
(d) Cases with undertaking secured	8	4	0
(e) Cases with warning/ advisory letter issued	154	88	19
(f) Cases with forfeiture only	7	Not applicable	Not applicable
(g) Cases closed with no further action after detailed investigation under TDO	684	289	19
(h) Completed prosecution cases	299	23	1
(i) Convicted cases	284	18	1
(j) Prosecution rate (j) = (c)/(b) × 100%	27%	6%	3%
(k) Conviction rate (k) = (i)/(h) × 100%	95%	78%	100%

Source: Audit analysis of C&ED and OFCA records

Note: The process through which complaints received were screened and consolidated into detailed investigation cases is summarised in paragraph 2.2(b).

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As shown in Table 5, for OFCA, the prosecution rate for services was low (3%). For the C&ED, while the number of complaints on goods (18,521) exceeded that on services (10,247) by 81%, the prosecution rate as a percentage of completed investigations for goods (27%) was more than three times higher than that for services (6%). The lower prosecution rates for services as a whole appear to support the OFCA's observation in its reviews that it is more difficult to collect sufficient evidence against misconduct relating to services as compared with goods (see para. 2.4(a)) under a criminal regime of the TDO.

2.7 *Need to conduct a comprehensive review on the enforcement of the amended TDO.* In response to the Audit's analysis in Table 5 of paragraph 2.6, the C&ED in February and March 2018 said that:

- (a) while investigating complaints on services was invariably complex due to absence of physical commodities (see para. 2.3(a)(iii)), there were a number of factors affecting the prosecution rate other than insufficient evidence, such as complainants' withdrawal of their complaints or refusal to assist in investigations. Specifically, more than 70% of the complaints involving the services sector could not be pursued due to the withdrawal of complaints and refusal to assist in investigations by complainants. In particular, these two factors accounted for more than 80% of the complaints involving the beauty and fitness industries; and

- (b) the prosecution rate had increased from 16% for the period from July 2013 to April 2016 to 57% from May 2016 to December 2017. The C&ED had proactively taken enforcement action under the TDO and there were significant cases of prosecution in different commercial sectors. Significant convicted cases included misleading pricing of goods at ginseng and dried seafood shops; aggressive commercial practices at a beauty parlor and a fitness centre as well as an investment and finance company; misleading omission by a renovation company; false trade descriptions of goods sold at supermarkets; bait advertising by electronic products retailers; wrongly accepting payment of fees by a warehouse operator and a wedding service company; and false trade descriptions of service provided by an employment agency, a travel agency and an educational centre.

However, Audit noted that the increase in prosecution rate from 16% to 57% (see (b) above) was mainly due to the decrease in the number of detailed investigation cases undertaken (i.e. from 1,363 cases in the 34 months from July 2013 to

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April 2016 (averaging 40 cases per month) to 211 cases in the 20 months from May 2016 to December 2017 (averaging 11 cases per month). According to the C&ED, the decrease in the number of detailed investigation cases was mainly attributable to a change in its filing practice in October 2014 (Note 18). As regards the C&ED's comments in (a) above, in light of the lower prosecution rate for services (as a percentage of completed investigations instead of complaints) and OFCA's review findings on the difficulty to collect sufficient evidence mentioned in paragraph 2.6, there is still a need to ascertain the major contributing factors of the lower prosecution rate for services in order to enhance the effectiveness of the amended TDO. With the lapse of over four years since the implementation of the amended TDO, it is opportune for the C&ED and OFCA, in consultation with the CEDB, to undertake a comprehensive review on the enforcement issues (see para. 2.4(a) for an example) taking into account the findings of this Audit Report (such as the timeliness in completing investigations — see paras. 2.23 and 2.34), with a view to drawing lessons for the future.

Inadequacies in the information exchange and case referral between the enforcement agencies and CC

2.8 In December 2012, when briefing the LegCo Panel on Economic Development on the preparatory work for the implementation of the 2012 Amendment Ordinance, the Government said that:

- (a) the two enforcement agencies (i.e. the C&ED and OFCA) would work with the CC on the arrangements for handling incoming complaints such that suspected violations of the TDO would be handled promptly by the enforcement agencies. In relation to cases not concerned with suspected violations, the CC would follow the current approach and provide advice to complainants and assist in conciliating between them and the traders; and

Note 18: *Before October 2014, the C&ED would open a case file for detailed investigation from the beginning when a complaint was assessed as actionable. After the change in October 2014, the C&ED would only open a case file for detailed investigation when there is reasonable ground to suspect that an offence has been committed and to take enforcement actions (e.g. seizure of goods or arrest). Prior to opening a case file for detailed investigation, the C&ED would conduct background checks on alleged entities and products, make enquiries with parties concerned and test-purchase, etc., depending on the merits and circumstances of each individual case.*

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- (b) in anticipation of an increase in reports of undesirable trade practices as a result of the implementation of the 2012 Amendment Ordinance, an electronic platform would be established for referral of cases between the C&ED and CC.

2.9 ***Computer system interface between the C&ED and CC.*** An electronic platform for information exchange and case referral was established by the C&ED and CC through enhancements to their computer systems to develop a system interface. In June 2014, the C&ED obtained funding of \$8.9 million to enhance its TIMS (see para. 1.7(b)), of which around \$1.6 million was used to create a sub-system to support the implementation of the 2012 Amendment Ordinance, including the provision of a computer system interface with the Complaints Case Management System (CCMS — see para. 4.4) of the CC. According to the C&ED’s proposal, the C&ED could make use of the computer system interface to:

- (a) receive unfair trade practice information (i.e. TDO-related complaint cases with complainants’ particulars obliterated) and complaints referred from the CC in a systematic and timely manner for making immediate response to the emerging trend in unfair trade practices and taking enforcement action expeditiously;
- (b) refer complaint cases which were consumer dispute in nature to the CC for conciliation; and
- (c) provide results on unfair trade practice cases for the CC’s information.

2.10 The C&ED commenced the system enhancement project in September 2014 and the enhanced TIMS was rolled out in February 2016. On the CC’s side, with the funding approval of \$0.4 million from the CEDB in July 2013, the enhancement of the CCMS to facilitate the system interface with the C&ED for sharing unfair trade practice information was completed in August 2014.

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2.11 *Computer system interface not used for case referral.* From September 2014 (Note 19) to September 2017, the CC had shared 12,413 pieces of unfair trade practice information (see para. 2.9(a)) with the C&ED via the computer system interface. However, the computer system interface had not been used for referral of complaint cases between the C&ED and CC (see para. 2.9(a) and (b)). Audit examination of the relevant records kept by the C&ED and CC revealed the following issues:

- (a) *Referral from CC to C&ED.* The feasibility of using the computer system interface to refer cases from the CC to C&ED was explored in several meetings between the C&ED and CC held in 2013. In October 2013, it was concluded that due to technical difficulties (e.g. disparity in the address format adopted in the CCMS of the CC and CAPS (see para. 1.7(b)) of the C&ED — Note 20), the proposal of referring cases via the computer system interface from the CC to the C&ED was suspended. As such, the CC had to refer complaint cases to the C&ED by e-mails which involved manual processing after receipt by the C&ED. From January 2014 to September 2017, the CC referred a total of 1,341 cases to the C&ED by unencrypted e-mails as there was no established encrypted channel between the CC and C&ED; and

- (b) *Referral from C&ED to CC.* Notwithstanding that the enhanced TIMS was rolled out in February 2016, the C&ED had not used the computer system interface for referring cases to the CC for conciliation. Audit noted that in the minutes of an internal meeting of the C&ED held in November 2014 concerning the enhancement of TIMS, it was stated that there was no need to transfer referral cases to the CC via the computer system interface. However, the justification for the decision was not documented. From January 2014 to September 2017, the C&ED referred a total of 157 cases to the CC, all by unencrypted e-mails, without making use of the computer system interface to save manual processing efforts and minimise human errors in data input.

Note 19: *As the enhancement of the CCMS (in 2014) was completed before that of TIMS (in 2016), the C&ED made minor enhancement to the then existing TIMS in 2014 so as to facilitate the receipt of unfair trade practice information from the CCMS as an interim measure.*

Note 20: *Case referral from the CC to C&ED would involve enhancement of CAPS in addition to TIMS.*

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2.12 ***Computer system interface not used for sharing case results.*** As regards the use of the computer system interface by the C&ED to share case results with the CC (see para. 2.9(c)), Audit found that this had not been done up to January 2018. The CC informed Audit in January 2018 that it was the existing practice for the C&ED to deliver a list of results on unfair trade practice cases to the CC on a monthly basis by hand for reference purpose.

2.13 ***Need to make full use of the computer system interface for information exchange.*** To sum up, apart from sharing of unfair trade practice information, the computer system interface had not been used for complaint case referral (see para. 2.11) and sharing of case results (see para. 2.12) to enhance the efficiency, cost-effectiveness and security of information exchange between the C&ED and CC. In response to Audit's enquiry, the C&ED in February 2018 said that:

- (a) due to system incompatibility, further enhancements to TIMS of the C&ED and the CCMS of the CC were needed for case referral (see para. 2.11(b)). The C&ED and CC aimed to complete the enhancements and start using the computer system interface for case referral in September 2018; and
- (b) after the successful completion of testing conducted in January 2018, the C&ED had made use of the computer system interface for transferring case information to the CC on a monthly basis since February 2018.

In Audit's view, the C&ED needs to work with the CC to ensure the timely completion of enhancements to the computer system interface for case referral (see (a) above).

2.14 ***Need to consider involving OFCA in the sharing of information via the system interface.*** Despite its enforcement role under the TDO, OFCA was not involved in setting up the electronic platform for information exchange and case referral (see para. 2.8(b)). As such, the CC only referred unresolved complaint cases related to trade practice or service quality of broadcasting or telecommunications services to OFCA in the form of letter upon the consent of the complainants, totalling 115 cases from January 2014 to September 2017. Moreover, there was no sharing of unfair trade practice information similar to that between the CC and C&ED (see paras. 2.9(a) and 2.11). According to the C&ED's proposal on the enhancement of TIMS, the system might be further developed to share intelligence and cases with OFCA. However, no action had been taken so far to further develop the existing

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computer system interface with a view to sharing intelligence and cases with OFCA. Audit analysis of the 12,413 pieces of unfair trade practice information shared by the CC with the C&ED via the computer system interface (see para. 2.11) revealed that 1,276 (10%) cases were on telecommunications and broadcasting services which might be under the jurisdiction of the CA and could have been shared with OFCA.

Audit recommendations

2.15 **Audit has *recommended* that the Commissioner of Customs and Excise and the Director-General of Communications should, in consultation with the Secretary for Commerce and Economic Development, conduct a comprehensive review on the enforcement issues of the amended TDO, taking into account the findings of this Audit Report, with a view to drawing lessons for the future.**

2.16 **Audit has also *recommended* that the Commissioner of Customs and Excise should work with the CC to ensure the timely completion of enhancements to the computer system interface for case referral.**

2.17 **Audit has *recommended* that the CC and the Director-General of Communications should review the need for:**

- (a) periodic sharing of unfair trade practice information relating to telecommunications and broadcasting services; and**
- (b) computer system enhancements to facilitate case referral and information exchange.**

Response from the Government and the Consumer Council

2.18 **The Commissioner of Customs and Excise, the Director-General of Communications and the Secretary for Commerce and Economic Development agree with the audit recommendation in paragraph 2.15. They have said that the C&ED and OFCA will conduct a review on the enforcement of the amended TDO, and the CEDB will work closely with them on the review.**

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2.19 The Commissioner of Customs and Excise and the CC agree with the audit recommendation in paragraph 2.16. The Commissioner of Customs and Excise and the CE, CC have said that they will collaborate closely to timely complete the enhancement of the computer system interface.

2.20 The Director-General of Communications and the CC agree with the audit recommendations in paragraph 2.17. The Director-General of Communications has said that OFCA would work with the CC to review the need, and if so the means, to periodically share unfair trade practice information and to refer cases relating to telecommunications and broadcasting services.

Enforcement work of the Customs and Excise Department

2.21 The C&ED's enforcement work of the TDO is divided between the IPIB of the Intelligence and Investigation Branch and TDIB of the Trade Controls Branch (Note 21). The IPIB (Note 22) is responsible for the enforcement of the TDO in relation to the supply of services and specified types of goods (notably ginseng, dried seafood and mobile phones which may involve syndicate crimes) where unfair trade practices prohibited by the amended TDO are commonly encountered. The TDIB is responsible for the enforcement of TDO in relation to the supply of goods (other than those covered by the IPIB).

Enforcement work of the IPIB

2.22 The enforcement work of the IPIB includes handling of complaints, patrol operations and investigations, and administering prosecutions and sanctions, as follows:

- (a) ***Handling of complaints.*** The C&ED has set performance targets of 100% in the COR for commencing investigations into: (i) urgent complaints against unfair trade practices within 24 hours upon receipt of complaints;

Note 21: *Before December 2013, the enforcement responsibility of the TDO rested solely with the TDIB.*

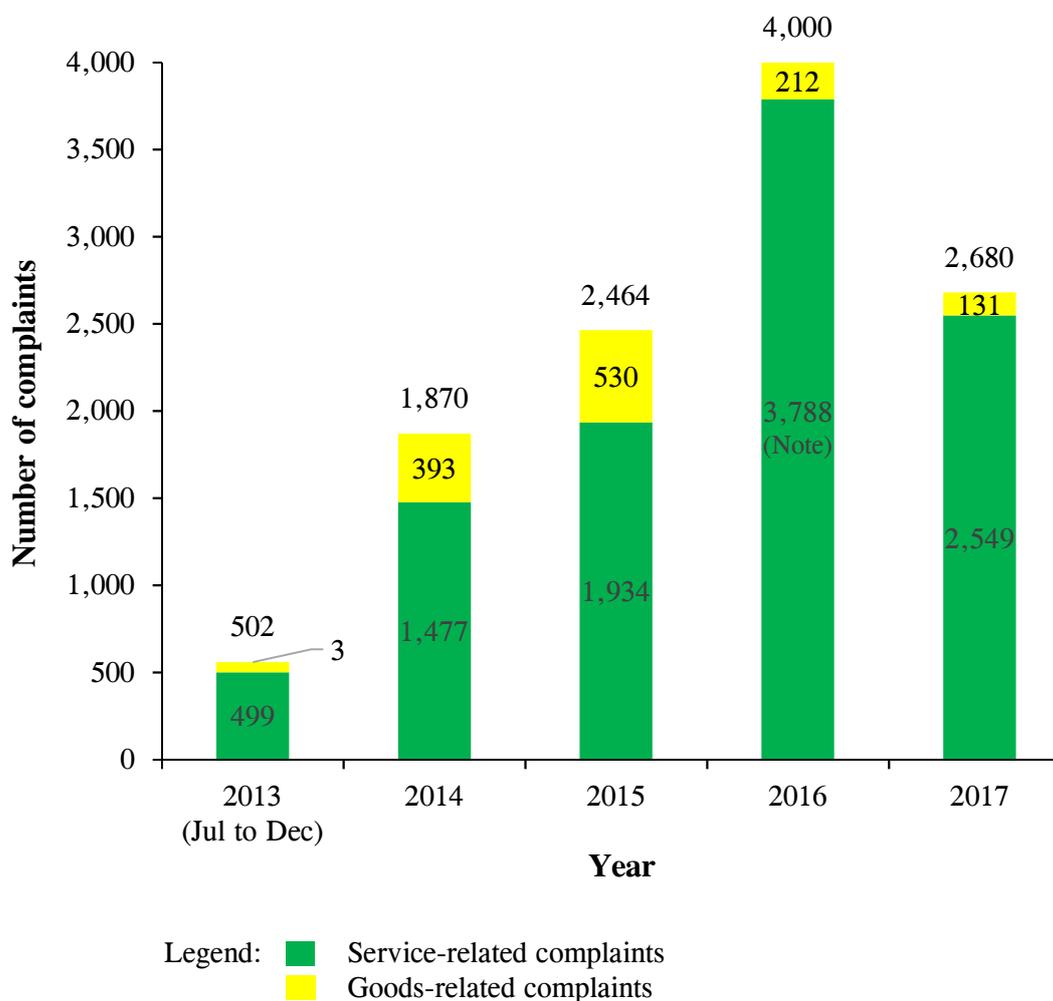
Note 22: *Apart from the TDO, the IPIB is also responsible for the enforcement of other laws such as the Copyright Ordinance (Cap. 528) and the Prevention of Copyright Piracy Ordinance (Cap. 544).*

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and (ii) priority complaints within 3 working days upon assessment of complaints. All complaints are centrally processed by the Intelligence Bureau of the Intelligence and Investigation Branch. For complaints of urgent nature (see Note 3 to Table 2 in para. 1.9), the Intelligence Bureau will immediately contact the responsible officers of the IPIB to decide whether the complaints shall be treated as urgent complaints that warrant immediate investigations to be undertaken. The Quick Response Teams will contact the complainants within 24 hours to obtain further information and determine whether immediate action against the alleged traders (e.g. raid operation) is required. For non-urgent complaints, the Intelligence Bureau will (after entering the related details into CAPS) pass the cases to the Assessment and Support Division (see Appendix A) of the Trade Controls Branch for assessment and further classification (see Note 4 to Table 2 in para. 1.9). Low-priority cases will be handled by the investigation teams of the IPIB within 12 working days. Figure 1 shows the number of complaints on services and specified goods received from July 2013 to December 2017;

Figure 1

Number of complaints received on services and specified goods
(July 2013 to December 2017)



Source: C&ED records

Note: Of 3,788 service-related complaints received in 2016, 1,672 (44%) were related to the closure of one fitness club.

- (b) **Patrol operations.** IPIB staff carry out patrols on a regular basis (Note 23) in plain clothes in tourist shopping areas and districts with a high

Note 23: In festive seasons, IPIB staff conduct high-profile patrols in tourist shopping areas to remind traders to comply with the TDO, and distribute pamphlets to tourists reminding them to check carefully the prices and units of measurement before making payments.

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concentration of the shops selling the specified types of goods (see para. 2.21). The objectives are to detect crimes of unfair trade practices, to enhance alertness of traders in compliance with the TDO, and to promote publicity education to consumers;

- (c) ***Investigations.*** The investigation teams conduct investigations on complaints by carrying out a series of follow-up actions including background checks, surveillance on the alleged traders, and taking witness statements. Depending on the merits and circumstances of each case, test purchase of goods/services may be conducted by staff posing as customers (decoy operation) and the purchased items will be sent to the Government Laboratory/an accredited laboratory for testing. If there is reasonable ground to suspect that an offence has been committed, enforcement action (e.g. raid operation and seizure) will be taken. In 2017, the IPIB completed 1,997 investigations and took enforcement actions on 48 cases; and
- (d) ***Prosecutions and sanctions.*** If an offence under the TDO is found, the investigation team will proceed to initiate prosecution proceedings on the advice of the DoJ. As an alternative to initiating prosecution, the investigation team may, with the consent of the DoJ, accept an undertaking from the trader under the civil compliance-based mechanism (see para. 1.5(b)(iv)). The TDO specifies that no prosecution for an offence under the Ordinance shall be brought after: (i) the expiration of three years from the date of commission of an offence; or (ii) the expiration of one year from the date of discovery of the offence by the prosecutor, whichever is the earlier. In 2017, the IPIB arrested 74 persons and instigated 22 prosecution actions.

Areas for improvement

2.23 ***Long time taken to close investigation case files.*** Timeliness in conducting investigations is important to protect consumer interests as there is a risk that more consumers would fall prey if unfair trade practices are not promptly curbed. The IPIB has set internal time standards for some stages of investigation work (see paras. 2.24 and 2.26 to 2.29). In response to Audit's enquiry on the time standard for completing investigations, the C&ED said that the IPIB had made reference to the statutory time limit for prosecution (see para. 2.22(d)) as the time standard. Based on an extract of the CAPS records as at 2 November 2017 provided by the C&ED, the IPIB had completed 2,960 investigations since July 2013. Audit analysis of the

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investigation case file opening and closure dates (Note 24) shown in these CAPS records revealed that the IPIB had taken more than one year to close 1,532 (52%) investigation case files, up to 3.8 years in the longest case. In response to Audit's enquiry on the long time taken, the C&ED in March 2018 said that:

- (a) while the exact time required for investigation for each case might vary depending on a number of factors (e.g. complexity of the case and availability of the complainant for statement taking), all the investigations were completed within the statutory time limit for prosecution;
- (b) in some cases, while the investigations into the particular complaints had been completed (due to the complainants' withdrawal of their complaints or unwillingness to assist in investigations), the files were not closed immediately because the investigation teams continued to conduct decoy operation or surveillance to keep monitoring the subject traders;
- (c) the IPIB encountered a backlog of cases as a result of the increasing number of complaints from 2014 to 2016 as shown in Figure 1 of paragraph 2.22(a). Most of these backlog cases occurred in 2014 and 2015 as the resources had been put on handling new investigations instead of closing investigations of no follow-up value; and
- (d) regardless of when the investigation files were closed, the progress of investigations had in no way been adversely affected.

Audit noted the C&ED's clarification above. However, in a sample check of 50 investigations that took more than two years from case opening to closure, Audit found areas for improvement as shown in paragraphs 2.24 to 2.29.

2.24 *Need to meet the time standards on commencing investigations of complaints.* According to the Work Manual (see para. 1.7(a)), for urgent complaints

Note 24: *According to the C&ED, upon receipt of a complaint, an investigation file will be created where appropriate and the process of handling the investigation file will begin. Generally speaking, the process includes investigation into the specific complaint, subsequent self-initiated investigation into the suspected trader if necessary as well as taking enforcement action if there is a contravention of the TDO or closing the investigation file if there is no further follow-up value.*

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lodged by short-haul travellers, investigations shall commence within 24 hours upon receiving the complaints. The case officer concerned should confirm with the complainant of his/her willingness to act as a prosecution witness in court and conduct an interview as soon as possible while the complainant still has clear recollection of the alleged incident. For priority and low-priority cases, investigations shall commence within 3 and 12 working days respectively. As a sample check on the compliance with the time standards, Audit examined 50 investigation cases (see para. 2.23) which according to the IPIB's advice of January 2018 comprised two urgent cases and 48 low-priority cases. Audit found that the time standards of 24 hours and 12 working days for one urgent and 8 low-priority (18% of 50) cases respectively were not met. There was no documented reason for the late commencement of investigations for these cases. Upon Audit's enquiry in February 2018, the C&ED said that: (a) the urgent case was a mistaken entry in the Quick Response Team register as the complainant had left Hong Kong when she lodged the complaint (see similar Audit observations in para. 2.31). It was a single input error made by an individual officer; and (b) the case had been handled within the 12-working day time standard as a low-priority case. However, Audit noted that for the 8 late low-priority cases, investigations only commenced 1 to 13 working days (averaging 4.8 working days) after the time standard of 12 working days. There is a need to tighten control over the compliance with the laid-down time standards to ensure that timely actions are taken on complaint cases.

2.25 *Need to contact complainants for early collection of evidence.* Audit noted that of the 8 low-priority cases with late commencement of investigation, 3 were lodged by short-haul travellers who lodged their complaints by e-mail after they had returned to the Mainland. However, the investigation officers concerned only contacted the 3 complainants 14 to 21 working days after receiving the complaints. In the event, two complainants refused to assist the C&ED's investigations by withdrawing their complaints and one did not respond to the C&ED's e-mail. While the reasons for the complainants' withdrawal and non-response in these cases could not be ascertained, there is merit for the C&ED to consider setting a time standard for investigation officers to contact complainants (in particular those who are short-haul travellers) for early collection of evidence.

2.26 *Need to step up supervisory oversight of investigation progress and fieldwork.* According to the IPIB's Work Manual, supervisors shall monitor the progress of the investigation cases by reference to the progress reports submitted by case officers and other exception reports. Audit examination of the 50 investigations (see para. 2.23) revealed that in seven cases, a total of 56 progress reports were

Enforcement work against unfair trade practices

submitted from 2014 to 2017. Audit found that: (a) 5 (9%) reports were not signed off by supervisors concerned; (b) 19 (34%) reports were signed off by the supervisors concerned more than 9 months after submission; and (c) 7 (12%) signed-off reports were undated. There was no assurance that supervisory checks had been properly conducted in these 31 (5 + 19 + 7) reports. The Work Manual also requires the officer-in-charge of a surveillance team to conduct supervisory check on his/her subordinates in the field. However, in 42 of the 50 cases examined where surveillance/decoy operations were conducted, there was no record showing that supervisory check of the fieldwork had been conducted for 214 such operations in 38 (90%) cases.

2.27 *Need to meet the internal time standards in handling investigation cases.* To facilitate the intelligence collection and analysis work by the C&ED's Intelligence Bureau, the IPIB has set internal time standards for the submission of bimonthly reports on investigation results and reporting closed case information to the Intelligence Bureau. Audit examination of the 50 investigations revealed that: (a) out of a total of 726 reports submitted from January 2014 to October 2017, 120 (16.5%) reports had exceeded the two-month submission time standard by 1.1 to 6.3 months (averaging 1.9 months); and (b) in 35 (70%) cases examined, the one-month time standard for reporting closed case information to the Intelligence Bureau was exceeded by 1.2 to 13.5 months (averaging 4.4 months).

2.28 *Need to seek legal advice as early as practicable.* Timeliness in completing investigation is critical as the TDO has laid down the time bar for prosecution (see para. 2.22(d)). Audit noted that, the DoJ had expressed concern on the late submission of cases by the C&ED on two occasions, as follows:

- (a) **Case A.** In a suspected case of contravention of the TDO (i.e. misleading omission) and with prosecution time-bar falling on 20 May 2016, the C&ED sought legal advice from the DoJ on 20 April 2016; and

- (b) **Case B.** In a suspected case of contraventions of the TDO (involving multiple complaints of false trade description and wrongly accepting payment) with prosecution time-bar falling on 7 January 2017, the C&ED sought legal advice from the DoJ relating to 9 complaints on 8 December 2016. As the legal advice obtained for the 9 complaint cases on 28 December 2016 could not be taken as precedent, the C&ED sought further advice relating to another 13 complaints on 3 January 2017.

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On 8 February 2017, the C&ED and the DoJ agreed that cases requiring legal advice should reach the DoJ as early as practicable, preferably not later than three months prior to the prosecution time-bar. In September 2017, a new time standard was included in the Work Manual which specified that the officer-in-charge should send the case file to the DoJ at least three months prior to the expiry of the time limit for prosecution (Note 25).

2.29 From March to September 2017, the C&ED sought the DoJ's advice on 9 cases. Audit's examination revealed that in 5 of the 9 cases, the relevant case files were submitted to the DoJ only 1.9 to 2.8 months (averaging 2.2 months) before the prosecution time-bar (i.e. not meeting the agreed 3-month timeframe). According to the C&ED, in 2 of the 5 cases, it had informed the DoJ explaining that more time would be required for conducting investigation and collecting sufficient evidence before the case files could be submitted to the DoJ for advice. Audit considers that the C&ED needs to take measures to ensure compliance with the time standard for submitting case files to the DoJ for advice.

Enforcement work of the TDIB

2.30 The enforcement work of the TDIB includes handling of complaints, spot checks and patrol operations, investigations, administering prosecutions and sanctions, as follows:

- (a) ***Handling of complaints.*** The C&ED has set performance targets of 100% in the COR for commencing investigations into: (i) urgent complaints against unfair trade practices within 24 hours upon receipt of complaints; and (ii) priority complaints within 3 working days upon assessment of complaints. Similar to the IPIB, complaints are centrally processed by the Intelligence Bureau. For complaints of urgent nature, the Intelligence Bureau will immediately contact the responsible officers of the Trade Controls Branch to decide whether the complaints should be treated as urgent complaints that warrant immediate actions to be taken. Once a case is assessed as an urgent complaint, the Quick Response Teams/relevant case officers will be immediately deployed to commence investigation.

Note 25: *The three-month time standard was included in the Work Manual in September 2017 after taking on board the advice of the Independent Commission Against Corruption in the same month.*

Enforcement work against unfair trade practices

Non-urgent complaints will be forwarded to the Assessment and Support Division for further classification into priority and low-priority cases. According to the Work Manual, investigations shall commence within 5 working days for low-priority cases. Figure 2 shows the number of goods-related complaints received from July 2013 to December 2017;

Figure 2



Source: C&ED records

Note: Of 4,577 complaints received in 2014, 1,337 (29%) were related to the supply of mobile phones by a telecommunications service provider.

- (b) **Spot checks and patrol operations.** The TDIB conducts proactive spot checks on retailers (Note 26) and patrol operations to distribute TDO

Note 26: Goods/retailers selected for spot checks are mainly based on: (a) risk assessment results provided by the division responsible for intelligence profiling on products and/or retailers; (b) reports from other law enforcement agencies and statutory bodies, e.g. CC; and (c) reports of the mass media. Seasonal products with high risk of false origin and/or performance claim are selected for spot checks in each quarter.

Enforcement work against unfair trade practices

pamphlets in patrol areas during festive seasons. The objectives of the spot checks and patrol operations are to ensure compliance with the TDO, identify unscrupulous traders and dubious products, and educate traders and the public. Depending on the findings of the spot checks and media reports, the TDIB may conduct project-based research (known as product monitoring scheme) to identify products which may have TDO implications for follow-up investigations by relevant investigation units. In 2017, the TDIB conducted 4,000 spot checks;

(c) ***Investigations.*** The investigation teams conduct investigations on complaints by carrying out background checks, surveillance on the alleged traders, and taking witness statements. Test purchases may be conducted and the purchased items will be sent to the Government Laboratory/an accredited laboratory or an expert for testing/examination. The TDIB will take enforcement actions on cases where there is reasonable suspicion that an offence has been committed under the TDO. The TDIB has set time standards for case officers to complete investigations, i.e. within 4 months for cases not resulting in enforcement actions (e.g. raid operation and seizure) and 6 months for cases with enforcement actions taken (both counting from commencement of the investigations) or one month before the time limit for legal proceeding (see para. 2.22(d)), whichever is the earlier. In 2017, the TDIB completed 1,491 investigations, comprising 1,328 cases not resulting in enforcement actions and 163 cases with enforcement actions taken (Note 27); and

(d) ***Prosecutions and sanctions.*** If sufficient evidence is found after investigation, the TDIB will consider whether to take prosecution actions or accept an undertaking from the trader, seeking the advice of the DoJ where necessary. In 2017, the TDIB arrested 15 persons and instigated 50 prosecution actions, and issued 24 warning/advisory letters.

Note 27: *Some of the complaint investigations were screened and consolidated into detailed investigation cases (e.g. those relating to the same alleged traders) for enforcement actions.*

Areas for improvement

2.31 *Misclassification of urgent complaint cases.* After examining the complaint register kept by the Complaint Assessment Units (see Appendix A) and records of the TDIB, Audit obtained confirmation from the TDIB in February 2018 that of 3,260 goods-related complaints received by the C&ED in 2016, 45 (1.4%) were classified as urgent cases. Based on the dates of commencement of investigations as recorded by the investigation officers concerned in their case diaries (Note 28) for the 45 urgent cases, Audit found that the 24-hour time target for commencing investigation (see para. 2.30(a)) was not met in 12 cases (27%). There was no documented reason for the delayed action in all 12 cases. In response to Audit's enquiry, the C&ED said in February and March 2018 that:

- (a) 31 (69%) of the 45 cases examined by Audit (comprising the 12 cases that took longer than 24 hours to commence investigations and another 19 cases which had commenced investigations within 24 hours) were non-urgent in nature but misclassified as urgent cases by the officers concerned;
- (b) urgent complaints included those cases: (i) lodged by short-haul visitors; or (ii) involving mobile/temporary stalls, that might require immediate investigation or action to be taken;
- (c) for 19 of the 31 misclassified cases involving temporary stalls, the durations of their operations were later found to be not temporary (longer than 24 hours). For another misclassified case involving a tourist, the complaint was lodged by e-mail after she had left Hong Kong. For the remaining 11 misclassified cases, they did not involve short-haul visitors or temporary stalls; and
- (d) all 14 (45 less 31) urgent cases had met the 24-hour target.

Note 28: *According to the Work Manual, an investigation officer shall maintain records (including a case diary) of all cases in progress for submission monthly to his/her supervisor for inspection. If a case cannot be commenced within the timeframe according to its classified priority, the investigation officer shall seek the supervisor's endorsement with full justifications for the delayed action and keep such record in the case diary.*

Enforcement work against unfair trade practices

2.32 *Need to improve complaint handling and reporting achievement of key performance target in COR.* The fact that the 31 misclassified urgent cases of the TDIB and the one mistaken urgent case of the IPiB (mentioned in paras. 2.31 and 2.24 respectively) were only discovered during this audit exercise after reporting the achievement of the 24-hour performance target on handling urgent complaints in the CORs suggested room for improvement in the following areas:

- (a) there was inadequate checking of the nature of the complaints to ensure that they were accorded the right priority before assigning them to the Quick Response Teams/case officers for actions; and
- (b) for the purpose of reporting the achievement of the performance target on handling urgent complaints in the COR, the TDIB submitted monthly returns on the number of urgent complaints handled and the number meeting the 24-hour time target. Audit examination of the 12 monthly returns submitted for 2016 revealed that a total of 45 urgent cases all meeting the 24-hour time target were reported. However, this was not fully supported by the case diaries in that 12 cases had taken more than 24 hours to commence investigations. The undetected discrepancies indicate a need to strengthen checking of the supporting records for reporting the achievement of performance target in the COR.

Audit also noted that for all the 12 misclassified cases of the TDIB which took 2 to 6 days after receipt of the complaints to commence investigations, the Quick Response Teams/case officers took actions on the same dates when the cases were allocated to them. In other words, most of the time spent was attributable to the lengthy case classification and/or assignment process, e.g. in 6 of the 12 cases, it took more than 2 days for such process, ranging from 3 to 6 days (averaging 5 days). The C&ED needs to make improvement in this regard.

2.33 *Investigation time standards not met.* Based on data provided by the TDIB, there were 4,990 completed investigation cases for complaints received between July 2013 and December 2017, comprising 3,784 cases not resulting in enforcement actions and 1,206 cases with enforcement actions taken. Audit analysed the time taken to complete the 4,990 investigations against the time standards (i.e. 4 months and 6 months respectively — see para. 2.30(c)) and found that the number of cases not meeting the time standards totalled 1,946 (39%), including 5 of the 14 urgent complaint cases of 2016 (see para. 2.31(d)). Upon Audit's enquiry in January 2018, the C&ED said that the specified time standards on completion of investigations were

Enforcement work against unfair trade practices

internal work targets and guidance for officers to complete their assigned cases under normal circumstances. They also served as a guidance for supervisors in monitoring the progress of their assigned cases. As every case carried its own unique facts and circumstances, the time and investigation efforts devoted to each case would not be identical but varied depending on various factors, such as: (a) whether the complainant was co-operative in providing sufficient information in identifying the traders and product under complaint; (b) the number of traders involved and their reactions to the investigation; (c) the availability of the product; (d) the testing arrangement of the product involved; (e) the need for seeking legal advice from the DoJ; and (f) the caseload of the investigation officer. Each and every case would be closely monitored to ensure that the case would be concluded as early as possible and completed before the time limitation for legal proceedings.

2.34 *Need to improve the timeliness in completing investigation work.* Timeliness in conducting investigations is important to protect consumer interests as there is a risk that more consumers would fall prey if unfair trade practices are not promptly curbed. However, an ageing analysis of the 1,946 investigations not meeting time standards showed that the time taken to complete 38% of 1,328 cases not resulting in enforcement actions and 50% of 618 cases with enforcement actions taken had exceeded the time standards of 4 months and 6 months respectively by more than 90 days (Note 29). In Audit's view, the C&ED needs to make greater effort to achieve the investigation time standards.

2.35 *Need to step up monitoring of investigation progress.* Audit examination of 30 completed investigations not meeting time standards revealed that the long time taken in individual stages of investigation work had contributed to the delays. According to the Work Manual, an investigation officer should keep a case diary recording each stage of investigation work and submit it to his/her supervisor for monthly monitoring. However, the reasons for the long time taken were not always documented in the cases examined:

- (a) *Test purchases.* In 7 of the 30 cases examined, it took more than two months to conduct test purchases after commencement of investigation. Audit noted that in four cases it took time for the C&ED to obtain further

Note 29: *The longest case took 741 days to complete investigation. According to the C&ED, the long time taken was due to the complicated product testing process and all the investigations were completed within the statutory time bar for prosecution.*

Enforcement work against unfair trade practices

information on the alleged goods/traders from the complainants or other sources before commencing the test purchases. However, in the remaining three cases, the delays were attributed, in part, to the investigation officers concerned and there was no documented justification for the long time taken (see Case C for an example); and

- (b) *Samples for laboratory testing.* Out of the 30 cases examined, 7 cases involved laboratory testing of the purchased samples or samples provided by the complainants. In 6 (86%) of the 7 cases, the samples were sent for laboratory testing 2 months or more after test purchases/obtaining the samples. However, in one case, there was no documented justification for the long time taken.

At present, there is no exception report generated by the C&ED's computer system to facilitate the monitoring of the delayed investigation cases. In Audit's view, the C&ED needs to step up monitoring of investigation progress with a view to ensuring that timely enforcement actions are taken against unfair trade practices.

Case C

Delays in conducting test purchase

1. On 7 February 2016, the C&ED received a complaint against a chain dried seafood shop alleging that one of its branches was supplying faked shark fin. On 18 February 2016, the investigation officer approached the complainant but she refused to attend an interview or provide a sample of the product for investigation. On 1 March 2016, the investigation officer conducted a test purchase but could not find the target type of shark fin in one of the branches of the shop. There was no documented justification for not conducting another test purchase.

2. In mid-August 2016 (some 5.5 months later) after reviewing the case, the TDIB management considered that one more test purchase should be conducted in other branches of the shop. In the event, the target type of shark fin was purchased on 18 August 2016 (some 6 months after receipt of the complaint) for expert examination which found that the shark fin sample was genuine.

Audit comments

3. In Audit's view, there is a need to conduct all test purchases expeditiously as the test result may point to the need for taking enforcement actions.

Source: Audit analysis of C&ED records

Audit recommendations

2.36 **Audit has recommended that the Commissioner of Customs and Excise should:**

Enforcement work of the IPIB

(a) **take measures to improve the conduct of investigations by the IPIB, including:**

Enforcement work against unfair trade practices

- (i) tightening control over the compliance with the laid-down time standards for commencing investigations of complaint cases;**
- (ii) considering setting a time standard for investigation officers to contact complainants (in particular those who are short-haul travellers) for collecting evidence;**
- (iii) stepping up supervisory checks of investigation progress and fieldwork in accordance with the Work Manual requirements and reminding supervisors to maintain sufficient evidence of their checks;**
- (iv) ensuring that the time standards for reporting investigation results and closed case information to the Intelligence Bureau are always complied with; and**
- (v) ensuring compliance with the time standard for submitting case files to the DoJ for advice on taking prosecution actions or administering other sanctions;**

Enforcement work of the TDIB

- (b) take measures to improve complaint handling, including:**
 - (i) stepping up the checking of the nature of complaints in case classification to ensure that they are accorded the right priority for action within the timeframe laid down in the COR or relevant Work Manual; and**
 - (ii) reminding staff concerned to take prompt action in the case classification and assignment process;**
- (c) strengthen the checking of supporting records for reporting the achievement of performance targets in the COR; and**
- (d) take measures to improve the timeliness in completing investigation work by the TDIB, including:**

- (i) **stepping up monitoring of investigation progress, including making use of the computer system to generate exception reports on delayed investigation cases for management attention; and**
- (ii) **reminding investigation officers to take prompt actions in investigation work, and maintain adequate records of each stage of work, including the reasons for any long time taken.**

Response from the Government

2.37 The Commissioner of Customs and Excise agrees with the audit recommendations. He has said that:

Enforcement work of the IPIB

- (a) the C&ED will step up control over the compliance with the laid-down time standards for commencing investigations of complaint cases; consider setting a time standard for contacting complainants, in particular short-haul travellers; step up supervisory checks of investigation progress and fieldwork subject to the availability of manpower resources; and remind all relevant personnel to maintain sufficient evidence of their checks;
- (b) while noting that the timing for case file closure does not affect the progress of the investigation of the relevant cases, the C&ED has reminded all relevant personnel to comply with the time standards for reporting investigation results and closed case information to the Intelligence Bureau;
- (c) the C&ED has reminded all relevant personnel to comply with the time standard for submitting case files to the DoJ for advice. C&ED's officers will continue to communicate with the DoJ during the investigation process and notify the DoJ in advance if the time standard cannot be met and alternative arrangement is required. At the early stage of implementation of the TDO, there was no concrete time standard but a standing arrangement for the submission of case files to the DoJ for legal advice. While the C&ED made every effort to complete investigations and submit case files to the DoJ earlier, in some complicated cases involving a huge volume of documents or a large group of complainants, there might be only one or two months left for seeking legal advice as a result of the

Enforcement work against unfair trade practices

comprehensive and in-depth investigations. However, with the concerted efforts of the DoJ and the C&ED, the time bar for prosecution was duly met in all cases including Case A and Case B in which the defendants were convicted;

Enforcement work of the TDIB

- (d) while the misclassification of non-urgent cases as urgent cases did not adversely affect the progress of the relevant investigations, the C&ED has reminded all relevant personnel of the criteria for classifying the nature of complaints so as to accord right priority for action in accordance with the performance target set out in the COR or relevant Work Manual and to take prompt action in the case classification and assignment process;
- (e) the C&ED will step up checking to ensure accuracy of classification and compliance with time standards;
- (f) the C&ED will enhance the existing departmental mechanism to closely monitor investigation progress, and explore the feasibility of generating exception reports on delayed investigation cases for management attention; and
- (g) the C&ED has reminded all relevant personnel to expedite action in investigation work and maintain adequate records of each stage of work. For the 3 cases that took more than 2 months to conduct test purchases but without documented justification (see para. 2.35(a)), the delays were attributable in part to the caseload of the officers concerned.

Enforcement work of the Office of the Communications Authority

2.38 The MCB of OFCA is responsible for, among other duties, the enforcement of the fair trading sections of the TDO in relation to the commercial practices of licensees under the Telecommunications Ordinance and the Broadcasting Ordinance that are directly connected with the provision of a telecommunications service or broadcasting service under the two Ordinances.

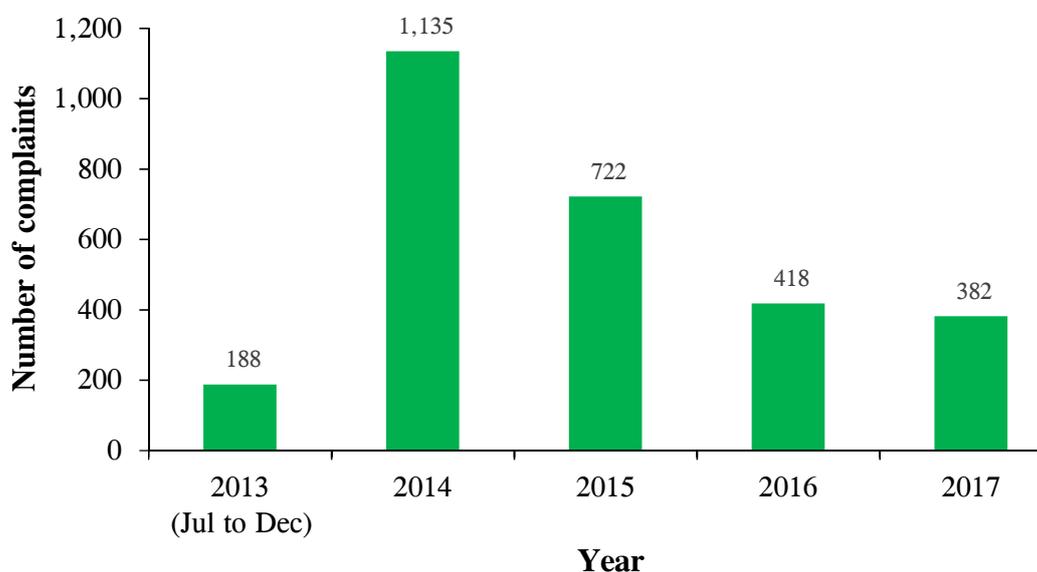
Investigation procedures

2.39 **Complaint handling.** OFCA mainly adopts a complaint-based approach in the enforcement of the TDO and only performs proactive monitoring to identify malpractice from time to time having regard to risk assessment. From July 2013 to December 2017, OFCA received 2,845 complaints involving suspected breaches of the TDO (see Figure 3). All complaints received are forwarded to a case assignment officer (at Principal Regulatory Affairs Manager or Senior Controller Telecom rank) for registration and allocation to the three divisions for further allocation to case officers. Upon taking up a complaint case, the case officer will input information into the computer system, which serves as the central record of all cases received and as the tool to report progress. Based on the complainant's information and subject to any necessary enquiry and clarification, the case officer will determine whether the case should be investigated, referred to the C&ED or other branches/divisions of OFCA, or closed, after seeking the required approvals in accordance with the Office Manual. The complainant will be informed if the case is to be referred or closed. Advisory letters (Note 30) may also be issued for cases not proceeded to investigation. From July 2013 to December 2017, the MCB issued advisory letters in respect of 143 complaints not proceeded to investigation.

Note 30: *An advisory letter aims to advise a trader to: (a) avoid engaging in certain commercial practices which have the risk of contravening the TDO; and (b) improve its relevant commercial practices in relation to the sale, supply or promotion of the service concerned.*

Figure 3

**Number of complaints received
(July 2013 to December 2017)**



Source: OFCA records

2.40 *Investigations and sanctions.* The case officer will carry out an investigation in accordance with the procedures laid down in the Office Manual. Subject to the outcome of the investigation and after seeking the required approval, advice will be sought from the DoJ, where appropriate, as regards the most appropriate enforcement option for the case. Possible enforcement sanctions include instigation of prosecution, accepting of an undertaking under the civil compliance-based mechanism (see para. 1.5(b)(iv)), and issuance of a warning letter or advisory letter. From July 2013 to December 2017, there were 39 investigation cases and OFCA issued advisory letters in respect of 19 investigation cases and instigated prosecution in one case.

Need to promulgate performance measures on enforcement of the amended TDO

2.41 While the C&ED has promulgated two performance targets to inform the public of its pledged time for commencement of investigations into complaints under the TDO (see Table 2 in para. 1.9), OFCA has not promulgated any performance target in relation to its performance in enforcing the TDO although it has set the following internal time targets in the Office Manual:

Enforcement work against unfair trade practices

- (a) the case officer will acknowledge receipt of a complaint in writing within 3 working days upon receipt of the complaint by the MCB; and
- (b) the case officer should strive to complete processing of a complaint, including completion of the investigation, and where a case is established, taking the civil or criminal enforcement options, within 9 months upon receipt of a complaint.

Audit analysed the OFCA's computer records of 2,845 complaints received from July 2013 to December 2017 and found that in 2,830 (99%) cases, the internal time target for acknowledgement of receipt of complaints was met. Among the 2,792 closed cases as of December 2017, the internal time target for completion of 2,704 (97%) cases was met.

2.42 Audit noted that before the implementation of the amended TDO in July 2013, OFCA had been enforcing the Telecommunications Ordinance against misleading or deceptive conduct of the licensees. Such offences are now dealt with by OFCA under the amended TDO. Before July 2013, OFCA had promulgated a performance target to inform the public of its pledged time for completion of investigation under the Telecommunications Ordinance and reported the results in the annual trading fund accounts of OFCA which were posted on the OFCA's website. In line with the accountability and transparency practice, OFCA needs to consider promulgating performance measures on the enforcement of the amended TDO.

Audit recommendation

2.43 **Audit has recommended that the Director-General of Communications should consider promulgating performance measures in respect of the enforcement work under the amended TDO.**

Response from the Government

2.44 The Director-General of Communications agrees with the audit recommendation.

PART 3: ENFORCEMENT WORK AGAINST UNSAFE GOODS, AND SHORT WEIGHTS AND MEASURES

3.1 This PART examines the enforcement work of the C&ED against unsafe goods under the CGSO and TCPSO, and fraudulent or unfair trade practices in connection with quantity under the WMO.

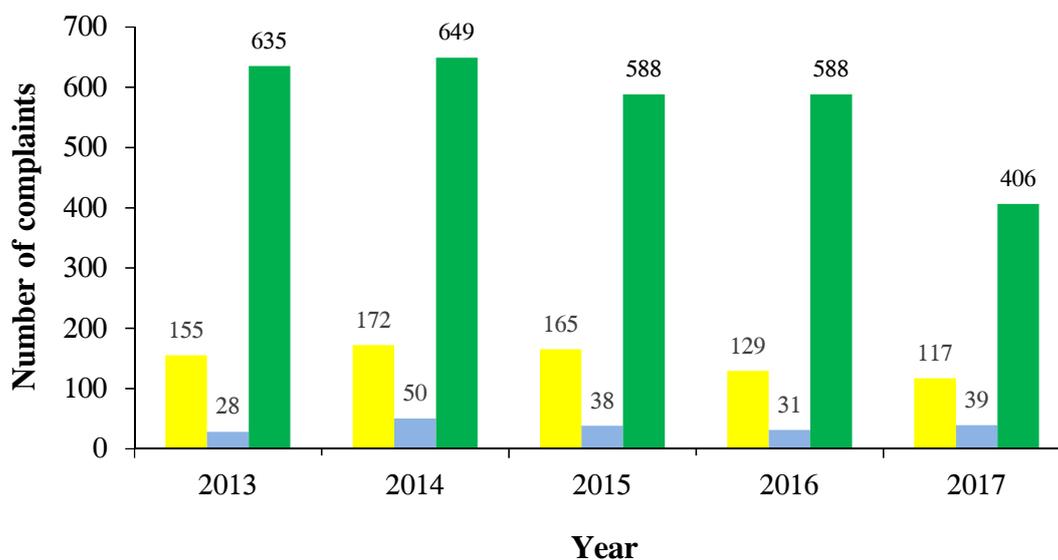
Enforcement work of the Customs and Excise Department

3.2 The CPB under the Trade Controls Branch of the C&ED (see para. 1.6) is responsible for enforcing the CGSO, TCPSO and WMO. Its enforcement work includes handling of complaints on alleged offences under these Ordinances, conducting proactive spot checks and surveillance at retail shops, conducting investigations on irregularities detected, and administering prosecutions and sanctions (see Note 9 to para. 1.7(a)).

3.3 *Handling of complaints.* All complaints are centrally processed by the Intelligence Bureau of the Intelligence and Investigation Branch. For complaints relating to the CGSO, TCPSO and WMO, the Intelligence Bureau will (after entering details into CAPS) pass the complaints to the CPB for according priority (see criteria in Notes 1 and 2 to Table 2 in para. 1.9). The C&ED has set performance targets of 100% in the COR for commencing investigations into: (a) urgent complaints against short weights and measures and unsafe products within 24 hours upon receipt of complaints; and (b) priority complaints within 3 working days upon assessment of complaints. According to the Work Manuals, investigations shall commence within 5 working days for low-priority cases. Figure 4 shows the number of complaints received from 2013 to 2017.

Figure 4

**Number of complaints received
(2013 to 2017)**



Legend: ■ CGSO-related complaints
■ TCPSO-related complaints
■ WMO-related complaints

Source: C&ED records

3.4 **Spot checks.** The CPB has standard programmes for conducting spot checks to detect the sale of unsafe consumer goods/toys and children’s products, and the use of inaccurate weighing and measuring equipment and practices. Quarterly work plans are prepared setting out the target products and shops to be checked. For enforcing the CGSO and TCPSO, the types of products selected for spot checks are based on the information collected from a variety of sources, including previous investigation results, studies conducted by the CC and professional bodies, media reports on injuries caused by unsafe goods and safety news released by overseas enforcement agencies and product safety organisations, and seasonal or festive products (e.g. lanterns). For enforcing the WMO, the CPB devises a risk profile on types of goods to be checked based on complaint figures. Spot checks are conducted by way of test purchases and equipment checks (in the case of WMO-related cases). The test purchased items and any suspected inaccurate weighing and measuring equipment are sent to the Government Laboratory or an accredited laboratory for

Enforcement work against unsafe goods, and short weights and measures

examination. Investigations will be conducted to follow up any non-compliance detected (see para. 3.6). In 2017, the CPB conducted 4,758 spots checks of which 1,715 were WMO-related, 1,440 CGSO-related and 1,603 TCPSO-related.

3.5 ***Surveillance.*** The CPB conducts surveillance on the availability of target products for sale by visiting retail shops under the quarterly work plans. Information so obtained will be used for conducting spot checks.

3.6 ***Investigations.*** The CPB conducts investigations on complaints received by carrying out test purchases and sending product samples to the Government Laboratory or an accredited laboratory for examination. If the test results confirm that the products are unsafe or there are short-weighted sales or fraudulent weighing and measuring equipment, a series of follow-up enforcement actions will be carried out including seizure of relevant products and documents, taking statements from the responsible persons and tracing the suppliers at all levels, i.e. manufacturers, importers, wholesalers and retailers. After completion of all investigation actions, the case officer prepares and submits an investigation report to his/her supervisor for evaluation. In 2017, the CPB completed 929 investigations (comprising 736 not resulting in enforcement actions and 193 with enforcement actions taken), of which 444 were WMO-related, 279 CGSO-related and 206 TCPSO-related.

3.7 ***Prosecutions and sanctions.*** If an offence under any of the three Ordinances is found after investigation, the CPB will consider whether to take prosecution action or issue a written warning after consulting the DoJ where necessary. For any product covered by the CGSO or TCPSO which is assessed to carry a risk, the C&ED may serve a safety control notice, such as a notice to warn (requiring the party concerned to issue a public warning about a product which may be unsafe unless certain steps are taken), a prohibition notice (requiring the party concerned to stop supplying a product in the market) or a recall notice. In 2017, the CPB instigated 28 prosecution actions (of which 19 were WMO-related, 5 CGSO-related and 4 TCPSO-related), issued 103 warning letters (of which 22 were WMO-related, 39 CGSO-related and 42 TCPSO-related) and 30 safety control notices.

Areas for improvement

Spot checks under the CGSO and TCPSO

3.8 The objectives of CGSO and TCPSO-related spot checks are to detect the sale of unsafe consumer goods/toys and children’s products and whether there are other irregularities, such as non-compliance with the labelling requirements. Based on the C&ED’s TIMS and CAPS records, Audit analysed the results of the spot checks conducted by the CPB from 2013 to 2017, a summary of which is shown in Table 6.

Table 6
Results of spot checks under the CGSO and TCPSO
(2013 to 2017)

Spot check	2013	2014	2015	2016	2017	Overall
CGSO-related						
Total number of spot checks conducted	1,255	1,146	1,439	1,460	1,440	6,740
Results:						
Target product not found	1,075 (86%)	943 (82%)	1,135 (79%)	1,149 (79%)	1,185 (82%)	5,487 (81%)
Target shop vacated/closed	34 (3%)	55 (5%)	54 (4%)	48 (3%)	51 (4%)	242 (4%)
Insufficient samples for testing	15 (1%)	12 (1%)	12 (1%)	11 (1%)	10 (1%)	60 (1%)
Target product examined/test purchased	131 (10%)	136 (12%)	238 (16%)	252 (17%)	194 (13%)	951 (14%)

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Table 6 (Cont'd)

Spot check	2013	2014	2015	2016	2017	Overall
TCPSO-related						
Total number of spot checks conducted	1,215	1,417	1,529	1,607	1,603	7,371
Results:						
Target product not found	550 (45%)	688 (49%)	730 (48%)	958 (60%)	1,119 (70%)	4,045 (55%)
Target shop vacated/closed	75 (6%)	114 (8%)	104 (7%)	81 (5%)	62 (4%)	436 (6%)
Insufficient samples for testing	359 (30%)	374 (26%)	465 (30%)	327 (20%)	210 (13%)	1,735 (23%)
Target product examined/test purchased	231 (19%)	241 (17%)	230 (15%)	241 (15%)	212 (13%)	1,155 (16%)

Source: Audit analysis of C&ED records

3.9 ***Need to review the high proportion of cases with target products not found.*** As shown in Table 6, target products were not found in a high proportion of spot checks (81% for CGSO-related products and 55% for TCPSO-related products). Audit noted that some of these spot checks were conducted according to the information from overseas recalls and reports by overseas authorities or media. While these products might not be available in the local market, the C&ED carried out spot checks and necessary follow-up actions in order to protect public safety. However, Audit examination revealed that some target products were general types of products (which are commonly available in the retail market) but they were still reported by CPB staff to be not found in the spot checks. For example, in 16 CGSO-related spot checks on disposable gloves conducted during the first quarter of 2017, the target product was reported not found in 6 checks (38%). In 60 TCPSO-related spot checks on infant toothbrush (to test for excessive phthalates — see Note 4 to para. 1.3(d)) conducted during the first quarter of 2016, the target

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product was reported not found in 41 checks (68%). In Audit's view, there is a need for the C&ED to ascertain the reasons for the persistently high proportion of cases with target products not found (particularly those relating to general types of products) in order to identify further improvement measures.

3.10 *Need to provide up-to-date intelligence for spot checks.* For the selection of target shops for spot checks, the Intelligence Bureau facilitates the CPB in compiling a Company/Product List. The List is used as a reference for carrying out surveillance on the target product types as set out in the quarterly work plans. Information collected for spot checks includes the names/addresses of relevant retailers and quantities of products available. However, as shown in Table 6, in 5% of the CGSO-related spot checks, the target shops were found by CPB staff to have been vacated/closed or not having sufficient quantity of the target products for sample testing. Similar problems were also found in 29% of the TCPSO-related spot checks. The C&ED needs to take measures to ensure the provision of up-to-date intelligence for spot checks.

3.11 *Need to conduct more spot checks on online sales.* In response to the recommendations of the Independent Commission Against Corruption's assignment studies, the CPB included proactive spot checks on goods supplied online in its spot check programme in April 2013. However, from April 2013 to September 2017, the CPB only conducted a total of 37 spot checks on online sales of CGSO and TCPSO-related products (i.e. averaging 8 checks a year compared to some 2,800 spot checks a year on retail shops). The detection rates of suspected offences were 16% for spot checks on online sales versus 1.1% on retail shops. According to the C&ED, some of the online shops were not operating in Hong Kong and hence outside the C&ED's jurisdiction. However, Audit noted that from 2013 to 2017, the CC received 10,792 complaints related to Internet shopping/group purchase which were pursuable and of which 7,879 were finally settled. While not all these complaints were related to product safety, they generally reflected the growing popularity of online sales transactions. The C&ED needs to conduct more spot checks in this regard to strengthen consumer protection.

3.12 *Need for surveillance at control points.* According to the C&ED, surveillance requests to customs officers at control points to assist in watching out for target products were made on an ad-hoc basis. In light of the high proportion of cases with target products not found in spot checks at retail shops (see para. 3.9), the C&ED needs to consider stepping up surveillance at control points where appropriate.

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Spot checks under the WMO

3.13 The objectives of WMO-related spot checks are to detect the use of inaccurate weighing and measuring equipment by traders and the sale of short-weighted goods. Based on the C&ED's TIMS and CAPS records, Audit analysed the results of 8,073 spots checks conducted by the CPB from 2013 to 2017, a summary of which is shown in Table 7.

Table 7

**Number and percentage of WMO-related spot checks
with suspected offences found
(2013 to 2017)**

Spot check	2013	2014	2015	2016	2017	Overall
Number of suspected offences detected (a)	64	62	19	10	8	163
Number of spot checks conducted (b)	1,244	1,588	1,878	1,648	1,715	8,073
Detection rate (a)/(b) × 100%	5.1%	3.9%	1.0%	0.6%	0.5%	2.0%

Source: Audit analysis of C&ED records

3.14 ***Need for a review of the decreasing trend of detection rate.*** Table 7 shows that the detection rate of suspected offences in WMO-related spot checks was on a decreasing trend. While the decreasing trend could be due to more law-abiding trading practices, there is also a possibility of detection risk due to inadequacies in conducting spot checks. The C&ED needs to ascertain the reasons for the decreasing trend of detection rate with a view to identifying specific measures to improve the effectiveness of spot checks. In this connection, Audit examination of the spot check records has revealed issues that warrant the C&ED's attention (see paras. 3.15 to 3.17).

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3.15 ***Need to consider conducting more spot checks by way of test purchases.*** WMO-related spot checks may be conducted by way of test purchases or equipment checks. Audit analysed the 163 spot checks with suspected offences detected from 2013 to 2017 (see Table 7 in para. 3.13) and found that 161 (99%) were by way of test purchases. While the spot check results suggested that test purchase was a more effective detection tool than equipment check, the proportion of test purchases among spot checks decreased from 64% in 2013 to 16% in 2017. Audit noted that the number of test purchase could be limited by the allocated budget. However, the direct cost of a test purchase in most cases was lower than the staff cost involved in a spot check. The C&ED needs to take into account the overall cost-effectiveness and consider conducting more spot checks by way of test purchases.

3.16 ***Target trades not adequately covered in some spot checks.*** According to the C&ED, WMO-related spot checks were performed in accordance with quarterly work plans which set out the target trades selected on a risk basis. The work plans only specified the target trade categories (typically 3 to 4 types) and the total number of spot checks to be conducted in the relevant quarters. However, there was no laid-down guideline on the proportion of spot checks for the target trades. In 7 of 11 quarters from 2015 to September 2017, the percentages of spot checks for some target trades were less than those of the non-target trades. For example, of 514 spot checks conducted in the first quarter of 2016, two target trades, i.e. fruit and seafood only accounted for 5% and 4% respectively whereas a non-target trade, i.e. medicine accounted for 26%. The low percentage of target trades covered in the spot checks is not consistent with the intended risk-based enforcement strategy.

3.17 ***Late approval of work plans.*** All of the quarterly work plans for 2015 to 2017 were approved after the commencement of the relevant quarters. The delays ranged from 9 to 34 days, averaging 13 days. In other words, some of the spot checks could have been conducted before the approval of the quarterly work plans.

Investigation work

3.18 ***Misclassification of complaint cases.*** The C&ED has set a performance target in the COR for commencing investigations into urgent complaints against short weights and measures and unsafe products within 24 hours upon receipt of complaints at 100% (see para. 3.3). In February 2018, Audit obtained from the CPB information on all urgent complaints received in 2016 for examination. Of 160 CGSO or TCPSO-related complaints in 2016, 72 (45%) were classified as urgent. Audit found

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that the 24-hour time target for commencing investigation was not met in 39 (54%) cases. In response to Audit's enquiry, the C&ED in March 2018 said that:

- (a) 70 (97%) of the 72 cases examined by Audit (comprising the 39 cases that took longer than 24 hours to commence investigations and another 31 cases which had commenced investigations within 24 hours) were misclassified as urgent cases;
- (b) for CGSO or TCPSO-related cases, urgent complaints included cases: (i) involving injury; (ii) from complainants who had requested the C&ED to immediately conduct on site investigations with adequate justifications; or (iii) involving retailers who might terminate their short-term tenancy agreements at any time. Priority complaints included cases: (i) involving public/media concerns; (ii) from complainants asking for a reply on the progress of investigations; or (iii) involving products suspected of posing significant hazards to consumers (see Notes 1 and 2 to Table 2 in para. 1.9);
- (c) 47 of the 70 misclassified cases fell within the definition of priority cases instead of urgent cases because 32 cases involved significant hazards, 4 cases involved public/media concerns and the complainants in 11 other cases requested a progress reply. The remaining 23 (70 less 47) cases were not in the nature of an urgent or priority case and hence fell within the low-priority category; and
- (d) all 2 (72 less 70) urgent cases had met the 24-hour target.

However, Audit noted that for two cases (Cases D and E) which were reclassified as priority cases on account of significant hazards, there were reported injuries (see (b) above) by the complainants concerned (i.e. a cut on palm by broken strap component of a watch used for several months and lip bleeding caused by falling on the sharp edge of a sofa bed when asleep). In response, the C&ED said that: (i) in Case D, the complainant did not mention injury when lodging the complaint on 19 August 2016. It was not until 26 August 2016 that the C&ED noted that injury was involved when the complainant provided further information to the C&ED. Hence, Case D was not treated as urgent but was accorded priority in dealing with the complaint; and (ii) for Case E, the C&ED considered that the cause of the injury was the fall of the victim which was not related to any structural issue of the sofa bed. Hence, Case E was reclassified as a priority complaint.

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3.19 *Need to improve complaint handling and reporting achievement of key performance target in COR.* The fact that the misclassified urgent cases were only discovered during this audit exercise after reporting the achievement of the 24-hour performance target on handling urgent complaints in the COR for 2016 suggested room for improvement in the following areas:

- (a) there was inadequate checking of the nature of the complaints by the CPB leading to these misclassified cases;
- (b) for the purpose of reporting the achievement of the performance target on handling urgent complaints in the COR, the CPB submitted monthly returns on the number of urgent complaints handled and of which the number meeting the 24-hour time target. Audit examination of the returns submitted for 2016 revealed that all the 72 urgent cases were reported as meeting the 24-hour time target. However, this was not supported by the complaint details recorded by the Intelligence Bureau and the CPB's case diaries in that 39 cases had taken more than 24 hours to commence investigations. The undetected discrepancies indicate a need to strengthen checking of the supporting records for reporting the achievement of performance targets in the COR;
- (c) for one of the two confirmed urgent cases (see para. 3.18(d)), Audit noted that the complainant sent an e-mail regarding an alleged unsafe product on 22 February 2016 to the C&ED's enquiry e-mail address. The e-mail was routed to the Toys and Children's Product Safety Division of the CPB (see Appendix A) on 23 February 2016 for reply and was treated as an urgent complaint on the same day. According to the C&ED, the Division Head assigned the case to a Unit Head on 24 February 2016 which was followed up immediately by conducting background research (though not documented). In other words, over one day was spent on routing the e-mail from receipt in the e-mail box to the Unit Head. In response, the C&ED in March 2018 said that the case should have complied with the 24-hour time target taking into account the complaint classification date and the work done by the Unit Head. Given that the public may lodge an urgent complaint to the C&ED's enquiry e-mail address that takes extra time for routing, the C&ED needs to take measures to improve the situation; and
- (d) according to the COR, the performance target for priority cases is to commence investigations within 3 working days upon assessment of the complaints. In other words, the time taken by the Intelligence Bureau to

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process the complaints and input details into CAPS for transmission to the CPB and the subsequent case priority assessment by the CPB is not taken into account in measuring the achievement of the 3-working day time target. As mentioned in paragraph 3.18(c), of the 47 urgent cases reclassified by the C&ED as priority cases, 32 involved significant hazards (e.g. broken furniture posing danger to users). However, Audit noted from the C&ED's records of 2016 that in 14 of the 32 cases, it had taken more than 3 days each in processing the complaints for transmission to the CPB. In 10 of the 32 cases, the CPB had taken more than 3 days each in priority assessment/case assignment. The C&ED needs to expedite action in this regard.

3.20 *Investigation time standards not met.* Timeliness in completing investigations is important as there is a time limit on commencement of legal proceedings which is three years after the commissioning of an offence or within 12 months after the first discovery of the offence (for CGSO and TCPSO) whichever is the earlier, or 6 months from the time when the matter arises (for WMO). For goods assessed to have a safety risk in an investigation, there is also a need to inform the public as soon as possible the findings and potential hazard. The CPB has set internal time standards for completing: (a) CGSO and TCPSO-related investigations within 4 months for cases not resulting in enforcement actions and 6 months for cases with enforcement actions taken; and (b) within 3 and 4 months respectively for WMO-related investigations. According to the Work Manuals, investigation work has to be completed within the specified time standards or one month before the time limit for legal proceedings, whichever is the earlier. The C&ED informed Audit that the time standards served as internal work targets and guidance for officers to complete their assigned cases under normal circumstances. Audit analysed the 4,978 completed investigations (comprising 2,090 cases not resulting in enforcement actions and 2,888 with enforcement actions taken) in relation to the three Ordinances for the period from 2013 to September 2017 and noted that inability to meet the specified time standards was a cause for concern, particularly in respect of the CGSO and TCPSO-related cases, being 56% and 65% respectively (see Table 8 for details).

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Table 8

**Number and percentage of completed investigations
not meeting time standards
(2013 to September 2017)**

Completed investigation		CGSO- related	TCPSO- related	WMO- related
Cases not resulting in enforcement actions	Number of cases not meeting time standards (a)	255	265	97
	Total number of cases (b)	442	311	1,337
	Percentage not meeting time standards ((a)/(b) × 100%)	58%	85%	7%
Cases with enforcement actions taken	Number of cases not meeting time standards (c)	391	221	368
	Total number of cases (d)	709	433	1,746
	Percentage not meeting time standards ((c)/(d) × 100%)	55%	51%	21%
Overall	Number of cases not meeting time standards (e)	646	486	465
	Total number of cases (f)	1,151	744	3,083
	Percentage not meeting time standards ((e)/(f) × 100%)	56%	65%	15%

Source: Audit analysis of C&ED records

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3.21 *Need to improve the timeliness in completing investigations.* An ageing analysis of the completed investigations not meeting the time standards showed that the extent of delays was also more significant for the CGSO and TCPSO-related cases than the WMO-related cases. While 52% and 62% respectively of the CGSO and TCPSO-related cases with enforcement actions taken were delayed for over 90 days (averaging 164 days), only 23% of such WMO-related cases were delayed for over 90 days. Audit examination of 60 completed investigations not meeting the time standards revealed that unsafe goods and other offences were confirmed by laboratory tests in 45 (75%) cases (Note 31) against which the C&ED took enforcement actions, including prosecutions, issuing warning letters and/or safety control notices. While there was no time-barred prosecution case, the delays in meting out punishments to deter similar offences and/or issuing safety control notices to warn the public of the risks in buying/using the related products in these cases undermined consumer protection. Cases F and G are two examples to illustrate this point. In Audit's view, there is a need to improve the timeliness in completing investigations in order to provide timely protection for consumers against the sale of unsafe or short-weighted goods.

Note 31: *After taking into account the test results, the C&ED concluded that no further action was required in respect of the other 15 cases.*

Case F

Delays in investigation of a CGSO-related complaint

1. A complaint was received on 3 May 2013 alleging that a stool was structurally insecure. The case was assigned to the case officer on 7 May 2013 (i.e. 4 days later) who contacted the complainant on 8 May 2013. CPB staff subsequently visited the complainant to inspect the stool and obtained the Government Laboratory's advice on applicable safety standards on 29 May 2013. However, it was not until 27 June 2013 (some 1 month later) that the case officer sought clarification from the Government Laboratory on the applicable safety standards. Test purchase was then conducted on 24 July 2013 (about another month later). On 25 July 2013, the samples were sent to Government Laboratory for safety analysis. Test results obtained on 17 September 2013 confirmed that the stools failed to comply with the applicable safety standards (i.e. serious permanent deformation was observed during the test which could pose a falling hazard to users). The associated risk was assessed to be "moderate to significant" (Note).

2. On 2 October 2013, the case officer recorded on the case diary that raid operation was pending the result of an appeal (which according to the C&ED's information of March 2018, was lodged by the retailer in another case involving a Prohibition Notice issued by the C&ED on a different product). On 27 November 2013, the CPB conducted a raid operation to seize the unsold stools and issued a Prohibition Notice to prohibit the retailer from supplying the unsafe stools. Investigation continued with interviewing the retailer and tracing the supplier of the stools. On 8 May 2014, the case officer submitted the investigation report to his supervisor for evaluation. However, it was not until 5 August 2014 (3 months later) that a recommendation was made to prosecute the retailer.

3. In the event, the court case was concluded in December 2014 and the retailer was fined \$50,000 and the offending goods were confiscated.

Case F (Cont'd)

Audit comments

4. The CPB took some 6 months (after receipt of the complaint in May 2013) to seize the unsafe stools and issue a Prohibition Notice to prohibit the retailer from supplying the stools in November 2013. Over the period, uninformed consumers could have purchased and used the unsafe stools which was unsatisfactory. The long time taken was partly attributable to the delays of some 2 months in seeking clarifications from the Government Laboratory on the applicable safety standards and arranging the test purchase (see para. 1), for which there was no documented reason.

5. While the test results confirming that the stools failed to comply with the applicable safety standards were obtained on 17 September 2013, prosecution action was only initiated in August 2014 (about 1 year later) and the retailer was fined in December 2014. The long time taken was partly attributable to the delay of some 3 months in recommending prosecution action after completion of the investigation report (see para. 2), for which there was no documented reason. The delay in fining the retailer and confiscating the offending goods (about 19 months after receipt of the complaint) could have undermined the deterrent effect of the punishment against similar offences.

6. The C&ED needs to draw lesson from this case and remind relevant staff to take prompt actions in their investigation work, and maintain adequate records of each stage of work, including the reasons for any periods with no progress made.

Source: Audit analysis of C&ED records

Note: Based on a statistical model widely used in other countries, the CPB assesses product risk with reference to factors including maximum potential injury, probability of hazard occurrence, hazard recognition and availability of the product. On a scale of 0 to 90, a score of between 50 and 60 represents moderate to significant risk. A score of 70 or above represents high risk.

Case G

Delays in a TCPSO-related investigation

1. A complaint was received on 28 August 2014 concerning the safety of a children's mat. In early September 2014, CPB staff conducted surveillance to confirm that the children's mat was still for sale and obtained further information from the complainant. However, the supervisor's approval of the test purchase and further information on the mat to be purchased were only obtained in mid-October and end-November 2014 respectively (about 2 months later). As the target mat was out of stock, a purchase order was placed with the retailer in mid-December. The sample mats were eventually obtained by the CPB in late-December 2014.

2. In March 2015, the case officer recorded on the case diary that the purchased samples were pending testing as the Government Laboratory was heavily engaged in other testing work. In April 2015, the complainant enquired about the test results and an e-mail reply was given by the C&ED on the same date. However, it was not until 29 July 2015 that the CPB obtained a quotation from an accredited laboratory for conducting tests for the samples. Preliminary test results by the accredited laboratory obtained on 20 August 2015 indicated that the packing materials and the zipper which was used to assemble the mats were unsafe. Final test report was available on 20 October 2015 and the hazard level was assessed as "high" (see Note in Case F).

3. In a raid operation on 4 November 2015, the CPB seized the unsold mats and issued a Prohibition Notice to prohibit the retailer from supplying the mats. Laboratory testing of the seized mats commenced in mid-November and the test report of December 2015 confirmed that the seized mats were unsafe. During the interviews held in January 2016, the retailer and the supplier provided the C&ED with two test reports to substantiate that they had exercised due diligence to avoid committing an offence under the TCPSO. After reviewing the investigation report submitted by the case officer in March 2016, the CPB sought advice from the DoJ in April 2016. Finally, a warning letter on identification marking was served on the retailer in August 2016.

Case G (Cont'd)

Audit comments

4. The CPB took about 15 months (from the date of complaint in August 2014) to stop the sale of the unsafe mat by seizing the unsold mats and issuing a Prohibition Notice to the retailer in November 2015. Over the period, uninformed consumers could have purchased and used the unsafe mats which was unsatisfactory. The long time taken was partly attributable to the delay of about 2 months (see para. 1) in obtaining the supervisor's approval and further information for the test purchase, for which there was no documented reason. While there was indication in March 2015 that the Government Laboratory was heavily engaged in other testing work, there was no documented reason why a decision to use an accredited laboratory for safety testing was only taken in July 2015 (about 4 months later). In March 2018, the C&ED informed Audit that the decision was taken in July 2015 as the Government Laboratory was unable to confirm the date for testing the samples.

5. The C&ED needs to draw lesson from this case and remind relevant staff to take prompt actions in their investigation work, and maintain adequate records of each stage of work, including the reasons for any periods with no progress made.

Source: Audit analysis of C&ED records

3.22 ***Need to step up monitoring of investigation progress.*** Audit examination of the 60 completed investigations not meeting the time standards (see para. 3.21) also revealed that the long time taken in individual stages of investigation work had contributed to the delays. According to the Work Manuals, a case officer should keep a case diary recording each stage of investigation work and submit it to his/her supervisor for monthly monitoring. However, the justifications for the long time taken were not always documented in the cases examined:

- (a) ***Test purchases.*** In 11 (18%) cases, it took more than two months to conduct test purchases after commencement of investigations. However, there was inadequate documentation of the reason for the long time taken in one case. For this complaint case which was received in October 2015, after obtaining

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additional information from the complainant in December 2015, the investigation officers did not conduct test purchase until May 2016 (i.e. about 5 months later). However, there was no documented justification for the delayed action;

- (b) ***Samples for laboratory testing.*** In 13 (22%) cases, samples were sent for laboratory testing more than two months after test purchases. However, there was inadequate documentation of the justification for the long time taken in 11 cases; and
- (c) ***Raid operations.*** In 10 (17%) cases, raid operations (i.e. shop search and seizure) were conducted more than two months after obtaining the laboratory test results confirming that the test products had failed the relevant tests. However, there was inadequate documentation of the justification for the long time taken in 4 cases.

At present, there is no exception report generated by the C&ED's computer system to facilitate the monitoring of the delayed investigation cases. In Audit's view, the C&ED needs to step up monitoring of investigation progress with a view to ensuring that timely enforcement actions are taken against unsafe goods and offences of inaccurate measurement.

3.23 ***Need to review the guidelines on issuing warning instead of prosecution.*** According to the C&ED's enforcement guidelines, written warning in place of prosecution is allowed if the risk level of the offence is not high and the offending retailer has not been subject to any previous prosecution or written warning for the same product type of the same offence. Audit examined 80 investigation files and noted that the C&ED issued warnings in 44 cases. In one of the 44 cases, the retailer concerned was warned in January 2014 for supplying an unsafe fishing game which was assessed to carry moderate risk. According to the C&ED's records, the retailer had been previously warned 10 times for supplying different types of unsafe toys (such as twirling cup, mobile phone and toy car) and once for breaches of the identification marking requirement. Audit noted that in the submission to the DoJ for advice in issuing a warning instead of prosecution (see para. 3.7), the case officer stated that the retailer had been previously warned of supplying non-compliant toys not of the same product type (as the unsafe fishing game). This case suggests that the term "same product type" in the enforcement guidelines could have limited the imposition of appropriate sanctions to deter recurrence of similar offences. The C&ED needs to review the enforcement guidelines to rectify the situation.

Audit recommendations

3.24 **Audit has *recommended* that the Commissioner of Customs and Excise should:**

Spot checks under the CGSO and TCPSO

- (a) take measures to improve the effectiveness of spot checks for the detection of the sale of unsafe goods and other offences under the CGSO and TCPSO, including:**
 - (i) ascertaining the reasons for the persistently high proportion of cases with target products not found (particularly those relating to general types of products) in spot checks with a view to identifying specific areas in need of improvement;**
 - (ii) providing up-to-date intelligence to assist the selection of target shops for spot checks;**
 - (iii) conducting more spot checks on online sales of goods; and**
 - (iv) stepping up surveillance at control points;**

Spot checks under the WMO

- (b) take measures to improve the effectiveness of spot checks for the detection of the sale of short-weighted goods and other offences under the WMO, including:**
 - (i) ascertaining the reasons for the decreasing detection rate with a view to identifying specific areas in need of improvement;**
 - (ii) considering to conduct more spot checks by way of test purchases;**

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- (iii) **laying down requirements that the numbers of spot checks on target and non-target trades should be commensurate with their risk profiles; and**
- (iv) **ensuring that quarterly work plans for guiding the direction of spot checks are approved before commencement of the checks;**

Investigation work

- (c) **take measures to improve complaint handling, including:**
 - (i) **stepping up the checking of the nature of complaints in case classification to ensure that they are accorded the right priority for action within the timeframe laid down in the COR or relevant Work Manuals; and**
 - (ii) **reminding staff concerned to take prompt action in the processing and classification of complaints;**
- (d) **strengthen the checking of supporting records for reporting the achievement of performance targets in the COR;**
- (e) **improve the timeliness in completing investigation work to protect consumers against the sale of unsafe or short-weighted goods, including:**
 - (i) **stepping up monitoring of investigation progress, including making use of the computer system to generate exception reports on delayed investigation cases for management attention and action; and**
 - (ii) **reminding officers to take prompt actions in investigation work, and maintain adequate records of each stage of work, including the reasons for any long time taken; and**
- (f) **review the enforcement guidelines on issuing warning instead of prosecution to see if there are any terms (such as “same product type”) which need clarification to ensure the imposition of appropriate sanctions to deter recurrence of similar offences.**

Response from the Government

3.25 The Commissioner of Customs and Excise agrees with the audit recommendations. He has said that the C&ED:

Spot checks under the CGSO and TCPSO

- (a) will enhance the existing mechanism under which, when the target products are not found, similar products from the target shops will be bought or a search of target products will be conducted in nearby shops;
- (b) will ensure that spot check findings are reported to the Intelligence Bureau for updating in a timely manner, conduct more spot checks on online sales of goods with reference to high-risk products, and consider devising a mechanism to enhance detection of high-risk products at control points;

Spot checks under the WMO

- (c) noted that the decreasing detection rate was mainly attributable to greater awareness and understanding of the WMO on the part of traders resulting in increased compliance, and proactive measures taken by the management offices of markets to enhance tenants' compliance. Nevertheless, the C&ED will continue to keep in view the situation and further examine other reasons for the decreasing detection rate;
- (d) will prepare guidelines to lay down requirements for the number of spot checks to be commensurate with risk profiles of products;
- (e) has started formulating work plans one month ahead of the end of the preceding quarter and to conduct more spot checks by way of test purchases;

Investigation work

- (f) has reminded all relevant personnel of the criteria for classifying the nature of complaints so as to accord the right priority for action in accordance with

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performance targets set out in the COR or relevant Work Manuals and to take prompt actions in the complaint classification and assignment process;

- (g) will review the classification criteria with a view to making them clearer and easier to follow;
- (h) will step up checking to ensure accuracy of case classification and compliance with time standards, enhance the monitoring mechanism and explore the feasibility of generating exception reports on delayed investigation cases for management's attention;
- (i) has reminded all relevant personnel to expedite action in investigation work and maintain adequate records of each stage of work; and
- (j) will review the enforcement guidelines to see if there is any need for improvement to ensure the imposition of appropriate sanctions to deter recurrence of similar offences.

PART 4: OTHER CONSUMER PROTECTION MEASURES

4.1 Apart from the enforcement of relevant consumer protection legislation, the efforts to protect consumers also include resolving disputes between consumers and traders, and providing education and information to consumers. This PART examines other consumer protection measures, including:

- (a) conciliation of consumer disputes by the CC (paras. 4.2 to 4.15);
- (b) naming and public reprimand against unscrupulous traders by the CC (paras. 4.16 to 4.25);
- (c) implementation of the Customer Complaint Settlement Scheme (CCSS) by OFCA (paras. 4.26 to 4.31);
- (d) research study on cooling-off periods by the CC (paras. 4.32 and 4.33); and
- (e) consumer education and publicity (paras. 4.34 to 4.45).

Conciliation of consumer disputes by the Consumer Council

4.2 The right to redress is one of the most widely recognised basic consumer rights. Consumer disputes in most cases involve moderate amount of money which may not warrant the pursuit of legal action. The CC is not a law enforcement agency and does not possess the power of investigation or adjudication. Instead, the CC handles complaints by means of conciliation, providing a platform for consumers and traders to resolve disputes by mutually acceptable agreements. Therefore, settlement of disputes relies heavily on voluntary cooperation of the traders concerned and mutual understanding of the parties involved.

4.3 *Types of complaints handled and complaint channels.* The CC only handles complaints on immovable property, goods and services purchased from traders by individual consumers for private use or consumption. According to the

CC, complaints involving private transactions between individuals not in the course of business or goods and services supplied by the Government would fall outside the CC's scope of work. A consumer aggrieved by unfair trade practices can lodge a complaint with the CC by phone, postal mail, electronic means on the CC's website or in person at any of the seven Consumer Advice Centres.

4.4 **Operation and procedures.** The Complaints and Advice Division (C&AD — see Appendix C) of the CC is responsible for handling consumer complaints and conciliation of disputes (Note 32). The C&AD, with an establishment of about 60 staff and led by a Principal Complaints and Advice Officer, operates two hotline centres and seven Consumer Advice Centres. An operational manual setting out the procedures on handling enquiries and complaints has been issued to provide reference and guidelines to all C&AD staff involved in the processes. The C&AD uses the CCMS (see para. 2.9) to record all details of the complaints received and case progress, and as a communication log on correspondence/phone calls with the complainants, traders and other relevant parties.

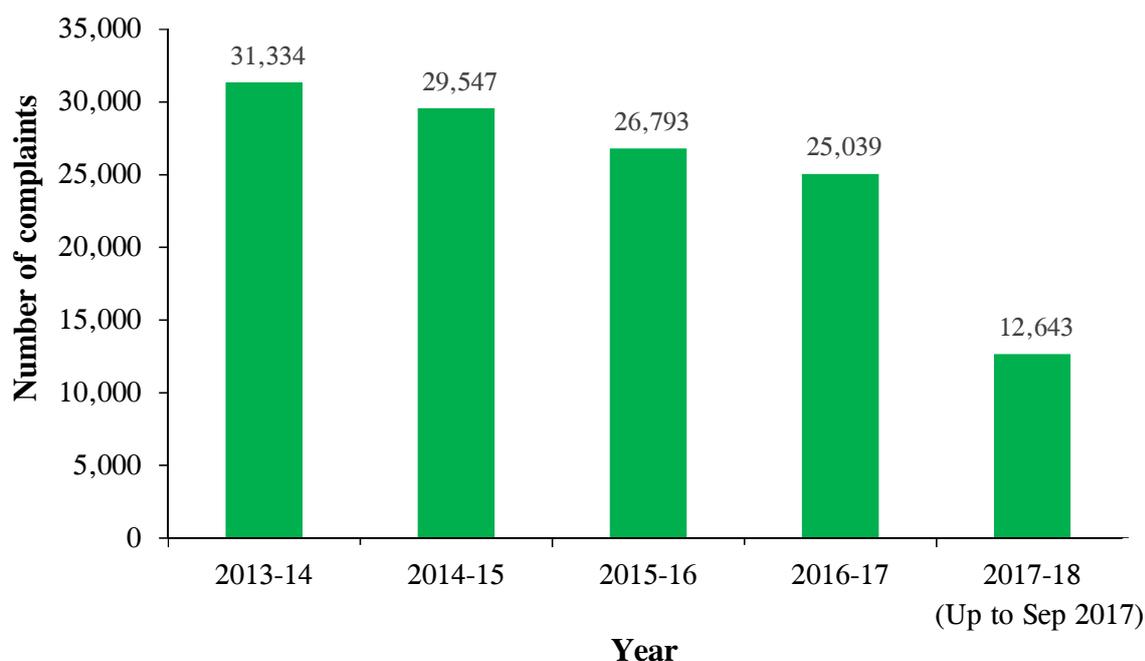
4.5 **Complaint statistics.** The CC publishes in its annual reports statistics on complaint handling and dispute conciliation. Figure 5 shows the number of complaints received from April 2013 to September 2017. During the same period, the resolution rate of pursuable cases (Note 33) was about 74%.

Note 32: *Apart from handling complaints and conciliating disputes, the C&AD is also responsible for handling general enquiries (e.g. some 80,000 enquiries were handled in 2016-17) and monitoring market trends and intelligence to safeguard consumer interests.*

Note 33: *According to the CC, anonymous complaints, cases with insufficient information, and complaints outside the CC's terms of reference are in general non-pursuable. A pursuable complaint case is regarded as resolved when redress has been obtained on behalf of the consumer or the trader has responded with reasonable explanations.*

Figure 5

**Number of complaints received by the CC
(April 2013 to September 2017)**



Source: CC records

Inadequacies in setting performance targets and reporting results

4.6 The CC has set two performance targets on handling consumer complaints and the actual achievement of the targets is reported in the COR of the CEDB (Commerce, Industry and Tourism Branch). According to the CORs, the two targets (i.e. issuing initial reply after receipt of complaint in 7 working days and notifying the complainant of progress/results in 16 working days) were met from 2014-15 to 2016-17. However, Audit examination of the CCMS records revealed that the average time taken to issue initial reply ranged from 3 to 4 calendar days instead of the reported 6 working days. Moreover, the average time taken to notify progress/results ranged from 5 to 6 calendar days instead of the reported 16 working days. Accurate performance reporting is important for effective performance management. The CC needs to make more efforts in checking the accuracy of the results in attaining the two performance targets on handling consumer complaints

before submission to the CEDB for inclusion in the latter's CORs. Moreover, given that the actual response times were consistently shorter than the target times (e.g. the actual time taken to notify complainants of the case progress averaged 5 to 6 calendar days in three consecutive years as against a target response time of 16 working days), there is a need to consider raising the target levels to ensure that they remain useful in motivating performance improvement.

Inadequacies in taking follow-up actions on complaints

4.7 The CC has stipulated in the operational manual of the C&AD the following requirements on follow-up actions to be taken on complaint cases:

- (a) if no response is received from a trader within 30 calendar days after the issue of the first inquiry letter (Note 34), a reminder letter should be sent to the trader requesting a reply within two weeks; and
- (b) it is a good practice for the case officer to contact the complainant proactively and keep him/her informed of the case progress. A copy of the first inquiry letter and the reminder letter should be sent to the complainant as a notification of progress.

4.8 ***Tracking of case progress.*** The CCMS has been designed to automatically generate alerts and reports to assist case officers and their supervisors to keep track of case progress, such as the following:

- (a) reminder for initial response to alert on a case without an acknowledgment letter sent within 7 days from the date of complaint (i.e. the date that the complainant has provided all information and documents necessary for complaint processing);
- (b) reminder letter to a trader automatically generated if no response is received from the trader 30 calendar days after the issue of the first inquiry letter; and

Note 34: *The purpose of an inquiry letter is to solicit the trader's response on the consumer's allegation and any settlement offer.*

Other consumer protection measures

- (c) monthly report on outstanding cases to provide statistical information on cases not closed for over two calendar months from the dates of complaints.

4.9 *Areas for improvement regarding the issue of reminders to traders.* Notwithstanding the tracking mechanism mentioned in paragraph 4.8, Audit found in a sample check of 30 complaint cases received from April 2013 to September 2017 that:

- (a) in 20 (67% of the 30) cases, the traders had not responded to the first inquiry letters. However, no reminder letters had been sent to the traders concerned in 3 (15% of the 20) cases; and
- (b) of the 17 cases with reminder letters issued to the traders, there were delays of 6 and 17 days in 2 (12%) cases.

In response to Audit's enquiry, the CC informed Audit in February 2018 that the observed problems in (a) and (b) were due to the fact that two inquiry letters each had been sent in these cases for various reasons (e.g. one to the official e-mail account of the trader and another to the e-mail address of the trader's customer service). Under the system rules of the CCMS, no reminder would be generated if there was a progress action with the trader after issuing the first inquiry letter. The CCMS regarded the second inquiry letter as such a progress action. Therefore, it did not generate a reminder in (a) above. For the cases in (b) above, the case officers concerned issued the reminders manually after noticing the omission and hence the observed delays. In Audit's view, there is a need to enhance the CCMS on automatic generation of a reminder letter to a trader which has not responded to an inquiry letter to ensure compliance with the operational manual requirement.

4.10 *Need to provide more guidance on following up complaint cases.* The operational manual has not stipulated the follow-up procedures in case a trader fails to respond to a reminder letter after two weeks. According to the CC, it was the practice to follow up non-response cases by phone calls or e-mails. Of the 30 cases examined, the traders in 12 cases did not respond to the reminder letters (see para. 4.7(a)). Audit examination revealed that:

- (a) follow-up actions taken varied among different case officers in the 12 cases. While the case officers in 8 (67%) cases made further attempts to contact the traders by telephone calls or issuing further reminders, the

case officers in the remaining 4 (33%) cases did not follow up with the traders; and

- (b) in 5 (42%) cases, the complainants were only informed of the case progress more than 30 days (ranged from 38 to 1,126 days) after the traders had not responded to the reminder letters within 2 weeks. In one extreme case, after the trader had not responded to a reminder letter issued in February 2014, there was no record of follow-up action with the trader or correspondence with the complainant to update him/her of the case progress. The case was closed in March 2017, after a lapse of some three years.

In response to Audit's enquiry, the CC in February 2018 said that in respect of 3 of the 4 cases mentioned in (a) above, no follow-up action was taken because: (i) in 2 cases, the trader was identical but the phone number and e-mail address of the trader were not provided by the complainants; and (ii) in one case, the case officer considered that the likelihood of the trader responding to the CC's further reminder was very slim. However, Audit noted that for the 2 cases in (i) above, the trader's phone number was available in the CCMS records of other complaints against the same trader. To observe the principle of confidentiality, a case officer was only allowed to access information of the cases he/she handled. Nevertheless, the case officer may seek the help of his/her supervisors who could get access to the information of all cases for the contact details of the traders concerned. As regards (ii) above, the basis of the case officer's decision for not taking follow-up action was not documented. In Audit's view, there is a need to provide more guidance to case officers on following up complaint cases, taking into account the above audit observations.

Inadequate monitoring of long-outstanding complaint cases

4.11 According to the operational manual, after a case is concluded, i.e. the case officer has taken all necessary follow-up actions, the case officer should submit the case in the CCMS to the supervisor for review and approval for case closure. After approval, a final reply letter will be sent to notify the complainant of the closure of the case. Audit analysed the CCMS records of complaints received from January 2012 to September 2017 and found that of 2,526 cases which were in progress as at 17 November 2017, 396 (16%) cases had been outstanding for almost three years or more. Of the 396 long-outstanding complaint cases, 310 cases were received in 2012 (i.e. outstanding for some 5 years).

Other consumer protection measures

4.12 In response to Audit's enquiry on the 396 long-outstanding cases, the CC in December 2017, January and February 2018 said that:

- (a) of the 310 outstanding cases of 2012, the case officers had concluded 289 cases for submission to the supervisors for review and approval in the CCMS (see para. 4.11). However, due to a system error, these cases were not delivered to the supervisors for actions in the CCMS;
- (b) the system error was first identified by the CC in October 2016. The CCMS contractor failed to provide an explanation to the satisfaction of the CC on the system error and was also unable to provide a permanent solution to solve the system problem. The CC accepted an interim measure proposed by the CCMS contractor, i.e. to execute a one-off patch program in the CCMS to close 428 outstanding cases from 2013 to 2016 not delivered to the supervisors for actions. In addition, a patch program had been executed in the CCMS on a daily basis to identify similar cases for action by the supervisors;
- (c) the CC was unaware of the 289 outstanding cases of 2012 (see (a) above) pending review and approval for case closure due to the system error until they were discovered during this audit exercise;
- (d) as a matter of practice, the case officer would inform a complainant of the outcome of the case upon its conclusion before submitting the case for the supervisor's review and approval for case closure in the CCMS. The failure to submit the case for the supervisor's review and approval for case closure would be basically an issue of internal record and in essence would not affect the interest of the complainant concerned in being informed of the conciliation outcome; and
- (e) for the other 107 (396 less 289) cases from 2012 to 2014, there were outstanding actions (up to 17 November 2017) as summarised in Table 9.

Table 9

**Outstanding actions of 107 complaint cases
(17 November 2017)**

Item	Outstanding action	Number of complaint cases			
		2012	2013	2014	Total
(a)	Cases not yet assigned to case officers	0	2	0	2
(b)	Case officers had not completed follow-up actions	11	13	38	62
(c)	Case officers had not submitted closure requests after completion of follow-up actions	3	2	14	19
(d)	Case closure requests pending supervisors' review	0	7	7	14
(e)	Reopen cases but could not be closed due to another system bug	7	1	2	10
Total		21	25	61	107

Source: CC records

4.13 Given the lapse of over 2 to 4 years, the CC needs to expedite actions to settle/close the 107 outstanding cases as appropriate. There is also a need to tighten monitoring of outstanding cases to prevent recurrence of similar problems.

Audit recommendations

4.14 **Audit has recommended that the CC should:**

- (a) **make more efforts in checking the accuracy of results in attaining the two performance targets on handling consumer complaints before submission to the CEDB for inclusion in the latter's CORs;**

Other consumer protection measures

- (b) **consider raising the target levels of the two performance targets on handling consumer complaints to ensure that they remain useful in motivating performance improvement;**
- (c) **enhance the CCMS on automatic generation of a reminder letter to a trader which has not responded to an inquiry letter to ensure compliance with the operational manual requirements;**
- (d) **provide more guidance for staff in taking follow-up actions on complaints, taking into account the audit observations in paragraph 4.10; and**
- (e) **expedite actions to settle/close the long-outstanding complaint cases such as those identified in paragraph 4.12(e) and tighten monitoring to ensure that complaint cases are dealt with in a timely manner.**

Response from the Consumer Council

4.15 The CC agrees with the audit recommendations. The CE, CC has said that:

- (a) as regards the audit recommendations in paragraph 4.14(a) and (b), the CC has taken action to tighten verification of the input to the COR for the 2018 Estimates and revise the targets to enhance clarity, and will consider raising the target levels of the two performance targets on the handling of consumer complaints, taking into account relevant factors including manpower resources;
- (b) as regards the audit recommendations in paragraph 4.14(c) and (d), the CC will seek to enhance the CCMS, and has taken and will take actions to provide more guidance for staff in taking follow-up actions, as follows:
 - (i) staff of the C&AD have been briefed on the system rules of the CCMS (see para. 4.9), in particular, those related to generating of reminders with emphasis on the need of vigilance in using the system; and

Other consumer protection measures

- (ii) the CC has reminded all the case officers and their supervisors of the practice to follow-up non-response cases and such practice will be included in the operational manual (see para. 4.10). Staff of the C&AD have been briefed on the way to handle cases where the phone number of a trader is not provided by the complainant but available in the CCMS records (see para. 4.10(i)). In light of the case where no follow-up action was taken because the case officer considered that the trader was not likely to respond to the CC's further reminder (see para. 4.10(ii)), all the case officers have been strongly reminded of the need to consult their supervisors and document the rationale for any deviation from the general practice; and

- (c) as regards the audit recommendation in paragraph 4.14(e), the CC has reviewed the 107 long-outstanding complaint cases mentioned in Table 9 of paragraph 4.12, expedited actions and settled/closed all the cases identified, as follows:
 - (i) for item (a) in Table 9, it has all along been a practice of the C&AD to check if any complaint case is left unassigned. The 2 unassigned cases were resulted from slip and omission rarely occurred. In any event, the CC will strengthen the checking process. After the problem had come to light, the CC contacted the affected complainants offering assistance to them. Both of them indicated that assistance was not required;

 - (ii) for item (b) in Table 9, the CC has already put in place since 2017 a practice that a team supervisor would check if his/her case officers have any cases not yet closed for 3 months for providing timely advice or assistance. The result of the checking would be reported to the Head/Deputy Head of the C&AD. Currently, the CCMS only sends alert to the supervisors with the counts of cases not closed for over 2 calendar months. The CC is considering enhancing the CCMS to improve the monitoring capacity of the supervisors. Moreover, the CC has informed the affected complainants that their cases were unresolved and would offer further assistance if needed;

 - (iii) for item (c) in Table 9, actions have been taken to close the cases; and

Other consumer protection measures

- (iv) the outstanding actions in items (d) and (e) in Table 9 were due to system errors of the CCMS. The problems have been fixed upon request of the CC.

Naming and public reprimand against unscrupulous traders by the Consumer Council

4.16 In the process of complaint handling, the CC may identify from repeated complaints lodged against a trader which has adopted some undesirable trade practices (Note 35). To protect the interest of consumers and to discourage these kinds of undesirable activities, the CC may decide to publicly name and reprimand such trader(s) or disapprove such practices in a certain industry.

4.17 ***Guidelines and procedures.*** The CC has issued a set of guidelines setting out the considerations (Note 36) for naming and public reprimand, and the procedures for taking such actions (hereinafter referred to as the naming guidelines). According to the naming guidelines, once any of the prescribed complaint features has been observed from a series of complaints against a trader found having undesirable trade practices, amongst other steps to be taken with a view to instituting a naming action, a meeting with the trader would be held to ask it to cease such practices and take improvement actions immediately. A warning letter will be issued to the trader after the meeting. The trader will then be put under close observation for a six-month period (Note 37). If one new complaint is lodged against the trader, the naming mechanism will be triggered off, i.e. submitting a case paper to the Trade Practices and Consumer Complaint Review Committee of the CC for

Note 35: *Undesirable trade practices refer to any act, omission, course of conduct or practices adopted by traders in the course of business towards consumers, which are detrimental or potentially detrimental to consumers whether or not they are fraudulent, false or ethically reprehensible.*

Note 36: *According to the naming guidelines, a holistic approach should be adopted in considering naming and public reprimand action having regard to (among other things) complaint features such as: (a) a considerable number of complaints against certain undesirable trade practices have been identified; and (b) considerable sums of money are involved.*

Note 37: *According to the naming guidelines, under special circumstances (e.g. sudden surge of complaints against a trader with unfair trade practices identified), the procedures of meeting with the trader and observation for improvement would be skipped.*

consideration of making a recommendation for naming and public reprimand to the Council for endorsement. With the endorsement of the Council, the details of the trader being named and the undesirable trade practices adopted will be promulgated in a press briefing and also uploaded onto the CC's website. Based on the list of traders under close observation provided by the CC, there were seven traders on the list in 2017 and one of them was publicly named and reprimanded.

Need to enhance the CCMS to support the identification of traders with repeated undesirable trade practices

4.18 ***Existing procedures to identify unscrupulous traders.*** Audit examined the naming guidelines and found that there was no laid-down procedure to identify traders with repeated undesirable trade practices. In response to Audit's enquiry, the CC in January 2018 said that trade malpractices could be identified at different stages during the complaint handling process:

- (a) ***Case processing.*** When case officers came across repeated complaints lodged by a considerable number of complainants against a trader for adopting undesirable trade practices, they were required to escalate the cases to supervisors to decide what appropriate follow-up actions to be taken. Case officers might choose to bring out the cases for discussion at the divisional meeting, which was held once every two to three months, in order to see if the suspected malpractices were prevalent in the industry. Case officers might also approach the supervisors direct to alert the identified malpractices;
- (b) ***Case assignment and review.*** When supervisors assigned complaint cases received to different case officers for follow-up actions or conducted reviews of concluded cases submitted by case officers, they might identify repeated complaints against a trader or identify some trade malpractices common in the industry. They would obtain more case information from the responsible case officers and decide what appropriate action to be taken;
- (c) ***Complaint reports.*** Sudden surge of complaints against a trader or in a certain industry might serve as the first signal for the CC's staff to assess whether trade malpractices were involved. In this connection, the CCMS could generate reports showing the 20 traders and the 20 industries which had received the highest number of complaints every month; and

Other consumer protection measures

- (d) *Case registration.* C&AD staff were required to alert supervisors by e-mails upon receipt of consumer complaints involving prepayment service contracts of over a certain amount.

4.19 *Inadequate analytical capability of the CCMS for identifying unscrupulous traders.* According to a submission to the Council in 2016, on proposing the naming of a trader, C&AD staff had to analyse the complaints against the trader from different aspects such as the alleged sales malpractices, trends of complaints, case resolution rate and the impacts on consumer interests before making a recommendation to name and reprimand a trader. The complaint reports generated by the CCMS (see para. 4.18(c)) which only highlight traders with the highest number of complaints received without any analysis of whether the complaints are related to their undesirable trade practices (or just problems in the quality of goods or services supplied which are outside the scope of the naming and public reprimand mechanism — see para. 4.16) could not provide sufficient details for identifying serious cases of undesirable trade practices. Moreover, the lack of data mining capability makes it difficult to extract other useful information such as dispute resolution rates of traders from the CCMS database for analysis. As such, there is a risk that some serious cases of undesirable trade practices may not have been brought up by the CCMS for considering further actions. Based on an extract of the CCMS records of complaints received from January 2012 to September 2017 provided by the CC on 17 November 2017, Audit used a spreadsheet software to identify traders with a large number of unsuccessful resolution cases for further examination of their complaint history. In the process, Audit noted that two traders (Traders A and B) had an increasing number of complaints against them for undesirable trade practices and the resolution rate of the complaints against one of them was substantially below the industry average:

- (a) *Trader A.* From January 2012 to September 2017, a total of 113 complaints were lodged against Trader A. 60 (53%) complaint cases were related to its sales practices. An analysis of the complaints by year showed an increasing trend, up from 11 cases in 2014 by 145% to 27 cases in 2017. The resolution rate of the complaints against Trader A was only 27%, which was substantially below the average of 68% for the industry to which it belonged. Moreover, in 50 (44%) of the 113 complaints, the conciliation was unsuccessful because Trader A refused to cooperate or could not be reached. However, there was no record to show that the case of Trader A had been brought up for consideration of further actions; and

- (b) **Trader B.** The number of complaints lodged against Trader B increased from 4 cases in 2014 to 31 cases in 2015. Trader B was alleged to have malpractices of high-pressure sales, late in response to the CC's queries and unwilling to settle disputes. At a meeting held in December 2015, the CC obtained Trader B's undertaking to clear all outstanding cases and implement a voluntary cooling-off period. As the performance of Trader B had not improved during the subsequent observation period, the case was brought up to the Trade Practices and Consumer Complaint Review Committee in April 2016 for considering whether Trader B should be named. The Committee decided not to name Trader B as the caseload and details of complaints against Trader B were not sufficient. In early December 2016, the CC issued a letter to Trader B expressing serious concern in light of the increasing number of complaints from 31 cases in 2015 to 69 cases in 2016 (up to 8 December). Audit examination of the CCMS records revealed that the number of complaints against Trader B continued to increase from 74 cases in 2016 to 84 cases in 2017 (up to September), with 88% of the complaints relating to Trader B's sales practices. With the CC's conciliation effort, there was a resolution rate of 73% of Trader B's complaint cases in 2017. However, there was no record to show that the overall performance of Trader B had been brought up for review in 2017.

4.20 In Audit's view, there is a need to enhance the analytical capability of the CCMS to facilitate the identification of serious and repeated cases of undesirable trade practices for taking follow-up actions.

Need to lay down guidelines on monitoring traders for service improvement

4.21 According to the naming guidelines, if one new complaint is lodged against a trader during the six-month observation period, the naming mechanism will be triggered off (see para. 4.17). Of the 7 traders on the observation list in 2017, only one was named and reprimanded. Audit found that despite new complaints had been lodged against the remaining 6 traders during the six-month observation periods, the naming mechanism was not triggered off.

Other consumer protection measures

4.22 In response to Audit's enquiry, the CC in February 2018 said that:

- (a) it was the practice of the C&AD to invite traders with substantial problems on matters affecting consumers' interests (e.g. unfair trade practices, unsatisfactory quality of service or goods, late delivery, etc.) to meetings for improvement of their problem areas and resolution of complaints against them. Such traders would be put under close observation for monitoring their progress of improvement. Such practice was not intended for instituting naming action;
- (b) the 6 traders under close observation in 2017 were for the purpose of monitoring their progress of improvement instead of instituting naming action; and
- (c) after the meetings with the 6 traders, they undertook to resolve outstanding complaint cases and took other steps for improvement. The number of new complaints against all 6 traders had decreased comparing with the positions before the observation periods.

4.23 Audit notes the CC's clarification on the need to put in place another monitoring mechanism on traders with problems affecting consumer interests for service improvement. However, in the absence of clear guidelines for such monitoring mechanism, there could be: (a) confusion as to the purpose of monitoring for traders put on the same observation list; and (b) inconsistencies in handling these traders. The CC needs to make improvement in this regard.

Audit recommendations

4.24 **Audit has recommended that the CC should:**

- (a) **enhance the analytical capability of the CCMS to facilitate the identification of serious and repeated cases of undesirable trade practices for taking follow-up actions; and**
- (b) **lay down guidelines on monitoring traders for service improvement.**

Response from the Consumer Council

- 4.25 The CC agrees with the audit recommendations. The CE, CC has said that:
- (a) the CC will seek to enhance the CCMS and has started preparing a set of guidelines on monitoring traders for service improvement; and
 - (b) regarding Trader B mentioned in paragraph 4.19, the CC emphasised that its trade practice was put under close monitoring in 2017 and would be brought up to the Trade Practices and Consumer Complaint Review Committee for review when necessary.

Implementation of the Customer Complaint Settlement Scheme by the Office of the Communications Authority

4.26 **Background.** The CCSS is one of the measures implemented to address issues of billing disputes in telecommunications services (Note 38). The CCSS is a voluntary mediation scheme to help resolve billing disputes in deadlock between the telecommunications service providers and their customers through mediation. The mediation service is provided by an independent service agent (CCSS Agent) set up under the Communications Association of Hong Kong (CAHK — Note 39). In November 2012, OFCA, in collaboration with the telecommunications industry, conducted a two-year trial of the CCSS. Having regard to the encouraging outcome of the trial, OFCA supported the long-term implementation of the CCSS which commenced on 1 May 2015. OFCA supports the operation of the CCSS, through a Memorandum of Understanding (MoU) signed with the CAHK, by contributing the

Note 38: *OFCA, in collaboration with the industry, has also implemented other measures to further enhance the protection of consumer interests, e.g. the implementation of the mobile bill shock preventive measures and industry code of practice for telecommunications service contracts. OFCA also runs publicity campaigns to educate the public about proper use of mobile services with a view to avoiding mobile bill shocks and billing disputes.*

Note 39: *The CAHK is an industry association representing the communications sector, with the participation of most of the major telecommunications service providers.*

Other consumer protection measures

necessary funding (Note 40), screening the CCSS applications against prescribed criteria, and monitoring the performance and the governance of the scheme.

4.27 *Acceptance criteria and application procedures.* According to the MoU, a billing dispute complaint will be accepted for handling by the CCSS Agent when the following criteria are met: (a) it relates to a telecommunications service provided by a CCSS member for personal and/or residential use; (b) the amount in dispute is not less than \$300; and (c) a deadlock is reached. Telecommunications service users who choose to use the mediation service under the CCSS may first contact OFCA which will assess the cases against the criteria in (a) to (c). OFCA will refer eligible cases to the CCSS Agent for follow-up actions. For a case accepted and referred to the CCSS Agent, the applicant and the telecommunications service provider concerned will be charged a service fee of \$100 and \$200 respectively for using the CCSS service.

Low usage of the CCSS

4.28 According to OFCA, the CCSS Agent has a capacity of handling a minimum of 200 cases a year. If operating in full capacity, it can handle over 400 cases a year. From November 2012 to October 2017, OFCA received a total of 2,382 CCSS applications, of which 703 cases were accepted as eligible for referral to the CCSS Agent. However, 333 (47%) of the 703 accepted cases were settled before referral to the CCSS Agent. The number of cases referred to the CCSS Agent for mediation over the five years totalled 370, averaging 74 cases a year. In other words, the utilisation of the CCSS only represented about 18.5% of its full capacity. According to OFCA, with the various measures to address issues of billing disputes (see Note 38 to para. 4.26), the number of billing dispute complaints received by OFCA had decreased from 1,121 in 2012 to 322 in 2017. As a result, the number of deadlock billing dispute cases eligible for the CCSS was also on the decrease. Under-utilisation of the CCSS is not an effective use of the Government funding (of \$1.2 million to \$1.8 million a year — see Note 40 to para. 4.26) for helping consumers resolve their disputes with the telecommunications service providers.

Note 40: *According to the MoU, OFCA shall provide financial contribution not exceeding \$2 million per annum to the CAHK for the operation of the CCSS, subject to the actual cost incurred. In the first two years of long-term implementation, i.e. from May 2015 to April 2016 and from May 2016 to April 2017, the OFCA's contribution amounted to \$1.8 million and \$1.2 million respectively.*

Audit considers that OFCA needs to make greater efforts to promote the usage of the CCSS.

Inadequacies in setting performance targets

4.29 According to the MoU, OFCA has set 10 key performance indicators to measure the operational performance of the CCSS Agent. The key performance indicators cover different aspects, such as the CCSS workflow, user satisfaction, and the submission of reports and statistics to OFCA. The achievement of the targets is reported in the CAHK's annual reports which are accessible through a hyperlink of the OFCA's website. Audit found that the reported performance of two targets was consistently above the target level from November 2012 to April 2017, as follows:

- (a) against a target level of 30% on resolution rate, the actual result ranged from 93.7% to 100%; and
- (b) against a target level of 3 (5 being the highest) on user satisfaction, the actual average score of the user satisfaction survey ranged from 4.5 to 4.8.

To ensure that the two performance targets remain useful in motivating performance improvement, there is a need to consider raising the targets to a more challenging level.

Audit recommendations

4.30 **Audit has *recommended* that the Director-General of Communications should:**

- (a) **make greater efforts to promote the usage of the CCSS; and**
- (b) **consider raising the target level of the two performance targets on resolution rate and user satisfaction of the mediation service of the CCSS.**

Response from the Government

4.31 The Director-General of Communications agrees with the audit recommendations. She has said that OFCA will explore ways to promote the usage of the CCSS and review the target level of the two performance indicators.

Research study on cooling-off periods by the Consumer Council

4.32 The issue of imposing a mandatory cooling-off period was widely discussed in the community during the public consultation on the legislation proposals to combat unfair trade practices in 2010 and 2011. Following discussions with stakeholders and careful considerations, the Government considered that imposing a mandatory cooling-off period would change the course of transactions and had significant implications on both traders and consumers, and the matter should be considered carefully. At the LegCo Panel on Economic Development's meeting of June 2015, some members opined that the availability of a cooling-off period should be able to provide better protection to consumers. In May 2016, the LegCo Panel on Economic Development passed a motion urging the Government to introduce legislation on imposition of mandatory cooling-off periods, and accord priority to implementing a statutory cooling-off period for prepaid services involving a lot of complaints and large amount of payment, such as those provided by the fitness and beauty service sectors. In response to the motion, the CEDB indicated that resources had been provided to the CC to conduct a research study on various issues concerning cooling-off periods and the research study was expected to be completed by the following year.

4.33 *Progress of the research study on cooling-off periods for prepaid services.* Audit examination of the CC's records revealed that funding for the research study had been obtained from the CEDB in November 2013. In response to Audit's enquiry on the progress of the study, the CC in January and February 2018 said that:

- (a) cooling-off period was one of the five key subjects of consumer legal protection (Note 41) with which the Legal Affairs Division of the CC was tasked to review and study from 2013 to 2016. Due to prioritisation among the said subjects, personnel changes and longer time required to hire a suitable contract legal counsel to support the legal research, the Legal Affairs Division began the research study on cooling-off periods in early 2016; and
- (b) as the subject matter was highly complicated and sensitive, the Legal Protection Committee (see Note 13 to para. 1.13) of the CC carried out extensive discussions at different stages of the study from July 2016 to September 2017. Upon conclusion of the proposed framework of the cooling-off regime, including the scope of application and its operational arrangements, the research report proceeded to drafting in September 2017 for the Committee's further deliberations and comments. The research report was scheduled to be released in April 2018.

Consumer education and publicity

4.34 **CC's work.** Apart from the right to redress, the right to be informed and the right to consumer education are two other widely recognised basic consumer rights. In this regard, the CC is committed to empowering consumers to protect themselves through the following work:

- (a) ***Disseminating consumer information.*** The CC publishes the CHOICE monthly magazine which provides a regular outlet of information, advice and viewpoints on all matters affecting consumer interests. Readers can also access and view the full digital version of CHOICE online (Note 42). The CC's website with dedicated sections such as CHOICE articles and Online Price Watch registered 4.4 million page views in 2016. The CC's

Note 41: *The five key subjects were: (a) pre-payment safety measures; (b) corporate insolvency protection; (c) online consumption; (d) consumer arbitration; and (e) cooling-off period. According to the CC, these study subjects were prioritised in accordance with their complexity, sensitivity and urgency. Reports on subjects (a) to (d) were released between August 2016 and May 2017.*

Note 42: *The cover price of CHOICE magazine has been maintained at \$12 per copy since the last price increase in 1997. For the online version, the price is \$8 per article.*

Other consumer protection measures

Shopsmart webpage that provided Mainland visitors with tailored information and shopping tips also received more than 2.4 million page views in 2016; and

- (b) ***Empowering consumers through education.*** The CC has been organising seminars and talks for various strata of the society, including young people, students of primary and secondary schools, senior citizens and new immigrants, to provide more opportunities for learning consumers' culture and rights, and enhance their abilities to help themselves protect their rights and interests as a consumer. About 220 seminars, workshops and talks are held every year.

4.35 ***Concerted efforts of CC, C&ED and OFCA.*** With the implementation of the 2012 Amendment Ordinance in July 2013, a three-pronged approach with equal emphasis on public education and publicity has been adopted in enforcing the fair trading sections of the TDO (see para. 2.2(a)). The C&ED, OFCA and the CC have been launching publicity and education programmes since 2013 with a view to empowering consumers by raising their awareness of the prohibited unfair trade practices and promoting the concept of “shopping smart”, and promoting good practices amongst traders, as follows:

- (a) from July 2013 to September 2017, the C&ED and the CC organised over 300 briefing sessions/seminars to traders and other members of the public;
- (b) the C&ED, as the principal enforcement agency, has been issuing press releases on TDO-related matters, e.g. upon the arrest of suspects or conviction of prosecuted cases, to raise public awareness of the unfair trade practices and appeal to members of the public to report any suspected cases. In 2017, the C&ED issued over 60 press releases on TDO-related matters;
- (c) for OFCA, a consumer education campaign lasting about eight months (August to March) (including roving exhibitions, public seminars and community talk programme) is held every year to further enhance public awareness of using communications services smartly; and
- (d) as regards the CC, in the wake of the commencement of implementation of the fair trading provisions of the TDO, the CC launched public education

through various means such as roving exhibitions, radio segments, a designated website and education seminars to raise consumers' understanding regarding the relevant statutory provisions and alertness towards unfair trade practices. The CC continues such efforts in educating the public through the articles concerning complaints published in the CHOICE magazine, videos dramatising prevailing unfair trade practices and naming exercise against unscrupulous traders.

Challenges faced by CHOICE magazine

4.36 According to the CC, CHOICE magazine plays a vital role in assisting consumers to make astute choices and make purchases in a safe, informed and responsible manner. Since its introduction, findings of around 1,300 product tests, 2,280 in-depth studies and 580 market surveys have been released. There are also articles on other subjects such as healthcare, typical complaint cases revealing prevalent undesirable trade practices for consumer education. The announcement of CHOICE's publication every month has received wide media coverage and stimulated public discussions on significant consumer issues.

4.37 However, the 21st century sees the global trend of convergence of printed and online media in accessing information and news, alongside with the gradual dwindling of the former and increasing proliferation of the latter. As a result, the sale of CHOICE magazine had dropped by 23% from an average of 27,428 copies a month in 2009-10 to 21,033 a month in 2016-17. Feedback collected through surveys and focus groups to the CC from consumers, media and other stakeholders included that: (a) the current format of CHOICE magazine was outdated in design, too wordy and hard to comprehend; and (b) content needed to be more diversified and made available in digital devices such as tablet personal computers and mobile devices.

4.38 According to the CC, the online version of the magazine, which was launched in 2004, had a slow pick-up rate due to the unfriendliness of the online subscription platform. In 2016, there were only 1,066 subscribers and 50,128 downloads recorded. As early as 2013, the CC obtained funding of \$2.9 million from the CEDB and deployed \$1.7 million from its reserve to embark on a comprehensive review of CHOICE magazine based on a primary goal of sustaining and creating further value to the public. According to the consultancy review completed in 2016 and the CC's internal review in 2017:

Other consumer protection measures

- (a) the online version of the magazine was presented in a basic and primitive format for download with poor browsing experience and functionalities. The outdated engine had also brought challenges in safeguarding its intellectual properties as the content could be easily copied and circulated via the Internet free of charge;
- (b) the public awareness of the online version of the magazine was extremely low. The subscription procedures were cumbersome, e.g. while there was a downloadable subscription form, a subscriber had to fill out and submit the form to the CC by post, fax or e-mail to complete the entire subscription process; and
- (c) a major revamp of the magazine with particular emphasis on building a user-friendly online platform and reformatting the aged print version was deemed necessary to sustain its value to the public.

4.39 Since the completion of the consultancy review in 2016, the CC had discussed with the CEDB on the funding requirements for a revamp of CHOICE magazine. In 2017, based on its proposed strategic plan made in light of the observations of the consultant and the internal review, the CC obtained the necessary funding for a revamp project which covered the development of new content, information technology infrastructure and marketing programme.

4.40 As shown in paragraphs 4.37 and 4.38, there was a general trend of decline in the sales of the print version of CHOICE magazine and the subscription rate of the online version was staying low, despite the endeavours of the CC to boost the sale by different promotion tactics. It indicates that there is an imminent need to revamp CHOICE magazine to enhance its accessibility and quality so that it can meet the rising expectation of the public. In Audit's view, with the funding approved and in view of the significance of CHOICE magazine in educating the public, the CC should continue the efforts to take forward the revamp project of CHOICE magazine.

Need to address common problems in non-pursuable complaint cases

4.41 Since the fair trading sections of the TDO came into operation in July 2013, the C&ED and OFCA together had received and processed some

30,000 complaints up to September 2017. However, there were only some 300 prosecution cases. Audit examination revealed that:

- (a) of 11,924 complaints received by the C&ED from July 2013 to September 2017 but not selected for investigation, the C&ED concluded that in 8,597 (72%) complaints, no further action was required because there was insufficient evidence or the complaints only involved consumer disputes. To address the common problem of insufficient evidence, in May 2016 and January 2018, the C&ED advised consumers through the media of the need to keep relevant documents of transactions and report case details in a timely manner. However, there was no record to show that the C&ED had stepped up consumer education on differentiating consumer disputes (which are more appropriately dealt with by the CC) from suspected offences under the TDO (which are dealt with by the C&ED); and
- (b) of 2,658 complaints received by OFCA from July 2013 to September 2017 but not proceeded to investigation, 511 (19%) complaints could not be pursued because the complainants refused to assist in the investigations. There was no record to show that OFCA had stepped up education on consumers' obligations after lodging a complaint and the criminal proceedings and investigation procedures involved.

There is a need for the C&ED and OFCA to monitor common problems in non-pursuable TDO complaint cases with a view to formulating specific consumer education/publicity programmes to address these problems.

Audit recommendations

4.42 **Audit has *recommended* that the CC should continue the efforts to take forward the revamp project of CHOICE magazine.**

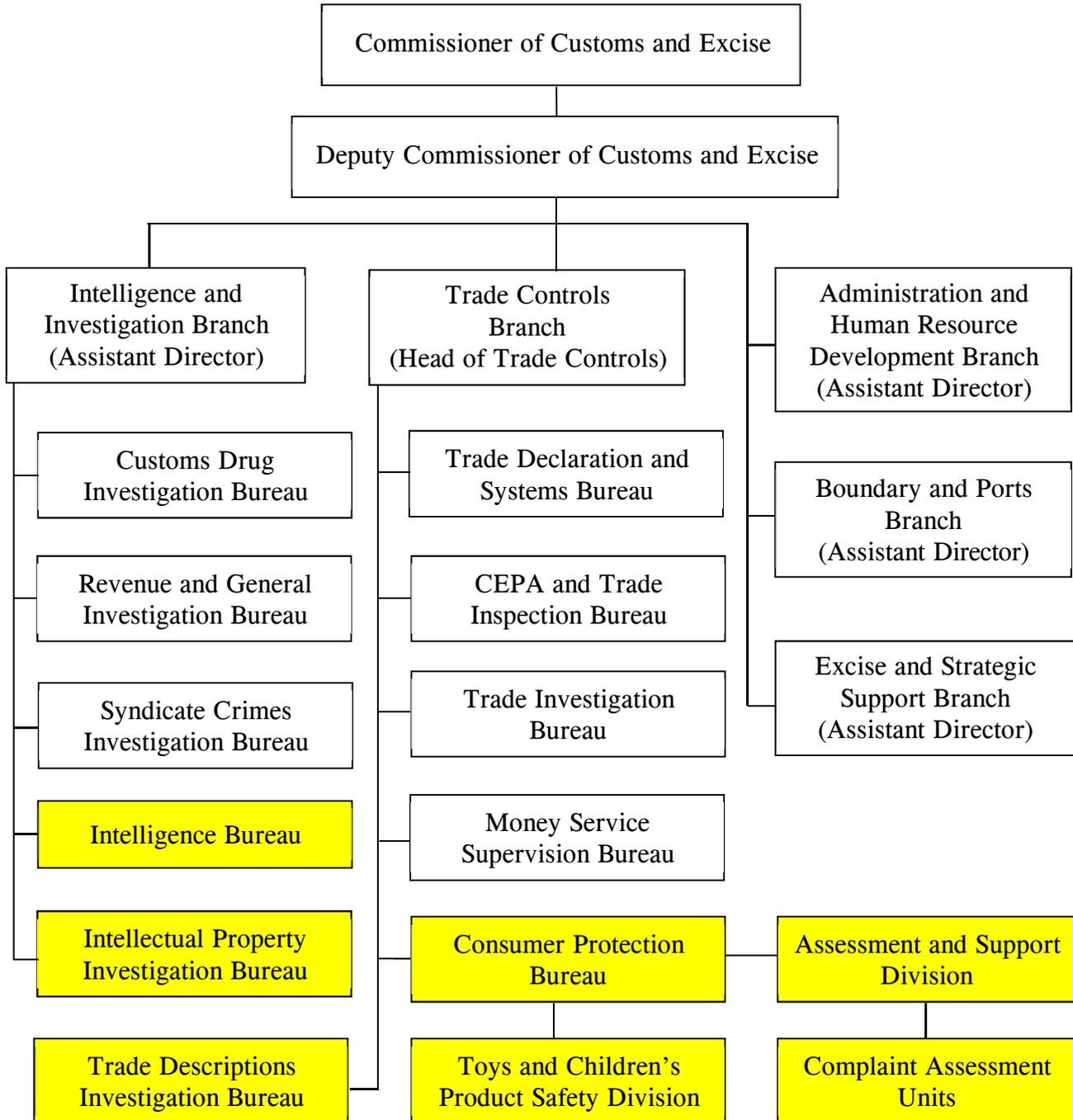
4.43 **Audit has also *recommended* that the Commissioner of Customs and Excise should in collaboration with the Director-General of Communications, monitor common problems in non-pursuable TDO complaint cases with a view to formulating specific consumer education/publicity programmes to address these problems.**

Response from the Government and the Consumer Council

4.44 The CC agrees with the audit recommendation in paragraph 4.42. The CE, CC has said that the CC would continue its efforts to take forward the revamp project of CHOICE magazine.

4.45 The Commissioner of Customs and Excise and the Director-General of Communications agree with the audit recommendation in paragraph 4.43.

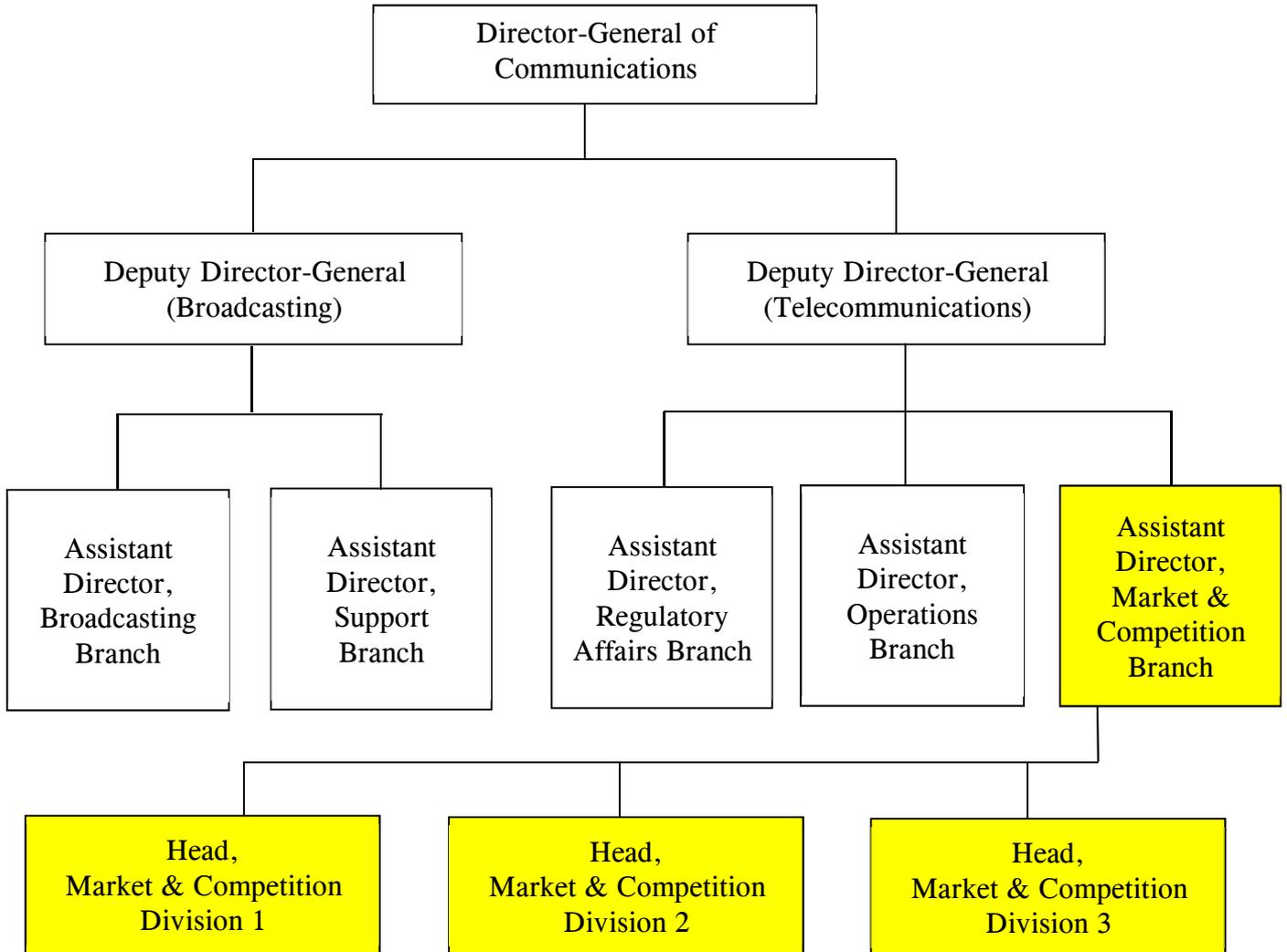
**Customs and Excise Department:
 Organisation chart (extract)
 (31 December 2017)**



Legend: Bureaux/divisions/units covered in this Audit Report

Source: C&ED records

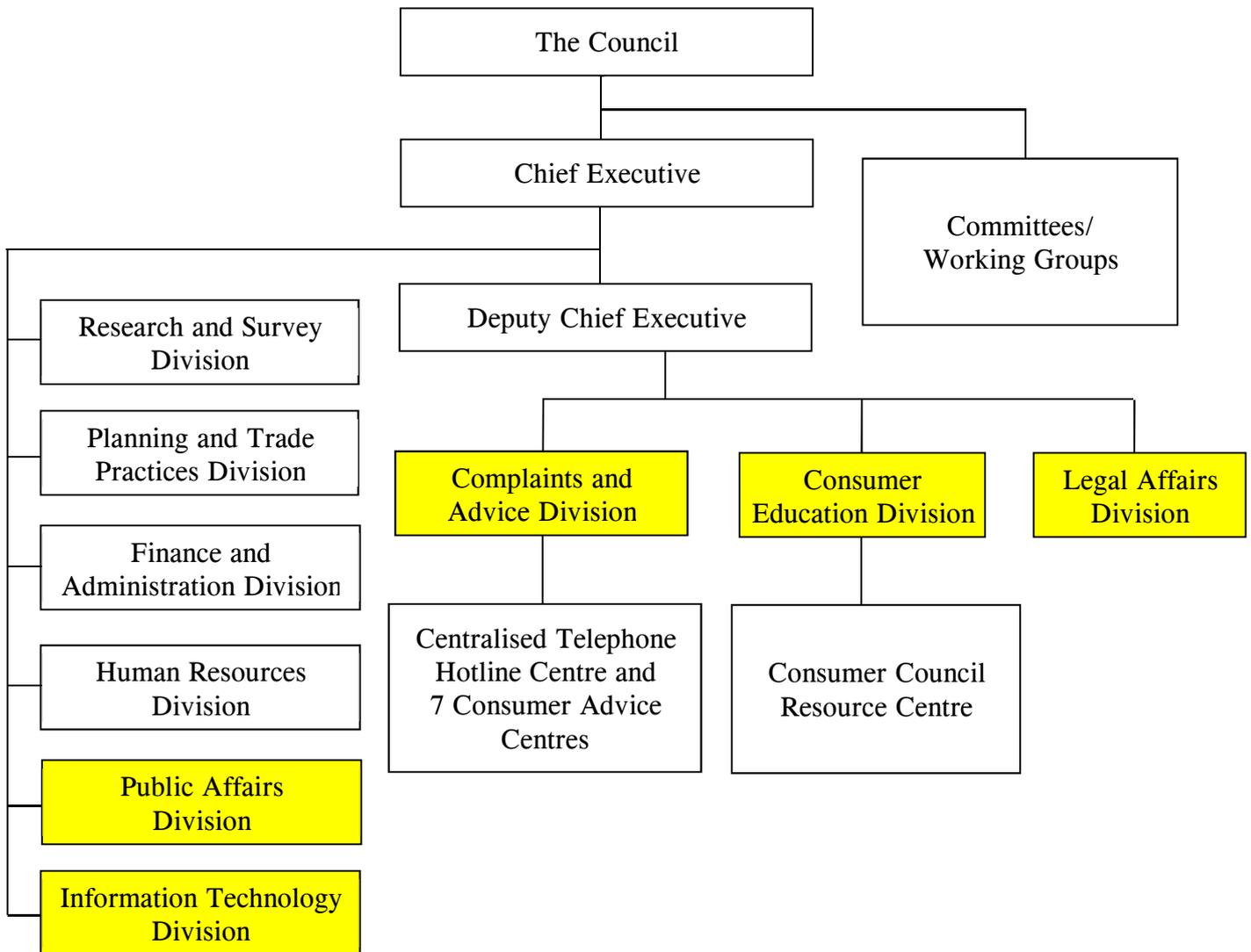
**Office of the Communications Authority:
Organisation chart (extract)
(31 December 2017)**



Legend: Branch/divisions covered in this Audit Report

Source: OFCA records

**Consumer Council:
Organisation chart (extract)
(31 December 2017)**



Legend: Divisions covered in this Audit Report

Source: CC records

Acronyms and abbreviations

Audit	Audit Commission
CA	Communications Authority
C&AD	Complaints and Advice Division
CAHK	Communications Association of Hong Kong
CAPS	Case Processing System
CC	Consumer Council
CCMS	Complaints Case Management System
CCSS	Customer Complaint Settlement Scheme
CE	Chief Executive
C&ED	Customs and Excise Department
CEDB	Commerce and Economic Development Bureau
CGSO	Consumer Goods Safety Ordinance
COR	Controlling Officer's Report
CPB	Consumer Protection Bureau
DoJ	Department of Justice
IPIB	Intellectual Property Investigation Bureau
LegCo	Legislative Council
MCB	Market and Competition Branch
MoU	Memorandum of Understanding
OFCA	Office of the Communications Authority
TCPSO	Toys and Children's Products Safety Ordinance
TDIB	Trade Descriptions Investigation Bureau
TDO	Trade Descriptions Ordinance
TIMS	Trader Information Management System
WMO	Weights and Measures Ordinance

CHAPTER 3

Education Bureau

Integrated education

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. 70 of the Director of Audit contains 8 Chapters which are available on our website at <http://www.aud.gov.hk>

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INTEGRATED EDUCATION

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INTEGRATED EDUCATION

Executive Summary

1. In accordance with the Disability Discrimination Ordinance (Cap. 487) and the Code of Practice on Education issued by the Equal Opportunities Commission, all educational establishments have the obligation to provide equal education opportunities to eligible students, including students with Special Educational Needs (SEN). Students with SEN refer to students who need special educational support because of learning or adjustment difficulties categorised as: (a) Specific Learning Difficulties; (b) Attention Deficit/Hyperactivity Disorder; (c) Autism Spectrum Disorders; (d) Speech and Language Impairment; (e) Intellectual Disability; (f) Hearing Impairment; (g) Physical Disability; (h) Visual Impairment; and (i) Mental Illness (included as a type of SEN from 2017/18 onwards — unless stated otherwise, all years mentioned hereinafter refer to school years). In September 1997, the Government launched a two-year pilot project on integrated education under which participating schools were required to provide an accommodating learning environment for students with SEN. Integrated education was extended to all public sector ordinary schools from 1999/2000 onwards. The targets and beneficiaries of integrated education are not only the students with SEN but also other students, school staff, parents and even the whole society. The Government adopts a dual-track mode in implementing special education. For students with more severe or multiple disabilities, the Education Bureau (EDB) will, subject to the assessment and recommendations of specialists and the consent of the parents, refer them to special schools for intensive support services.

2. In 2016/17, there were 844 public sector ordinary schools comprising 454 primary schools and 390 secondary schools. About 42,890 students with SEN studied in the 844 schools. On top of the regular subventions provided to all public sector ordinary schools, the EDB provides schools with additional resources (in the form of cash grant and additional teaching staff), professional support and teacher training to help them cater for students with SEN. The Special Education Division of the EDB is responsible for the provision and administration of support measures for implementing integrated education. The EDB's expenditure on additional resources and professional services for integrated education increased by \$408.6 million from \$1,008.5 million in 2012/13 to \$1,417.1 million in 2016/17.

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The Audit Commission (Audit) has recently conducted a review on the EDB's work in the implementation of integrated education.

Identification and admission of students with SEN

3. *Need to enhance measures to identify students with SEN as early as possible.* In 2016/17, 6,159 students were assessed by school-based Educational Psychologists (EPs) for the first time. Of them, 6,131 were diagnosed as students with SEN or Academic Low Achievers (ALAs). Of these 6,131 students, while 4,181 (68.2%) were diagnosed in Primary One and Primary Two, 1,950 (31.8%) were diagnosed at higher class levels. As early identification of possible learning difficulties would enable parents and teachers to provide the appropriate support to the students as soon as possible, all efforts should be made to ensure that students with SEN are identified at the earliest opportunities (paras. 2.5 and 2.7).

4. *Need to strengthen measures in obtaining consents from parents to transfer information of students with SEN.* It is essential to have an effective mechanism to ensure that information of students with SEN can be made available to schools as early as possible so that timely and appropriate support can be provided. Primary schools are required to obtain consents from parents of upcoming Secondary One students with SEN before transferring to the recipient secondary schools the relevant information of the students with SEN. Although the percentage of parents who refused to give consent to the primary schools for transferring their children's information to the secondary schools had decreased from 25% in 2013/14 to 17% in 2017/18, there was still a notable number of parents (775 cases in 2017/18) who declined to give consent (paras. 2.8 and 2.10).

5. *Need to monitor the timeliness of assessment service.* According to the School-based Educational Psychology Service (SBEPS) Guide: (a) through post-assessment meeting, the EP should explain to parents and school personnel the assessment results and discuss the educational support for every student who was given an individual assessment; (b) EPs should provide parents with an assessment summary containing key information on intellectual functioning, learning difficulties and recommendations for support for every case given psychometric assessment, normally within three months; and (c) for every referral given assessment, EPs should send a copy of the assessment report to the school concerned for arrangement of appropriate supportive service, normally within three months. Audit noted that the

Executive Summary

EDB did not record in its computer system the dates on which the post-assessment meetings were held and the assessment summaries and the assessment reports were issued (paras. 2.12 and 2.13).

6. *Need to release more school information on support for students with SEN to facilitate parents of students with SEN in selecting schools.* Parents of students with SEN may, based on their own choice, apply for a place in ordinary schools for their children through the established mechanisms. The profiles of primary schools and secondary schools published by the Committee on Home-School Co-operation are important sources of information about the schools. Audit noted that in the profiles, schools disclosed only three pieces of information on support for students with SEN. There is other school information on support for students with SEN that would be useful to parents of students with SEN, e.g. how resources are allocated to and amongst students with SEN, and school-based support services for students with SEN (paras. 2.16 to 2.19).

7. *Need to expedite installation of lifts in schools to create a barrier-free physical environment for students with disabilities.* Barrier-free access facilities (e.g. lifts) are needed for students with Physical Disability. Aided schools without lift may apply for lift installation after taking into account their individual school-based needs under the annual major repairs exercise. As at 28 February 2018, 110 applications received by the EDB had not been completed. Of the 110 applications, only 42 were approved. Of the 42 lift projects approved, the related works of one application were expected to be completed by April 2018. Another 10 were in the construction stage and the remaining 31 were either under the statutory submission, planning or detailed design stage. The Government announced in February 2018 that it would make an additional provision of \$2 billion to expedite installation of lifts for public sector schools (paras. 2.23 to 2.26).

Additional resources provided to public sector ordinary schools

8. *Need to improve the administration of the Learning Support Grant (LSG).* The LSG was launched in 2003/04. Schools should deploy the LSG flexibly and strategically to support ALAs (applicable to primary schools only) and students with SEN. Under the 3-Tier Intervention Model, students are provided with three levels of support ranging from Tier-1 (for students with less severe learning difficulties) to

Executive Summary

Tier-3 (for students with more severe learning difficulties). Subject to a ceiling, the amount of the LSG per year provided to each school is calculated annually based on the number of ALAs and students with SEN enrolled at the school who require Tier-2 or Tier-3 support. In 2016/17, 696 of the 844 public sector ordinary schools received support from the LSG and \$539 million was allocated to the 696 schools. Audit identified the following room for improvement: (a) the tier of support a student with SEN needed was determined by the school concerned. To facilitate schools to cater for the needs of students with SEN, the EDB has provided guidelines to schools on the level of support according to the performance of the students under the 3-Tier Intervention Model. However, the guidelines did not explicitly spell out the criteria that schools could make reference to when determining the tier of support of students with SEN; (b) the ceiling was increased to \$1.5 million per school per year in 2013/14. Starting from 2015/16, the ceiling has been adjusted annually based on the change in the Composite Consumer Price Index but not the change in the number of students with SEN and ALAs. In the four-year period from 2013/14 to 2016/17, the number of Tier-2 and Tier-3 students with SEN and ALAs had increased by 29% from 37,188 to 47,937. The number of schools reaching the LSG ceiling had increased by 13-fold from 4 in 2013/14 to 56 in 2016/17; and (c) the EDB stipulated that schools should fully utilise the LSG fund allocated in every school year. In 2015/16, of the 692 schools which had received the LSG allocation, 366 had surplus fund. Of the 366 schools, 122 (33%) had surplus fund of more than 10% of the annual allocation (paras. 3.4, 3.5 and 3.8 to 3.15).

9. ***Slow progress of schools in switching from Intensive Remedial Teaching Programme (IRTP) to LSG.*** Under the IRTP implemented in 2000, schools are provided with one to three additional teachers in the establishment and a class grant is given for each additional teacher. With the introduction of the LSG in 2003/04, schools that have not participated in the IRTP can only apply for the LSG. Schools that are under the IRTP may continue to receive support under the IRTP. According to the EDB, the provision of the LSG enables schools to pool school resources together and deploy them more holistically and flexibly to render appropriate support services to students with SEN and ALAs based on their needs. Under the IRTP, the number of additional teacher posts granted to schools is based on the number of ALAs, students with Intellectual Disability and students with Specific Learning Difficulties but not other types of SEN. The EDB encourages schools implementing the IRTP to switch to the LSG as soon as possible. However, the response from schools was far from satisfactory. Over the eight-year period from 2009/10 to 2016/17, only 35 (13%) of 277 schools switched from the IRTP to the LSG. The remaining 242 schools were still participating in the IRTP (paras. 3.18 to 3.21).

Executive Summary

10. *Need to address the large disparity in the ratio of Special Educational Needs Coordinator (SENCO) to students with SEN among schools and the training of SENCOs.* In phases over a three-year period (2017/18 to 2019/20), the EDB will provide each public sector ordinary primary school and secondary school with one additional teaching post to facilitate school's assignment of a designated teacher to take up the roles of SENCO whose responsibility is to steer and coordinate services and support for students with SEN. In 2017/18, only 244 of 844 schools were each provided with a post for SENCO. By 2019/20, when the provision of SENCO is extended to the remaining schools, all public sector ordinary primary and secondary schools would each have a SENCO. The annual recurrent expenditure would amount to about \$550 million in financial year 2021-22. Audit analysis on the distribution of students with SEN among schools in 2016/17 revealed that of the 844 schools, 469 (55.6%) each had fewer than 50 Tier-2 and Tier-3 students with SEN while 45 (5.3%) each had 100 or more such students. As the number of students with SEN is not evenly distributed among schools, the ratio of SENCO to students with SEN varies among schools. Moreover, the EDB stipulated that a SENCO should have completed the Basic, Advanced and Thematic (BAT) Courses on catering for students with SEN. As at January 2018, 56 (23%) of the 244 SENCOs were still attending the required BAT Courses on supporting students with SEN (paras. 3.31 to 3.37).

Teacher training and professional support

11. *Need to encourage schools to meet training targets.* In 2007/08, the EDB launched a teacher professional development framework on integrated education. Under the framework, BAT Courses are conducted for serving teachers. Since the launch of the framework, the EDB has launched three cycles of BAT Courses with training targets set for each school to attain in each cycle. Audit examined the attainment of BAT Courses training targets by all 844 public sector ordinary schools in the second and the third cycles based on the training position of schools in the end of 2016/17. Audit found that of the 844 schools: (a) 37 (4%), 83 (10%) and 47 (6%) did not meet the training targets of the Basic, Advanced and Thematic Courses respectively applicable for the second cycle from 2012/13 to 2014/15; (b) 219 (26%), 572 (68%) and 326 (39%) did not meet the training targets of the Basic, Advanced and Thematic Courses respectively applicable for the third cycle from 2015/16 to 2019/20; and (c) there were 11 schools that did not meet any of the training targets for the BAT Courses applicable for the second cycle and the third cycle (paras. 4.2, 4.4 and 4.5).

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12. *Need to step up measures to ensure that schools receive the required number of visit days by EPs.* Audit examined the number of EP visit days of the 844 schools in 2016/17 and found that: (a) for 27 (8%) of the 330 schools that received the regular SBEPS provided by the EDB, each received less than the required 18 visit days per school year; (b) for 11 (2%) of the 484 schools that received the regular SBEPS provided by the school sponsoring bodies (SSBs), each received less than the required 14 visit days per school year; and (c) for 4 (13%) of the 30 schools that received the enhanced SBEPS, each received less than the required 30 visit days per school year. As the numbers of visit days were less than required, the educational psychology service provided to the schools might have been affected (para. 4.14).

13. *Need to strengthen monitoring of SBEPS provided by SSBs.* The SBEPS is provided to schools either by the EDB direct or the SSBs. In 2016/17, there were 11 SSBs that provided the SBEPS. Each of the 11 SSBs hired an EP supervisor. According to the SBEPS Guide, the EP supervisor must be an experienced EP generally with six years or more of EP experience and is required to provide about 130 supervision hours to each EP under his supervision each year. The EDB has not required the SSBs to submit proof of the qualifications of their EP supervisors. In addition, the EDB has not set up a robust mechanism to monitor the services provided by the EP supervisors (paras. 4.8, 4.16 and 4.17).

Audit recommendations

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

Identification and admission of students with SEN

- (a) **review the timeliness of identifying students with SEN (para. 2.14(a));**
- (b) **in collaboration with schools, further encourage parents of students with SEN to give their consent to transfer related information from primary schools to secondary schools (para. 2.14(b));**

Executive Summary

- (c) **record the dates on which the post-assessment meetings are held and the assessment summaries and the assessment reports are issued in the EDB's computer system to facilitate the monitoring of the timeliness of issuing assessment summaries and reports (para. 2.14(c));**
- (d) **urge schools to release more school information on support for students with SEN to facilitate parents of students with SEN in selecting schools (para. 2.21);**
- (e) **closely monitor the progress of the works of the 42 approved lift installations and expedite the lift installation works for schools without such facility under the new lift-installation programme announced in February 2018 (para. 2.27(a) and (b));**

Additional resources provided to public sector ordinary schools

- (f) **consider issuing more specific guidelines to schools to facilitate their determination of the tier of support their students with SEN require (para. 3.16(a));**
- (g) **review the ceiling for the LSG periodically taking account of the changes in price level and the changes in the number of students with SEN and ALAs (para. 3.16(b));**
- (h) **take measures to further encourage schools to fully utilise the LSG fund allocated to them in each school year (para. 3.16(c));**
- (i) **take measures to address the concerns of the schools with a view to speeding up their switch from the IRTP to the LSG (para. 3.23);**
- (j) **take measures to address the large disparity in the ratio of SENCO to students with SEN among different schools (para. 3.41(a));**
- (k) **take measures to increase the number of teachers having completed the BAT Courses to stand ready to serve as SENCOs (para. 3.41(b));**

Executive Summary

Teacher training and professional support

- (l) **take measures to encourage schools to meet the BAT Courses training targets (para. 4.6);**
- (m) **step up measures to ensure that schools receive the required number of visit days by EPs (para. 4.18(c)); and**
- (n) **step up its monitoring of the SBEPS provided by the SSBs (para. 4.18(d)).**

Response from the Government

15. The Government welcomes the audit review and agrees with the audit recommendations.

PART 1: INTRODUCTION

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

Background

1.2 In accordance with the Disability Discrimination Ordinance (Cap. 487) and the Code of Practice on Education issued by the Equal Opportunities Commission, all educational establishments have the obligation to provide equal education opportunities to eligible students, including students with Special Educational Needs (SEN). Students with SEN refer to students who need special educational support because of learning or adjustment difficulties. In September 1997, the Government launched a two-year pilot project on integrated education under which participating schools were required to provide an accommodating learning environment for students with SEN. After the two-year pilot project, integrated education was extended to all public sector ordinary schools from the 1999/2000 school year (Note 1) onwards. One of the long term goals of integrated education is to help all students, teachers and parents recognise, accept and respect individual differences, and even celebrate differences. To support diversity and promote inclusiveness, the targets and beneficiaries of integrated education are not only the students with SEN but also other students, school staff, parents, and even the whole society.

1.3 The Government adopts a dual-track mode in implementing special education. For students with more severe or multiple disabilities, the Education Bureau (EDB) will, subject to the assessment and recommendations of specialists and the consent of the parents, refer them to special schools for intensive support services. Each type of special schools focuses on students with specific disability. The class size, staffing ratio, curriculum and level of support provided for the special schools are different from the ordinary schools. Other students with SEN, who do not need to attend special schools for intensive support services, may attend ordinary schools

Note 1: *Unless otherwise specified, all years mentioned in this Audit Report refer to school years, which start on 1 September of a year and end on 31 August of the following year.*

Introduction

so that they can interact with ordinary students and benefit from mainstream education. It is worth noting that many students with SEN cope well with learning in mainstream education and, in recent years, there have been examples of these students achieving good academic results in ordinary schools.

Types of SEN

1.4 The EDB classified SEN into the following nine types:

- (a) ***Specific Learning Difficulties (SpLD)***. SpLD in reading and writing, also known as dyslexia, is the most common type of SpLD. Students with SpLD, despite having normal intelligence and having received formal instructions, are unable to read, spell and dictate words accurately and fluently. In supporting students with SpLD, teachers need to adopt diversified teaching strategies (e.g. multisensory, structured and small-step teaching to suit the pace and learning capabilities of the students);
- (b) ***Attention Deficit/Hyperactivity Disorder (AD/HD)***. Students with AD/HD usually have the following three characteristics:
 - (i) ***Inattention***. They have difficulty sustaining attention and have short attention span. They are often distracted by irrelevant signs and sounds. They also have difficulty organising tasks and activities or paying attention to details. Moreover, they often make careless mistakes;
 - (ii) ***Hyperactivity***. They cannot remain seated in class and usually keep fidgeting or fiddling with objects around them; and
 - (iii) ***Impulsivity***. They lack patience, are impulsive and often act without considering the consequences. They blurt out answers before the questions are completed. Moreover, they often interrupt others, cannot remain in line with the queue, and are unable to follow the instructions.

In teaching these students, the teachers need to provide a well-structured learning environment, give clear and specific instructions and give one

instruction at a time, break down the task into small units and establish clear-cut rules and award schemes for guiding the behaviour of the students;

- (c) ***Autism Spectrum Disorders (ASD)***. Children with ASD display social communication impairments and restricted repetitive patterns of behaviour in the early developmental period (but may not become fully manifest until social demands exceed limited capacities, or may be masked by learned strategies in later life). Students with ASD usually need explicit instructions for accomplishing tasks. Teachers can help by providing them with support for routines and procedures, visual organisers, priming, and structured assignments to improve their participation in lessons;

- (d) ***Speech and Language Impairment (SLI)***. There are four common types of speech and language difficulties:
 - (i) ***Articulation problem***. Articulation problem refers to the mispronunciation of words due to various causes to the extent that other people cannot understand what is being said, such as substitution or omission of sounds;

 - (ii) ***Language problem***. Language problem refers to the inability to understand fully the information conveyed in a message, which leads to misunderstanding or even communication breakdown, and/or difficulties in conveying messages at an age-appropriate level;

 - (iii) ***Fluency problem***. Fluency problem refers to the condition in which the flow of speech is interrupted by repetitions of syllables or words, or prolongation of sounds, or the speech rate is too fast or too slow, or blocks; and

 - (iv) ***Voice problem***. Voice problem refers to hoarseness, loss of voice, excessively high/low pitch, difficulties in controlling the loudness of voice, hyper- or hypo-nasality, etc. due to various causes.

In helping students with SLI, teachers may provide feedback to the students to facilitate the communication process, demonstrate the appropriate speech and language production, and give encouragement and reinforcement for the students;

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- (e) ***Intellectual Disability (ID)***. ID is a group of developmental conditions characterised by significant impairment of cognitive functions, which are associated with limitations of learning, adaptive behaviours and skills. This disability originates before the age of 18. In supporting students with ID, teachers need to use differentiated instruction and employ diversified teaching strategies to enhance the effectiveness of learning. For example, they may use real objects and gestures as aids to supplement verbal instructions;
- (f) ***Hearing Impairment (HI)***. There are three major types of HI, namely conductive, sensorineural, and mixed. The level of impairment can be further classified into mild, moderate, moderately severe, severe and profound. Teachers need to try to stand and speak in front of the students so as to provide visual cues like lip-reading, facial expression and gestures;
- (g) ***Physical Disability (PD)***. Cerebral palsy, spina bifida and muscular dystrophy are common types of PDs which affect students' motor co-ordination, speech, writing and daily activities. Schools may help these students by providing them with accessible facilities such as lifts, accessible toilets and wheelchair access;
- (h) ***Visual Impairment (VI)***. VI refers to the visual acuity of 6/18 or below, taking measurement from the eye with better vision upon wearing spectacles or after refractive correction surgery. VI can be classified as mild low vision, moderate low vision, severe low vision or total loss of vision. Schools may help students with VI by allowing them to use assistive tools, including Braille book, audio tapes, magnifying glass, word magnifier and computer, in accordance with the students' residual visual functions; and
- (i) ***Mental Illness (MI)***. Effective from 2017/18, the EDB has included MI as a type of SEN. There are different types of MI including Anxiety Disorders, Depressive Disorders and Obsessive Compulsive Disorder. There are also more severe MI such as Psychotic Disorders and Bipolar Disorder, the symptoms of which are usually more persistent and their influence are usually more pervasive. Students with MI need treatment by healthcare professionals. They are usually diagnosed by psychiatrists, and followed up by clinical psychologists, psychiatric nurses or medical social workers. Schools play a complementary role in coping with the advice on treatment and rehabilitation given by the healthcare professionals, and assist the students adapt to school life according to their needs.

Number of students with SEN

1.5 In 2016/17, there were 844 public sector ordinary schools comprising 454 primary schools and 390 secondary schools. About 42,890 students with SEN studied in the 844 schools (Note 2) (see Table 1).

Note 2: *In 2016/17, about 7,700 students with more severe or multiple disabilities studied in 60 aided special schools. This audit review focused on the EDB's work in the implementation of integrated education (see para. 1.10). The review did not cover special schools.*

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Table 1

**Number of students with SEN in public sector ordinary schools
(2012/13 to 2016/17)**

	2012/13	2013/14	2014/15	2015/16	2016/17	Change between 2012/13 and 2016/17
Primary schools						
No. of students with SEN	16,810	17,390	18,200	19,830	21,860	+5,050 (+30%)
Total no. of students	258,527	259,867	266,153	273,006	282,482	+23,955 (+9%)
Students with SEN as a percentage of total students	6.5%	6.7%	6.8%	7.3%	7.7%	+1.2 percentage points
Secondary schools						
No. of students with SEN	14,580	16,440	17,990	19,640	21,030	+6,450 (+44%)
Total no. of students	347,851	323,691	302,110	282,525	268,609	- 79,242 (- 23%)
Students with SEN as a percentage of total students	4.2%	5.1%	6.0%	7.0%	7.8%	+3.6 percentage points
Primary schools and secondary schools						
No. of students with SEN	31,390	33,830	36,190	39,470	42,890	+11,500 (+37%)
Total no. of students	606,378	583,558	568,263	555,531	551,091	- 55,287 (- 9%)
Students with SEN as a percentage of total students	5.2%	5.8%	6.4%	7.1%	7.8%	+2.6 percentage points

Source: *Audit analysis of EDB records*

1.6 Table 2 shows the number of students with SEN in public sector ordinary schools analysed by major SEN type for the period 2012/13 to 2016/17.

Table 2

Number of students with SEN in public sector ordinary schools analysed by major SEN type (2012/13 to 2016/17)

SEN type	2012/13	2013/14	2014/15	2015/16	2016/17	Change between 2012/13 and 2016/17
SpLD	17,440	18,080	18,610	19,390	20,120	+2,680 (+15%)
AD/HD	4,780	5,860	6,910	8,200	9,440	+4,660 (+97%)
ASD	4,150	4,970	5,790	6,800	7,820	+3,670 (+88%)
SLI	2,130	2,090	2,130	2,400	2,870	+740 (+35%)
ID	1,690	1,680	1,650	1,590	1,580	- 110 (- 7%)
HI	690	660	650	670	650	- 40 (- 6%)
PD	380	360	330	310	300	- 80 (- 21%)
VI	130	130	120	110	110	- 20 (- 15%)
Overall	31,390	33,830	36,190	39,470	42,890	+11,500 (+37%)

Source: EDB records

Remarks: The Learning Support Grant for public sector ordinary schools to support students with SEN has extended to cover students with MI starting from 2017/18. The EDB does not have the number of students with MI before 2017/18.

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1.7 During the period 2012/13 to 2016/17, the number of students with SEN in public sector ordinary schools increased, mainly due to the increase in number of students with SpLD, AD/HD and ASD. According to the EDB:

- (a) the increasing number of students assessed to have SpLD and AD/HD may be due to the improvement in their identification process. To increase teachers' and parents' awareness and acceptance of needs of students with AD/HD, the EDB conducts annually territory-wide teacher and parent workshops and develops resource materials for schools to help them support students with AD/HD. In addition, a newsletter on helping those students was uploaded to the EDB website for promoting public awareness; and
- (b) the rapid increase in the number of students with ASD is similarly observed globally. It is likely to be a result of growing awareness among parents of the signs of children with ASD or developmental delay, hence they are more likely to seek diagnostic service and intervention. At school level, improvement in teacher training on SEN results in increased sensitivity and accuracy of teachers in spotting students who might have ASD and warrant assessment and support. Furthermore, the psychiatric services provided by the Hospital Authority (HA) which is responsible for diagnosing psychiatric disorders, including ASD and AD/HD, and follow-up services are improving.

Support measures to schools

1.8 On top of the regular subventions provided to all public sector ordinary schools, the EDB provides schools with additional resources (in the form of cash grant and additional teaching staff), professional support and teacher training to help them cater for students with SEN. The Special Education Division of the EDB is responsible for the provision and the administration of the support measures for implementing integrated education (see Appendix A for the organisation chart of the Division). According to the EDB's records, the EDB's expenditure on additional resources and professional services for integrated education increased by \$408.6 million (41%) from \$1,008.5 million in 2012/13 to \$1,417.1 million in 2016/17 (see Table 3).

Table 3

**Expenditure on additional resources and professional services provided to
public sector ordinary schools for integrated education
(2012/13 to 2016/17)**

Nature	Expenditure (\$ million)					Change between 2012/13 and 2016/17
	2012/13	2013/14	2014/15	2015/16	2016/17	
<i>Additional resources</i>						
Cash grant	348.9	390.0	511.4	566.1	607.6	+258.7 (+74%)
Additional teaching staff	552.7	555.0	570.3	580.5	599.7	+47.0 (+9%)
Subtotal (a)	901.6	945.0	1,081.7	1,146.6	1,207.3	+305.7 (+34%)
<i>Professional services</i>						
Educational psychology service	56.4	71.6	84.8	102.9	146.4	+90.0 (+160%)
Teacher training	50.5	58.8	55.2	60.5	63.4	+12.9 (+26%)
Subtotal (b)	106.9	130.4	140.0	163.4	209.8	+102.9 (+96%)
Total (c)=(a)+(b)	1,008.5	1,075.4	1,221.7	1,310.0	1,417.1	+408.6 (+41%)

Source: Audit analysis of EDB records

Introduction

Audit review

1.9 In 1999, the Audit Commission (Audit) conducted an audit review on services for students with SEN. The result was reported in Chapter 7 of the Director of Audit's Report No. 33 of October 1999.

1.10 In October 2017, Audit commenced a review of the EDB's work in the implementation of integrated education. The audit has focused on the following areas:

- (a) identification and admission of students with SEN (PART 2);
- (b) additional resources provided to public sector ordinary schools (PART 3);
and
- (c) teacher training and professional support (PART 4).

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

General response from the Government

1.11 The Secretary for Education welcomes the audit review and agrees to take necessary follow-up actions on the recommendations in this Audit Report. He has said that the Government has already commenced a review of the implementation of integrated education in schools and would introduce improvement measures with a view to delivering quality education for students with SEN and facilitating them to develop their potential to the full. As announced in the 2018-19 Budget, to achieve quality education, the Government has proposed to commit an additional recurrent expenditure of \$2 billion on top of the committed amount of \$1.4 billion. These new measures on integrated education will be included in the list of initiatives.

Acknowledgement

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

PART 2: IDENTIFICATION AND ADMISSION OF STUDENTS WITH SEN

2.1 This PART examines the EDB's work on identification and admission of students with SEN, focusing on the following issues:

- (a) identification of students with SEN (paras. 2.2 to 2.15);
- (b) information needs of parents of students with SEN for choosing schools (paras. 2.16 to 2.22); and
- (c) installation of lifts in schools to create a barrier-free physical environment for students with disabilities (paras. 2.23 to 2.28).

Identification of students with SEN

2.2 In 1985, the EDB put in place at all public sector ordinary primary schools the Early Identification and Intervention Programme for Primary One Students with Learning Difficulties (EII Programme — Note 3) to ensure that all children with learning difficulties could be identified early. Under the EII Programme, schools will identify students with learning difficulties and arrange follow-up action for them. Assessment will be arranged as appropriate.

Note 3: *Before primary education, children's developmental needs are addressed under the Comprehensive Child Development Service provided through the collaboration among the Department of Health, the HA, the Social Welfare Department (with non-governmental organisations) and the EDB. The objectives of the Service are the early identification and management of: (a) at-risk pregnant women; (b) mothers with postnatal depression; (c) families with psychosocial needs; and (d) pre-primary children with health, developmental and behavioural problems. Pre-primary teachers who have detected children with physical, developmental, behavioural and learning problems may refer the children to the Department of Health and the HA. Subject to their parents' consent, information on the problems of the children will be provided to the primary schools admitting them.*

Identification and admission of students with SEN

2.3 The key work flow of the EII Programme is as follows:

- (a) **Observation.** From September to December, teachers will observe the learning and social adjustment of every Primary One student. Where appropriate, teachers may discuss their observation with the parents concerned. Teachers will provide in-class support to the students displaying learning or adjustment difficulties. Schools may arrange initial remedial support outside the lessons for the students concerned;
- (b) **Identification.** From December to February of the school year, teachers will complete the Observation Checklist for Teachers (OCT) for students suspected to have learning difficulties. Based on the OCT, together with the observation made by the teachers and review of the samples of work of students, the Student Support Team (Note 4), the teachers and the school-based Educational Psychologist (EP) hold meetings to identify students with learning difficulties. They will formulate and implement initial intervention plans for students identified with learning difficulties in the second half of Primary One; and
- (c) **Assessment.** Under the principle of intervention before assessment, intervention plans for students suspected to have marked learning difficulties will be implemented before they are referred to the school-based EPs for assessment (Note 5) to ensure that timely support will be rendered to the students. Students' response to the intervention will be taken into account when the related assessment is carried out when the students are in Primary Two. The level and intensity of the support needed will be adjusted following the assessment. For those Primary One students who have exhibited severe learning or adjustment difficulties, early assessment will be arranged in the second term of Primary One.

Note 4: *According to the EDB's guidelines, the Student Support Team may consist of the following members: (a) a principal, a vice principal or a senior teacher as a co-ordinator; (b) class teachers and subject teachers of the students with SEN; and (c) curriculum development leaders, guidance teachers and school social workers.*

Note 5: *The EPs have the professional expertise to assess and diagnose students having cognitive difficulties (e.g. ID) and learning issues (e.g. SpLD). Other types of SEN (e.g. suspected AD/HD, ASD and MI) will be referred to other professionals (e.g. child psychiatrists) for a final diagnosis.*

Identification and admission of students with SEN

2.4 Apart from referring students suspected of having learning difficulties to EPs for assessment through the EII Programme, the teachers can refer the students from all grade levels identified with learning or adjustment difficulties for EP assessment throughout the school year, with the consent of parents. Students suspected to have ASD, AD/HD or MI, with the consent of parents, will be referred for further assessment by child psychiatrists of the HA for evaluation and diagnosis. According to the EDB, students who display learning or adjustment difficulties in senior primary or secondary school years may have the assessment conducted after Primary One and Two (instead of during Primary One or Two). Students who have been assessed by EPs may also be considered for reassessment if there are new concerns about their learning or behaviour adjustment. Hence, there is a notable percentage of students receiving EP assessment after junior primary school years.

Need to enhance measures to identify students with SEN as early as possible

2.5 In 2016/17, 6,159 students were assessed by school-based EPs for the first time. Of them, 6,131 were diagnosed as students with SEN or Academic Low Achievers (ALAs — see Note 7 to para. 3.5). Of these 6,131 students, while 4,181 (68.2%) were diagnosed in Primary One and Primary Two, 1,950 (31.8%) were diagnosed at the following stages:

- (a) 992 (16.2%) in Primary Three to Primary Six;
- (b) 726 (11.8%) in Secondary One to Secondary Three; and
- (c) 232 (3.8%) in Secondary Four to Secondary Six.

Identification and admission of students with SEN

2.6 The EDB informed Audit in December 2017 and February 2018 that:

- (a) students who manifest learning or behaviour difficulties in higher class levels are given EP service as soon as they are identified by schools or parents;
- (b) parents of some students with SEN might have refused to give consent for their children to undergo assessment when they were in early primary schools. They might only see the need for an assessment when their children displayed greater difficulties in the senior grades or when they requested special examination arrangements for public examinations;
- (c) not all students with SEN would display learning or adjustment issues at elementary stage of schooling, especially those who are intellectually more capable and might be able to compensate for their difficulties to a large extent in primary schools. These students would slip through the detection of the EII Programme;
- (d) some students only manifest adjustment difficulties in adapting to secondary school life or only manifest acute emotional and behaviour difficulties in adolescence. These students are first assessed after admission to secondary schools; and
- (e) some students might arrive Hong Kong at class levels other than Primary One or Primary Two. Assessments for them are carried out after they displayed difficulties at schools.

2.7 Early identification of possible learning difficulties can enable parents and teachers to provide the appropriate support to the students as soon as possible. All efforts should be made to ensure that students with SEN are identified at the earliest opportunities so as to ensure that timely support can be provided to them. Although there may be various reasons hindering the early identification of students with SEN, given the notable percentage of students with SEN receiving EP assessment at Primary Three or later, the EDB needs to ensure the timeliness of identifying students with SEN and continue to explore ways to improve the identification process. For instance, the EDB may:

Identification and admission of students with SEN

- (a) take action to further encourage parents to give consents to schools to refer their children for assessment at an early stage; and
- (b) further enhance the training of teachers on the identification of students with SEN.

Need to strengthen measures in obtaining consents from parents to transfer information of students with SEN

2.8 It is essential to have an effective mechanism to ensure that information of students with SEN can be made available to schools as early as possible so that timely and appropriate support can be provided. The existing information transfer mechanism is as follows:

- (a) ***Upcoming Primary One students with SEN.*** The Department of Health (DH) or the HA will, subject to parental consent, send the assessment information of those upcoming Primary One students with SEN to the EDB for onward transmission to the recipient schools before the commencement of the new school year. The DH/HA will provide/update their findings before passing the students' assessment information to the EDB. In general, the assessment information from the DH/HA will reach the EDB by July every year so that the EDB can send the information to schools in August to facilitate the schools to arrange timely and suitable learning support services for the students; and
- (b) ***Upcoming Secondary One students with SEN.*** Primary schools are required to obtain consents from parents of students with SEN before the relevant information is input into the Special Education Management Information System (SEMIS) of the EDB. After the Secondary School Places Allocation results are released, primary schools are required to transfer to the recipient secondary schools the relevant information of the students with SEN (e.g. their medical and assessment reports, learning records and suggested teaching strategies, etc.).

Identification and admission of students with SEN

2.9 In February 2018, the EDB informed Audit that:

- (a) the EDB has all along encouraged parents to give consent to transfer information of students with SEN. To ensure that Primary Six students with SEN on the transfer to secondary schools will continue to receive suitable support upon their admission to secondary schools, primary schools have been requested to transfer relevant information of these students to the secondary schools concerned (recipient schools) subject to the consent of parents;
- (b) apart from issuing a circular entitled “Transfer of Information of Students with Special Educational Needs” in June 2013, the EDB also issues a letter in May every year to remind the primary schools about the arrangements. In addition, inspectors of the EDB will advise schools, at various occasions, such as school visits, daily contacts, etc., about seeking parental consent for transfer of information for students with SEN, the types of documents to be sent to the recipient schools, and the timeframe for sending the information to the recipient schools; and
- (c) the EDB has also been collaborating with a non-governmental organisation in running an annual seminar for parents of Primary Six students with SEN going to apply for Secondary One places. Among others, the EDB advises parents to give consent to the primary schools to transfer relevant information of their children with SEN to the secondary schools with a view to facilitating early identification and intervention by the secondary schools. The students with SEN, in turn, will continue to receive suitable support.

2.10 Audit examined the EDB’s records and found that although the number and percentage of parents who refused to give consent to the primary schools for transferring their children’s information to the secondary schools had decreased from 925 in 2013/14 to 775 in 2017/18 and from 25% in 2013/14 to 17% in 2017/18 respectively, there was still a notable number of parents who declined to give consent (see Table 4).

Table 4

**Number of cases whose parents declined to give consent
for transferring information of Primary Six students with SEN
to secondary schools
(2013/14 to 2017/18)**

School year	Number of Primary Six students with SEN	Number of cases (percentage)
2013/14	3,675	925(25%)
2014/15	3,733	925(25%)
2015/16	3,884	731(19%)
2016/17	4,003	739(18%)
2017/18	4,578	775(17%)

Source: EDB records

Remarks: According to the EDB, among the Primary Six students with SEN, about 2% of them each year were admitted to non-public sector secondary schools.

2.11 Effective and timely information transfer from primary schools to secondary schools enables the continuation and timeliness of the support provided to students with SEN. Secondary schools which do not have the related information of their students with SEN may need to re-identify and re-assess them before providing support to them. The process may take time and delay the help rendered to the students with SEN. The EDB needs to, in collaboration with schools, continue to encourage parents of students with SEN to give their consent to transfer related information from primary schools to secondary schools. For instance, promoting the concept to parents that giving consent to transfer the SEN information to secondary schools would help secondary schools to provide timely support to their children.

Identification and admission of students with SEN

Need to monitor the timeliness of assessment service

2.12 According to the School-based Educational Psychology Service (SBEPS) Guide issued by the EDB:

- (a) upon receipt of referrals, school-based EPs should arrange related assessments with the schools concerned as soon as possible. Normally the assessments should be completed within six months;
- (b) through post-assessment meeting, the EP should explain to parents and school personnel the assessment results and discuss the educational support for every student who was given an individual assessment;
- (c) EPs should provide parents with an assessment summary containing key information on intellectual functioning, learning difficulties and recommendations for support for every case given psychometric assessment, normally within three months; and
- (d) for every referral given assessment, EPs should send a copy of the assessment report to the school concerned for arrangement of appropriate supportive service, normally within three months.

2.13 According to the EDB, while schools would plan their follow-up actions by implementing the recommendations as discussed and agreed at the post-assessment meeting, the assessment summary and assessment report are also important documents of the students receiving the assessment because:

- (a) the assessment summary, which contains the major assessment results and recommendations on support strategies, facilitates parents' better understanding of their children's needs; and
- (b) the assessment report is a professional report on the students' psycho-educational functioning, a copy of which is provided for schools' record and reference so that they can regularly review their support based on the assessment results as well as professional advice.

Audit noted that while the EDB recorded in its computer system the dates of referrals of cases from schools and the dates of assessments conducted by school-based EPs, the system did not record the dates on which the post-assessment meetings were held and the assessment summaries and the assessment reports were issued. In order to facilitate the EDB's monitoring of the timeliness of issuing assessment summaries and reports, Audit considers that the EDB needs to record such information in its computer system.

Audit recommendations

- 2.14 **Audit has *recommended* that the Secretary for Education should:**
- (a) **review the timeliness of identifying students with SEN to ascertain if there are any areas where improvements can be made;**
 - (b) **in collaboration with schools, further encourage parents of students with SEN to give their consent to transfer related information from primary schools to secondary schools; and**
 - (c) **record the dates on which the post-assessment meetings are held and the assessment summaries and the assessment reports are issued in the EDB's computer system to facilitate the monitoring of the timeliness of issuing assessment summaries and reports.**

Response from the Government

2.15 The Secretary for Education agrees with the audit recommendations. He has said that:

- (a) in view of the regularisation of the Pilot Scheme on On-site Pre-school Rehabilitation Services by the Social Welfare Department, the EDB and the Social Welfare Department have agreed on a mechanism to ensure pre-school children with special needs under the On-site Pre-school Rehabilitation Services or the Social Welfare Department's other subvented rehabilitation services will be given appropriate support when they proceed to primary schooling. Specifically, the specialists and special child care workers of the On-site Pre-school Rehabilitation Services and the other

Identification and admission of students with SEN

rehabilitation services will offer their professional comments on the progress of their client children by completing a report form before the children begin primary schooling. With the coordination of the Social Welfare Department and the EDB and subject to parental consent, the report form of individual children will be sent from their pre-school centres/kindergartens to their designated public sector primary schools before September, so as to facilitate the primary schools to plan and provide appropriate support services for the respective Primary One students at the earliest time possible;

- (b) it is worth noting that while the EDB advocates the policy of early identification, it does not mean that all assessments could be done in Primary One or Primary Two, especially those students who do not display learning or adjustment difficulties in junior primary school years. Having said that, the EDB will continue to support schools to comply with the principle of “intervention before assessment” for supporting students and enhance the review mechanism so that students with late emerging learning or behaviour difficulties are identified in a timely manner; and
- (c) the EDB will revisit the requirements on the timeline for schools to conduct the post-assessment meetings, and the timeline for EPs to issue the assessment summaries and the assessment reports, as well as explore the mechanism for recording the information.

Information needs of parents of students with SEN for choosing schools

2.16 Under the Disability Discrimination Ordinance and the Code of Practice on Education, all educational establishments have the obligations to provide equal opportunities to eligible students, including students with SEN. Parents of students with SEN may, based on their own choice, apply for a place in ordinary schools for their children through the established mechanisms. The existing admission mechanisms of ordinary primary schools and secondary schools are as follows:

Identification and admission of students with SEN

- (a) **Primary schools.** All eligible children (including those with SEN who opt for admission to ordinary primary schools) are allocated Primary One places in government or aided schools through the Primary One Admission System. The system is divided into two stages:
- (i) **Discretionary Places Admission Stage.** At this stage, parents can apply to one government or aided primary school of their preference. The schools concerned should admit children in accordance with the prescribed criteria laid down by the EDB (e.g. whether the applicant children have siblings studying or parents working in the school); and
 - (ii) **Central Allocation Stage.** At this stage, the EDB will centrally allocate Primary One places according to parents' choices of schools and applicant children's random numbers; and
- (b) **Secondary schools.** On completion of primary education, eligible students (including students with SEN) participate in the Secondary School Places Allocation System through their primary schools and are allocated subsidised Secondary One places. The system is divided into two stages:
- (i) **Discretionary Places Stage.** At this stage, students can apply to not more than two participating secondary schools of their preference. Secondary schools may admit students in accordance with their admission criteria; and
 - (ii) **Central Allocation Stage.** At this stage, Secondary One places are allocated according to individual student's allocation band, parental choice of schools and random number.

Identification and admission of students with SEN

Need to release more school information on support for students with SEN to facilitate parents of students with SEN in selecting schools

2.17 Parents can obtain information about the schools from the websites and open day activities of the schools. The profiles of primary schools and secondary schools published by the Committee on Home-School Co-operation (Note 6) each year are also important sources of information about the schools.

2.18 Audit noted that the types and details of information on support for students with SEN disclosed on school websites varied. For instance, some schools disclosed the number of training programmes arranged for students with different SEN types and some did not. In the profiles of schools published by the Committee on Home-School Co-operation, schools disclose the following three pieces of information on support for students with SEN:

- (a) percentage of teachers with special education training. No details of the training are disclosed (e.g. types and levels of the training);
- (b) support facilities available for students with SEN in the schools (e.g. accessible lift and accessible toilet); and
- (c) an account of school's approach to cater for student diversity.

2.19 Audit noted that other useful school information on support for students with SEN would facilitate parents of students with SEN in choosing schools for their children:

- (a) how resources are allocated to and amongst students with SEN;
- (b) school-based support services for students with SEN;
- (c) role played by parents of students with SEN; and

Note 6: *The Committee on Home-School Co-operation was set up in February 1993. It comprises the chairperson, ex-officio member from the EDB, educators (drawn from kindergartens, primary schools, secondary schools and special schools), parents of children in local schools, parent educators and professionals.*

- (d) arrangement of training for staff on support for students with SEN.

2.20 To facilitate parents of students with SEN in making an informed decision on their school choice, the EDB needs to ascertain and better assess their information needs and to address them accordingly. For example, the EDB may collect the views of parents through meetings with the parent groups, seminars and talks. Views gathered should be properly analysed to ensure that appropriate follow-up action is taken.

Audit recommendation

2.21 **Audit has *recommended* that the Secretary for Education should urge schools to release more school information on support for students with SEN to facilitate parents of students with SEN in selecting schools.**

Response from the Government

2.22 The Secretary for Education agrees with the audit recommendation. He has said that:

- (a) under the School Development and Accountability Framework, schools are required to self-evaluate their practice and to give an account in the School Report which will be uploaded to school website before end of November annually for public's information; and
- (b) the EDB has also proposed to the Committee on Home-School Co-operation to enhance the Primary and Secondary School Profiles to be distributed in the 2018/19 by adding a separate column entitled "Whole School Approach to Integrated Education" with illustrative examples for schools to give an account of schools' integrated education practice in supporting students with SEN. The EDB will keep in view the development.

Installation of lifts in schools to create a barrier-free physical environment for students with disabilities

2.23 It is the Government's policy to create a barrier-free physical environment for persons with disabilities to facilitate their access to building and use of facilities, thereby enabling them to integrate into society. Students with VI, HI and PD studying in ordinary schools require accommodations in environment that cater to their special needs. While the needs of students with VI and HI can be addressed by minor conversion works (e.g. installation of additional lighting) and provision of special furniture and equipment (e.g. flashing fire alarm and optical enlargement devices), barrier-free access facilities (e.g. lifts and ramps) are needed for students with PD.

2.24 According to the EDB, all schools constructed after 1997 are in compliance with the prevailing requirement on barrier-free access promulgated by the Buildings Department. Schools with premises built before 1997 can apply for Government funding to install barrier-free facilities (such as lifts, accessible toilets, and ramps) in their premises. Subject to technical feasibility and having regard to the operational needs of individual schools, the EDB has installed in most of them (over 600) barrier-free facilities through the School Improvement Programme that were implemented in five phases between 1994 and 2006. Since April 2010 and April 2014, the EDB has taken up major and emergency repair works for non-estate aided schools and estate aided schools respectively. Aided schools without lift may apply for lift installation after taking into account their individual school-based needs under the annual major repairs exercise.

Need to expedite installation of lifts in schools

2.25 Audit noted that the EDB issued circular memorandum in around April and May each year to invite applications from aided schools for installation of lifts in the following financial year under the major repairs exercise. As at 28 February 2018, 110 applications had not been completed. Of the 110 applications:

- (a) 42 were approved applications. The related works of one application were expected to be completed by April 2018. Another 10 were in the construction stage and the remaining 31 were either under the statutory submission, planning or detailed design stage; and

Identification and admission of students with SEN

- (b) 68 applications had not yet been approved. Of these 68 applications, 30 (44%) were received before financial year 2012-13 (see Table 5).

Table 5

**Ageing analysis of 68 lift-installation applications
not yet approved
(As at 28 February 2018)**

Year of application received (financial year)	Number of applications (percentage)
2008 - 09	3 (5%)
2009 - 10	5 (7%)
2010 - 11	17 (25%)
2011 - 12	5 (7%)
2012 - 13	9 (13%)
2013 - 14	14 (21%)
2014 - 15	2 (3%)
2015 - 16	5 (7%)
2016 - 17	4 (6%)
2017 - 18	4 (6%)
Total	68 (100%)

Source: Audit analysis of EDB records

2.26 The Government announced in February 2018 that it would make an additional provision of \$2 billion to expedite installation of lifts for public sector schools as needed to build barrier-free campuses. The EDB will set up a dedicated team to handle the lift installation programme. Schools without lift installation but have not made such application before are invited to inform the EDB. The EDB will arrange preliminary technical feasibility assessment of the lift installation works for the schools in need from the first quarter of 2019 onwards. The EDB envisages that the installation programme can be completed in around eight years' time (i.e. by

Identification and admission of students with SEN

financial year 2026-27). In Audit's view, the absence of lifts might deter or have deterred parents of students with PD from choosing the schools concerned for admission of their children. The EDB needs to closely monitor the progress of the works of the 42 approved applications and to ensure that the related works would be completed as soon as possible. Regarding the lift installation works for those schools without such facility (including the 68 applications pending approval), the EDB needs to expedite the works under the new programme announced in February 2018.

Audit recommendations

- 2.27 **Audit has *recommended* that the Secretary for Education should:**
- (a) **closely monitor the progress of the works of the 42 approved lift installations and ensure that the related works would be completed as soon as possible; and**
 - (b) **expedite the lift installation works for schools without such facility under the new programme announced in February 2018.**

Response from the Government

2.28 The Secretary for Education agrees with the audit recommendations. He has said that:

- (a) the EDB will closely monitor the progress of the 42 approved lift projects and seek to complete the relevant works as soon as practicable; and
- (b) the EDB will strive to expedite the lift installation works for schools without such facility under the dedicated programme announced in February 2018.

PART 3: ADDITIONAL RESOURCES PROVIDED TO PUBLIC SECTOR ORDINARY SCHOOLS

3.1 This PART examines the administration of support measures provided to public sector ordinary schools for integrated education. Audit found room for improvement in the following areas:

- (a) administration of the Learning Support Grant (LSG — paras. 3.4 to 3.17);
- (b) administration of the Intensive Remedial Teaching Programme (IRTP — paras. 3.18 to 3.24);
- (c) performance management (paras. 3.25 to 3.30); and
- (d) Special Educational Needs Coordinator (SENCO — paras. 3.31 to 3.42).

Support measures to schools

3.2 On top of the regular subvention provided to all public sector ordinary schools, the EDB provides schools with additional resources to help them cater for students with SEN (see Table 6).

Additional resources provided to public sector ordinary schools

Table 6

Additional resources provided to public sector ordinary schools for integrated education

	Primary school	Secondary school
<i>Cash grant</i>		
LSG	✓	✓
Other cash grant schemes	✓	✓
<i>Additional teaching staff</i>		
Additional Teachers for ALAs	N.A. (Note)	✓
IRTP	✓	N.A.
SENCO	✓	✓
Other non-cash grant schemes	✓	✓

Source: *Audit analysis of EDB records*

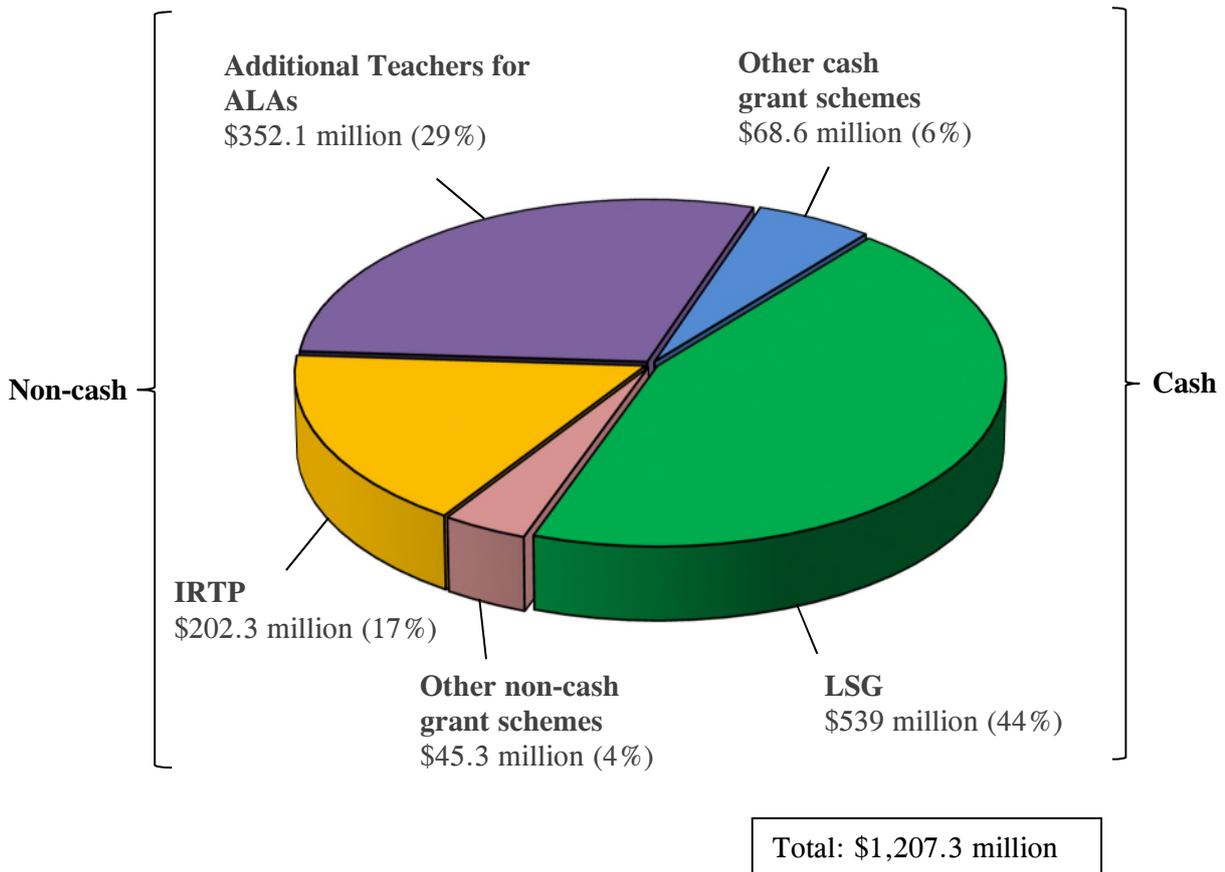
Note: *Resource is provided to support ALAs studying in primary schools under the LSG (see para. 3.5).*

3.3 For 2016/17, the total expenditure for the additional resources provided to public sector ordinary schools amounted to about \$1,207 million. Expenditure of the LSG, the Additional Teachers for ALAs and the IRTP amounted to about \$1,093 million, representing about 90% of the total expenditure of \$1,207 million (see Figure 1). The Additional Teachers for ALAs is one of the nine relief measures introduced in 2006 aiming to reduce the workload of teachers and provide better support to ALAs following the change from 5 to 3 Banding under the Secondary School Places Allocation. The provision of the Additional Teachers for ALAs to schools depends on the number of Territory Band 3 and the bottom 10% junior secondary students admitted by the schools. The EDB included the expenditure for the Additional Teachers for ALAs in the additional resources provided to public sector ordinary schools for integrated education.

Additional resources provided to public sector ordinary schools

Figure 1

Expenditure on the additional resources provided to public sector ordinary schools (2016/17)



Source: Audit analysis of EDB records

Administration of LSG

3.4 The LSG was launched in 2003/04. Unlike the IRTP (see para. 3.18) under which the provision depends on the number of ALAs and students with ID and students with SpLD, the LSG is a recurrent cash grant calculated according to the number of students with SEN enrolled at a school and their required level of support. In the circular issued by the EDB to the schools, the EDB stated that the schools should fully utilise the LSG provided in every school year to cater for the needs of the students of that school year and establish a regular mechanism to monitor the expenditure of the LSG, hence schools in general should not have large surplus of the LSG. To cater for schools which encountered unforeseeable circumstances affecting the planned utilisation of LSG, for example, the resignation of staff during the school year, the EDB allows schools to carry forward (government schools)/retain (aided/caput schools) 30% of the LSG across financial/school years. Any excess will be clawed back and returned to the EDB.

3.5 The LSG should be used for supporting students with SEN. For primary schools, the LSG can also be used to support students who are ALAs (Note 7). According to the EDB Guidelines, schools should deploy the LSG flexibly and strategically to support ALAs (applicable to primary schools only) and students with SEN through the 3-Tier Intervention Model. The Model consists of three levels of support for students:

- (a) ***Tier-1 support.*** This refers to quality teaching in regular classroom for supporting students with transient or mild learning difficulties;
- (b) ***Tier-2 support.*** This refers to “add-on” intervention for students with persistent learning difficulties, including those with SEN. Examples include small group learning, and pull-out programmes; and
- (c) ***Tier-3 support.*** This refers to intensive individualised support for students with severe learning difficulties and SEN, including the drawing up of an Individual Education Plan.

Note 7: *ALAs in primary schools refer to those students who are backward by two or more years in academic attainment in at least two of the three key learning areas (i.e. Chinese, English and Mathematics) as assessed by teachers using the measurement kit developed by the EDB. Under the 3-Tier Intervention Model, all ALAs are provided with Tier-2 support.*

Additional resources provided to public sector ordinary schools

3.6 According to the EDB, the 3-Tier Intervention Model is underpinned by the response to intervention approach in determining the tier of support provided for students with SEN recommended in the consultancy study in 2005. The Student Support Teams of primary and secondary schools will determine the tier of support of the students having regard to their difficulties and needs. This arrangement is so designed to ensure appropriate resources and services can be made available to students with diverse support needs.

3.7 Schools can use the LSG to:

- (a) employ additional teaching staff, on a full-time and/or part-time basis, to facilitate small group or individual remedial support;
- (b) employ additional teaching assistants to assist teachers in designing learning activities and materials, supporting students in classrooms learning activities, providing individual support on homework, training students with SEN on the use of assistive aids, collecting data and records of student progress and liaising with parents, etc.;
- (c) collaborate with other professionals through hire of services (e.g. school-based remedial support programmes, behavior guidance, and speech therapy);
- (d) purchase teaching resources and aids to facilitate the learning of students with SEN. For instance, schools may purchase graded readers or audio-visual software to strengthen the reading and writing abilities of students with SpLD or SLI;
- (e) organise programmes on learning or inclusive culture to promote peer acceptance and support for students with SEN;
- (f) conduct school-based teacher training programmes to enhance teachers' understanding of integrated education and support measures with a view to strengthening teachers' professionalism in catering for student diversity; and

Additional resources provided to public sector ordinary schools

- (g) strengthen home-school co-operation through organising groups of parent volunteers, for instance, to provide paired-reading programmes for students.

3.8 In 2016/17, 696 of the 844 public sector ordinary schools received support from the LSG, comprising 314 primary schools (including 102 primary schools in Mixed/Migration Mode — see para. 3.20) and 382 secondary schools. The total amount of LSG allocated to the 696 schools was \$539 million.

Need to issue more specific guidelines on determining the tier of support required

3.9 The amount of the LSG per year provided to each school is calculated annually based on the number of ALAs (applicable to primary schools only) and students with SEN enrolled at the school and the tier of support the students require. In 2016/17, the rates of grant for each school were as follows:

- (a) students requiring Tier-1 support do not affect the amount of grant;
- (b) \$13,725 per annum for each student requiring Tier-2 support;
- (c) a basic provision of \$164,700 per school per annum for the first one to six students requiring Tier-3 support; and
- (d) \$27,450 per annum for each student requiring Tier-3 support other than the first six such students.

The ceiling of LSG per school per annum was \$1,583,616.

3.10 Under the 3-Tier Intervention Model, schools are required to record the support and adaptations offered to the students with SEN as well as their progress for regular review to facilitate adjustment, where appropriate, of the level of support required. As such, the level of support for students with SEN may be adjusted upward or downward by schools according to the performance and prevailing support needs of the students. The tier of support a student with SEN needed was determined by the school concerned based on the student's support needs and taking into account the

Additional resources provided to public sector ordinary schools

EP's assessment (Note 8) and the EDB would review the school decisions during school visits. The details are as follows:

- (a) **Primary schools.** Primary schools are not required to indicate the recommended tier of support for their students with SEN in SEMIS ahead of meeting with the EDB. During school visits between September and November of a school year, the EDB officers will discuss with the Student Support Teams of the schools the planned tier of support for individual students with SEN on the Student Support Register, and give advice as appropriate. A list of the students with recommended support tiers will be discussed with the respective schools. Based on the list, the schools will submit information of the students to the EDB via the SEMIS by end of November for checking and provision of the LSG; and

- (b) **Secondary schools.** Unlike the primary schools, secondary schools will recommend the support tier required by individual students with SEN in the SEMIS when submitting their information to the EDB for the provision of the LSG. During the vetting process, the EDB officers verify whether these students recommended by the secondary schools to have Tier-2/3 support are eligible. The number of cases with tier of support revised after the vetting process for the 2015/16 and 2016/17 were 639 and 569 out of total number of cases recommended of 20,874 and 22,381 respectively. According to the EDB, the main reasons for not adopting the support levels recommended by secondary schools were that:
 - (i) schools have not submitted valid assessment reports;
 - (ii) students did not have SEN or the severity of their SEN did not meet the requirement for provision of the LSG; and
 - (iii) a few schools did not submit the Individual Education Plans for cases recommended for Tier-3 support.

Note 8: *The assessment summary of the EP contains key information on the intellectual functioning and the learning difficulties of the student with SEN and the recommended support to be provided to the student. The assessment summary does not provide recommendations on the tier of support for the student.*

Additional resources provided to public sector ordinary schools

3.11 To facilitate schools to cater for the needs of students with SEN, the EDB has prepared the Operation Guide on the Whole School Approach to Integrated Education (IE Operation Guide), which provides, among others, guidelines to schools on the level of support according to the performance of the students under the 3-Tier Intervention Model such as examples of specific differentiated teaching strategies for each of the three tiers of students with SEN. The IE Operation Guide stated that Tier-3 support should be provided to students with SEN having severe learning difficulties and some practical examples have been provided. However, Audit noted that the IE Operation Guide did not explicitly spell out the criteria that schools could make reference to when determining the tier of support of students with SEN. For instance, according to the EDB, students with ID have significant difficulties in learning academic subjects, social skills and adaptive life skills. They generally require Tier-3 support in the form of an Individual Education Plan. However, it was not explicitly mentioned in the IE Operation Guide that students with ID generally require Tier-3 support in the form of an Individual Education Plan. To ensure consistency in approaches among schools, Audit considers that the EDB needs to consider issuing more specific guidelines to schools to facilitate their determination of the tier of support their students with SEN require.

Need to review the ceiling for LSG

3.12 The amount of the LSG provided to each school per annum is subject to a ceiling. Since the introduction of the LSG in 2003/04, the ceiling had been increased twice from \$0.55 million to \$1 million in 2008/09 and to \$1.5 million in 2013/14. Starting from 2015/16, the ceiling has been adjusted annually based on the change in the Composite Consumer Price Index. In 2016/17, the amount of the ceiling was \$1,583,616.

3.13 In the four-year period from 2013/14 to 2016/17, the number of Tier-2 and Tier-3 students with SEN and ALAs had increased by 29% from 37,188 in 2013/14 to 47,937 in 2016/17. Audit noted that the number of schools reaching the LSG ceiling had increased by 13-fold from 4 in 2013/14 to 56 in 2016/17. The revisions since 2015/16 of the ceiling based on the change in the Composite Consumer Price Index had only catered for change in price level only. The revisions had not catered for the significant increase in the number of students with SEN and ALAs. To ensure that adequate resources are provided to these schools for providing support to students with SEN and ALAs, Audit considers that the EDB needs to take into account the increase in the number of students with SEN and ALAs and review the ceiling for the LSG periodically.

Need to encourage schools to fully utilise LSG fund allocated

3.14 It was stipulated by the EDB that schools should deploy their resources, including LSG fund, flexibly for the provision of support to ALAs (applicable to primary schools only) and students with SEN. They should also fully utilise the LSG fund allocated in every school year (see para. 3.4). According to the EDB, individual schools having underspending leading to claw back at the end of a specific year were generally due to some unexpected circumstances, e.g. longer time required for employment of additional staff than expected, early termination of contract of additional staff, failing to hire the planned professional services, etc. The EDB had stepped up efforts to monitor the utilisation of the LSG fund by schools through providing schools with guidelines on the deployment of the LSG and claw-back mechanism, conducting regular school visits to advise on the deployment of resources for supporting students with SEN, organising experience sharing activities among schools, and issuing reminders to individual schools concerned for making improvement should undesirable situation be detected.

3.15 Audit noted that in 2015/16, of the 692 schools which had received the LSG allocation, 366 had surplus fund (see Table 7). Of the 366 schools, 122 (33%) had surplus fund of more than 10% of the annual allocation. Audit considers that notwithstanding the flexibility required by schools, the EDB needs to take measures to further encourage schools to fully utilise the LSG fund allocated to them in each school year.

Additional resources provided to public sector ordinary schools

Table 7

**Schools with surplus LSG fund
(2015/16)**

Surplus fund as a percentage of the annual LSG allocated	No. of schools	Percentage
10% or less	244	67%
More than 10% to 20%	90	24%
More than 20% to 30%	26	7%
More than 30% (Note)	6	2%
Total	366	100%

Source: Audit analysis of EDB records

Note: Surplus fund exceeding 30% was required to be returned to the EDB.

Audit recommendations

3.16 **Audit has recommended that the Secretary for Education should:**

- (a) **consider issuing more specific guidelines to schools to facilitate their determination of the tier of support their students with SEN require;**
- (b) **review the ceiling for the LSG periodically taking account of the changes in price level and the changes in the number of students with SEN and ALAs; and**
- (c) **take measures to further encourage schools to fully utilise the LSG fund allocated to them in each school year.**

Response from the Government

3.17 The Secretary for Education agrees with the audit recommendations. He has said that the EDB will:

- (a) revisit the IE Operation Guide to provide more specific guidelines to schools to facilitate their determination of the tier of support their students with SEN require in consultation with relevant professionals (e.g. school-based EPs, school-based speech therapists and child psychiatrists) as appropriate, and to continue to provide professional training to teachers to enhance their capability to identify students' needs and render appropriate support to students with SEN. Yet the EDB wishes to stress that every student with SEN is unique, even students having the same SEN type will have different needs and require different tiers of support;
- (b) continue to provide training for teachers on the 3-Tier Intervention Model including the determination of tiers of support; and
- (c) keep on monitoring the utilisation of the LSG fund by schools through various means, such as providing schools with guidelines on the deployment of the LSG and claw-back mechanism, conducting regular school visits to advise on the deployment of resources for supporting students with SEN, organising good practice sharing activities among schools, and issuing reminders to individual schools concerned for making improvement should undesirable situation be detected.

Administration of IRTP

3.18 Since 1983, educational provision for children of low academic achievement has been provided through a range of intensive remedial services, including Resource Class in primary schools, which was renamed as the IRTP in 2000. Under the IRTP, primary schools are provided with additional teachers in the establishment and a class grant for each additional teacher. The target students counted for provision are ALAs, students with ID and students with SpLD. Subject to the number of target students in the school, the school will be provided with one to three additional teachers. The mode of operation of the IRTP may take any combination of the following forms:

Additional resources provided to public sector ordinary schools

- (a) schools may adopt co-teaching and provide in-class support to the target students;
- (b) students may receive intensive remedial teaching in one of the three basic subjects outside school hours; and
- (c) students may be withdrawn from the ordinary classes to attend IRTP lessons in one or more of the three basic subjects.

Slow progress of schools in switching from IRTP to LSG

3.19 In 2016/17, the EDB incurred LSG expenditure of \$539 million and IRTP expenditure of \$202.3 million (see Figure 1 in para. 3.3). The EDB first offered the LSG to primary schools in 2003/04. With the introduction of the LSG, schools that have not participated in the IRTP can only apply for the LSG. Schools that are under the IRTP may continue to receive support under the IRTP.

3.20 The LSG is provided to schools according to the number of ALAs (for primary schools only) and students with SEN enrolled in the school and the tier of support the students require. According to the EDB, the provision of the LSG enables schools to pool school resources together and deploy them more holistically and flexibly to render appropriate support services to students with SEN and ALAs based on their needs. To cater for the year-on-year change in student profile and the respective support needs, schools would, among others, employ teachers and/or teaching assistants, and/or hire various professional services, such as school-based speech therapy services for students with SLI, and supplemental coaching on complex and subtle social communication and emotional regulation skills for students with ASD, etc. In view of the advantages of the LSG, namely, greater flexibility in deploying resources to employ staff and to bring in expertise to offer various support services specifically suit the required tier of support of students with various types of SEN and ALAs, the EDB encourages schools implementing the IRTP to switch to the LSG as soon as possible. In addition to switching direct from the IRTP to the LSG, the EDB made the following offers to schools:

Additional resources provided to public sector ordinary schools

- (a) **Mixed Mode.** Starting from 2003/04, schools operating the IRTP were allowed to adopt a Mixed Mode under which each school can retain one IRTP teacher and at the same time receive the LSG capped at \$0.35 million per year; and
- (b) **Migration Mode.** In 2009/10, with a view to facilitating schools to switch to the LSG, the Migration Mode was introduced where each school was allowed to retain one IRTP teacher and receive the LSG with a ceiling of \$0.6 million per year up to a maximum of six school years. During the migration period, schools can switch to the LSG in any school year but are not allowed to switch back to the Mixed Mode.

3.21 When the Migration Mode was introduced in 2009/10, there were 277 schools participating in the IRTP. By 2016/17, there were still 242 schools participating in the IRTP. Only 35 schools had switched from the IRTP to the LSG. Of the 242 schools, 140 had not even joined the Mixed Mode or the Migration Mode (see Table 8). There were 383 IRTP teachers in the 242 schools.

Table 8

**Number of primary schools participating in the IRTP
(2016/17)**

Mode	No. of schools	Percentage
IRTP	140	58%
IRTP (Mixed Mode)	92 (Note)	38%
IRTP (Migration Mode)	10 (Note)	4%
Total	242	100%

Source: Audit analysis of EDB records

Note: Schools participating in IRTP (Mixed Mode) and IRTP (Migration Mode) were also provided with LSG fund (see para. 3.20).

Additional resources provided to public sector ordinary schools

3.22 Under the IRTP, the number of additional teacher posts granted to schools is based on the number of ALAs, students with ID and students with SpLD. An analysis of the profiles of students with SEN of the 140 IRTP schools in 2016/17 revealed that these schools had a total number of 3,792 Tier-2 and Tier-3 students with SEN other than ID and SpLD. These students were not the target students of the IRTP. Of the 140 schools, 49 (35%) each had 30 or more such students (see Tables 9 and 10). Resources provided to a school may not be adequate if the schools had many such students. According to the EDB, schools under the IRTP have been encouraged to switch to the modes of adopting the LSG, but the response is far from satisfactory. The EDB needs to take measures to address the concerns of the schools with a view to speeding up their switch from the IRTP to the LSG.

Table 9

**Number of Tier-2 and Tier-3 students with SEN other than ID and SpLD
in the 140 IRTP schools by SEN type
(2016/17)**

SEN type	No. of students	Percentage
ASD	1,571	41.4%
AD/HD	1,355	35.7%
SLI	781	20.6%
PD	46	1.2%
HI	29	0.8%
VI	10	0.3%
Total	3,792	100.0%

Source: Audit analysis of EDB records

Additional resources provided to public sector ordinary schools

Table 10

Number of Tier-2 and Tier-3 students with SEN other than ID and SpLD
in the 140 IRTP schools
(2016/17)

No. of students	No. of schools	Percentage
1 to 9	5	3.6%
10 to 19	44	31.4%
20 to 29	42	30.0%
30 to 39	24	17.1%
40 to 49	15	10.7%
50 to 72	10	7.2%
Total	140	100.0%

Source: *Audit analysis of EDB records*

Audit recommendation

3.23 Audit has *recommended* that the Secretary for Education should take measures to address the concerns of the schools with a view to speeding up their switch from the IRTP to the LSG.

Response from the Government

3.24 The Secretary for Education agrees with the audit recommendation. He has said that:

- (a) the EDB has conducted several consultation sessions with schools operating the IRTP in January 2018 to gauge their views on possible improvement areas. They in general acknowledged the benefits of using the LSG but showed concern about the stability of the teaching force in school should they opt to change from the IRTP to the LSG; and
- (b) the EDB would consider re-structuring the additional resources provided for all public sector ordinary schools under the LSG, the IRTP and the

Additional resources provided to public sector ordinary schools

Integrated Education Programme so that the stability of schools' teaching force could be strengthened while the flexibility of using resources could be maintained. The re-structuring of resources should also help address the challenges faced by those schools with a high concentration of students with SEN but with the LSG capped at the ceiling.

Performance management

Need to review school year-end self-evaluation on catering for students with SEN

3.25 According to the EDB's IE Operation Guide, at the end of every school year, each public sector ordinary school is required to:

- (a) review the student progress and collect the comments and suggestions of parents on the school support for the students with SEN. Schools may gather and compare the students' overall performance and review the effectiveness of all support measures so as to formulate the support mode for the next year; and
- (b) conduct reviews on the school's implementation of the Whole School Approach to integrated education (Note 9). Each school is required to complete a school year-end self-evaluation form, which should include the following items:
 - (i) the progress of the school on catering for students with SEN, measured in three aspects, namely inclusive culture, inclusive policies, and inclusive practices. For the sub-items named under each aspect, the school can rank its performance on each sub-item

Note 9: *Under the Whole School Approach, all staff of the school are responsible to cater for the needs of all students. Characteristics of the Whole School Approach include: (a) school curriculum can be adapted and/or expanded to cater for different needs; (b) diversified teaching techniques and assistive equipment are used to cater for students' diverse learning needs; (c) learning groups, peer tutoring and circles of friends are strategically organised; (d) specialists collaborate with teachers in improving the learning environment; and (e) assessment methods are adapted to facilitate students' demonstration of their learning outcome.*

Additional resources provided to public sector ordinary schools

by four scales (i.e. “highly satisfactory”, “satisfactory”, “acceptable”, and “need improvement”); and

- (ii) based on the review of the student progress conducted by the school in (a) above, summarise the performance of students with SEN in three aspects, namely students’ social adjustment, learning performance, and learning attitude or motivation. For each sub-item named under each aspect, the school can rank the students’ performance by three scales (i.e. “showing significant improvement”, “showing some improvement”, and “no improvement”).

Appendix B shows a sample of the school year-end self-evaluation form.

3.26 Audit examined the EDB’s summary on the self-evaluation results of all public sector ordinary primary and secondary schools for three years from 2014/15 to 2016/17 (see Appendix C). Audit noted that while the majority of schools had rated their progress on catering for students with SEN as “satisfactory” or “highly satisfactory”, notable number of students with SEN had been rated as showing “no improvement”. For instance, in 2016/17:

- (a) ***Progress of schools on catering for students with SEN.*** 88% to 99% of the schools rated themselves “satisfactory” or “highly satisfactory” in the three aspects (i.e. inclusive culture, inclusive policies, and inclusive practices) for their progress on catering for students with SEN; and
- (b) ***Performance of students with SEN.*** 20% to 31% of students with SEN were rated as showing “no improvement” in the three related aspects (i.e. social adjustment, learning performance, and learning attitude or motivation).

3.27 In response to Audit’s enquiry, the EDB commented that:

- (a) the school year-end self-evaluation form is for school’s self-evaluation on integrated education. The first part is to guide schools to self-evaluate their inclusive culture, inclusive policies and inclusive practices. As regards the second part, schools fill in the data for the performance of students with

Additional resources provided to public sector ordinary schools

SEN premised upon the data collected from the evaluation form for individual students;

- (b) there is no direct and positive correlation between the two parts of the year-end evaluation (i.e. progress of school on catering for students with SEN and performance of students with SEN). It is feasible that a school does well in the aspects in the first part while students show less significant improvement in the second part in spite of the good inclusive culture of a school; and
- (c) under the existing evaluation mechanism, schools would, upon evaluation via this form or other means, review support measures for students with SEN. The EDB staff would, during school visits, discuss with schools their review and give advice as appropriate.

3.28 According to the EDB's IE Operation Guide, schools may gather and compare the students' overall performance and review the effectiveness of all support measures so as to formulate the support mode for the next year (see para. 3.25(a)). Audit considers that the EDB needs to review the school year-end self-evaluation with a view to better understand the challenges and achievement of the support measures. For example, the EDB should evaluate whether the aspects used to measure schools' progress and students' performance are sufficiently comprehensive and correlative.

Audit recommendation

3.29 **Audit has recommended that the Secretary for Education should review the existing mechanism for analysing the school year-end self-evaluation with a view to better understand the challenges and achievements of the support measures.**

Response from the Government

3.30 The Secretary for Education agrees with the audit recommendation. He has said that the EDB will review the existing mechanism for analysing the school year-end self-evaluation results to better understand the achievements of the support measures. The review could include possible enhancement of SEMIS to

systematically analyse the data collected, which would in turn provide evidence for professional staff of the EDB to provide more focused advice and support to schools.

SENCO

3.31 In 2014, the Subcommittee on Integrated Education under the Legislative Council Panel on Education reviewed the resources and support provided to schools for implementation of integrated education. In September 2014, the Subcommittee issued its report on integrated education. In consideration of the heavy workload of frontline teachers in providing support to students with SEN, the Subcommittee recommended in its report that the EDB should implement a pilot project by creating a SENCO post in schools to steer and coordinate services and support for students with SEN. In 2015/16, the Community Care Fund launched a three-year Pilot Project on Special Educational Needs Coordinators (Pilot Project) to provide a cash grant of about \$220 million to ordinary schools with relatively more students with SEN to enable them to designate a teacher for coordinating the support measures for students with SEN. To be eligible to participate in the Pilot Project, the number of financially-needy students in the school should account for at least 55% of the total number of students, and the school should have at least 50 students with SEN in need of Tier-2 or Tier-3 support. In 2015/16, 124 (65 secondary schools and 59 primary schools) of the 844 public sector ordinary schools participated in the Pilot Project.

3.32 In October 2017, the Chief Executive of the Hong Kong Special Administrative Region announced that in phases over a three-year period (2017/18 to 2019/20), the Government would regularise the Pilot Project. The EDB will provide each public sector ordinary primary school and secondary school with an additional teaching post to facilitate school's assignment of a designated teacher to take up the roles of SENCO to support integrated education. A SENCO is required to lead the Student Support Team in performing duties including:

- (a) strategically plan, implement, monitor, review and evaluate various support measures for students with SEN and the resource deployment;
- (b) promote early identification and early intervention for students with SEN;

Additional resources provided to public sector ordinary schools

- (c) collaborate with other teachers/functional teams to devise support programmes, curriculum and teaching adaptations, and special examination and assessment arrangements;
- (d) guide fellow teachers to make use of effective support strategies to enhance the learning effectiveness of students with SEN;
- (e) collaborate with the Guidance Team to cater for the learning needs of students with MI;
- (f) enhance home-school co-operation and work with parents to support students with SEN;
- (g) review the special education training needs and profiles of teachers in the school, arrange teachers to receive relevant training, and plan and organise school-based professional development activities; and
- (h) strengthen external liaison with parties such as professionals, community resource providers and parents.

3.33 The EDB stipulated that schools should ensure that 50% to 70% of the SENCO's time would be spent on performing duties relating to the support of students with SEN, with the remaining time spent on classroom teaching. The SENCO should have:

- (a) at least three years' experience in teaching and implementing integrated education; and
- (b) completed the Basic, Advanced and Thematic (BAT) Courses on catering for students with SEN (see para. 4.3 for details).

The EDB advises new SENCOs who have not yet received training in special education to complete the training as soon as possible, preferably within the first year of their assumption of the role.

Additional resources provided to public sector ordinary schools

3.34 In 2017/18, only 244 schools were each provided with a post for SENCO. According to the EDB, the SENCO provision would be extended to about another 35% of schools in the second year (i.e. 2018/19). By 2019/20, when the provision of SENCO is extended to the remaining schools, all public sector ordinary primary and secondary schools would each have a SENCO. The annual recurrent expenditure would amount to about \$550 million in financial year 2021-22.

Ratio of SENCO to students with SEN varies among schools

3.35 Audit analysed the distribution of students with SEN among schools in 2016/17 and noted that the number of students with SEN among schools varied. For example, in 2016/17, 469 (55.6%) of the 844 schools each had fewer than 50 Tier-2 and Tier-3 students with SEN while 45 (5.3%) schools each had 100 or more such students (see Table 11).

Table 11

**Number of Tier-2 and Tier-3 students with SEN per school
(2016/17)**

No. of Tier-2 and Tier-3 students with SEN	No. of schools
0	3
1 to 24	206
25 to 49	260
50 to 99	330
100 to 149	40
Over 150	5
Total	844

Source: Audit analysis of EDB records

Additional resources provided to public sector ordinary schools

3.36 Under the SENCO provision, there would be one SENCO in each public sector ordinary school. SENCOs would lead and work collaboratively with the Student Support Team to provide support for students with SEN under the Whole School Approach. Table 11 shows that in 206 schools, one SENCO has to lead the Student Support Team to work with 1 to 24 students, while in 5 schools, one SENCO has to lead the Student Support Team to work with over 150 students. As the number of students with SEN is not evenly distributed among schools, SENCOs at different schools would have very different workloads. Three schools had no Tier-2 and Tier-3 students with SEN in 2016/17. Audit noted that other resources provided by the EDB such as the LSG and the SBEPs have taken into account the number of students with SEN. The EDB needs to take measures to address the large disparity in the ratio of SENCO to students with SEN among different schools.

Some SENCOs have not yet completed the BAT Courses or holding equivalent qualifications

3.37 As at January 2018, 56 (23%) of the 244 SENCOs were still attending the required BAT Courses (see para. 3.33(b)) on supporting students with SEN arising from the SENCO provision initiative debuted in 2017/18. SENCOs yet to complete the BAT Courses are required to complete the Courses in the first year of their assumption of the role. All SENCOs were still under training, be it the SENCO training provided by the SENCO training expert and/or the BAT Courses. In 2018/19, another 35% of the schools will have to designate a teacher as SENCO and in 2019/20, all public sector ordinary primary schools and secondary schools will each have a SENCO. The EDB needs to take measures to increase the number of teachers having completed the BAT Courses to stand ready to serve as SENCOs.

Need to strengthen SENCOs' training on SEN of students with MI

3.38 With effect from 2017/18, the EDB has included MI as a type of SEN. To raise teachers' concerns on mental health so as to enhance schools' capacity to identify and support students with mental health needs, the EDB commenced a professional development programme on mental health in 2017/18. The programme includes elementary training for teachers at large and in-depth training for designated teachers who are tasked with the related responsibilities, such as members of school's Guidance Team.

Additional resources provided to public sector ordinary schools

3.39 One of the duties of SENCOs was to collaborate with other staff in the school to cater for the learning needs of students with MI by giving input from the perspectives of teaching and learning as well as resource deployment, and to strengthen mental health education. On the other hand, the Guidance Team is to review the developmental needs of students in a comprehensive manner, devise overall plans for guidance services, provide individual/group intervention or referral services for students with emotional, social and behavioural difficulties, including those with MI. According to the EDB, the roles of SENCOs and Guidance Team in supporting students with MI differ and they need to work in collaboration. The Guidance Team would need to continue to take the lead in supporting students with MI, which is the existing practice in school.

3.40 According to the EDB, the SENCO training has included the topic of “Social Emotional Mental Health”. Seminars and talks on supporting students with MI are organised with a view to equipping SENCOs to discharge the said duty more effectively. Nonetheless, Audit noted that SENCOs are required to complete the BAT Courses on supporting students with SEN but the contents of the Courses do not specifically cover the needs of students with MI (Note 10). The EDB needs to offer more training to SENCOs to further strengthen their knowledge on the needs of students with MI.

Audit recommendations

- 3.41 **Audit has recommended that the Secretary for Education should:**
- (a) **take measures to address the large disparity in the ratio of SENCO to students with SEN among different schools;**
 - (b) **take measures to increase the number of teachers having completed the BAT Courses to stand ready to serve as SENCOs; and**
 - (c) **take further measures to strengthen the training and knowledge of SENCOs on the needs of students with MI.**

Note 10: *For example, the Thematic Courses are grouped under three categories, focusing specifically on the needs of eight types of students with SEN except for students with MI (see para. 4.3(c)).*

Response from the Government

3.42 The Secretary for Education agrees with the audit recommendations. He has said that:

- (a) the EDB will study the consultant's evaluation report on the Pilot Project to be published in late 2018 and consider how the implementation of the Whole School Approach to integrated education in schools with various number of students with SEN could be facilitated by the provision of SENCOs;
- (b) the EDB will continue to encourage schools to plan and nominate teachers to attend the BAT Courses more systematically so that more teachers could be ready to serve as SENCOs; and
- (c) the EDB will enrich the element on supporting students with MI in the SENCO training appropriately.

PART 4: TEACHER TRAINING AND PROFESSIONAL SUPPORT

4.1 This PART examines the management of teacher training and professional support provided by the EDB. Audit found room for improvement in the following areas:

- (a) teacher professional development framework on integrated education (paras. 4.2 to 4.7); and
- (b) School-based Educational Psychology Service (paras. 4.8 to 4.19).

Teacher professional development framework on integrated education

4.2 In 2007/08, the EDB launched a teacher professional development framework on integrated education to tie in with the 3-Tier Intervention Model and to enhance the professional capacity of teachers in catering for students with SEN. Under the framework, BAT Courses (see para. 3.33(b)) are conducted for serving teachers and training targets are set for schools with a view to enhancing the capacity of their teachers in catering for students with SEN.

4.3 The contents of the BAT Courses are as follows:

- (a) ***Basic Course on catering for diverse learning needs.*** This is a 30-hour course consisting of principles, theories and practices of teaching strategies, curriculum and assessment accommodations to cater for diverse learning needs. It aims at helping teachers better grasp the appropriate strategies and skills to provide Tier-1 support and to some extent, Tier-2 support of the 3-Tier Intervention Model for students with SEN;

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- (b) *Advanced Course on catering for diverse learning needs.* This is a 102-hour course consisting of a core module (including an attachment programme), elective modules and a school-based project for teachers to put the support strategies into practice. The Course aims at further strengthening teachers' professional capacity in providing Tier-2 support for students with SEN; and

- (c) *Thematic Courses on supporting students with SEN.* The Thematic Courses aim at providing in-depth training for teachers to help them acquire the knowledge and skills in catering for students with SEN who require Tier-3 support. The Courses will be grouped according to the educational needs of students under three categories. One or more Thematic Course(s) with a duration ranging from 90 to 120 hours will be offered under each category. The three categories are:
 - (i) *Cognition and learning needs.* This category focuses on the needs of students with SpLD or ID;

 - (ii) *Behavioural, emotional and social development needs.* This category focuses on the needs of students with ASD or AD/HD; and

 - (iii) *Sensory, communication and physical needs.* This category focuses on the needs of students with PD, VI, HI or SLI.

Starting from 2017/18, MI has been included as a type of SEN. Since then, the EDB has conducted a professional development programme for mental health “Elementary and In-depth Courses on Mental Health Promotion at Schools and Support Students with Mental Health Needs” to raise teachers’ concerns on mental health and to enhance school’s capacity to identify and support students with mental health needs.

Need to encourage schools to meet training targets

4.4 Since the launch of the teacher professional development framework on integrated education in 2007/08, the EDB has launched three cycles of BAT Courses (from 2007/08 to 2011/12, from 2012/13 to 2014/15 and from 2015/16 to 2019/20 respectively), with training targets set for each school to attain:

Teacher training and professional support

- (a) **First cycle.** The training targets set for each public sector ordinary school to achieve by 2011/12 were:
- (i) at least 10% of teachers should complete the Basic Course;
 - (ii) at least three teachers should complete the Advanced Course; and
 - (iii) at least one Chinese language teacher and one English language teacher should complete the Thematic Course on SpLD and at least one teacher should complete the related Thematic Course to cater for other types of students with SEN;
- (b) **Second cycle.** The training targets set for each public sector ordinary school to achieve by 2014/15 were:
- (i) at least 10% to 15% of teachers should complete the Basic Course;
 - (ii) at least three to six teachers should complete the Advanced Course; and
 - (iii) at least three to six teachers should complete the Thematic Courses (with at least one teacher completing the course(s) under each category as far as possible); and
- (c) **Third cycle.** The training targets set for each public sector ordinary school to achieve by 2019/20 are:
- (i) at least 15% to 25% of teachers will have completed the Basic Course;
 - (ii) at least six to nine teachers will have completed the Advanced Course; and
 - (iii) at least six to nine teachers will have completed the Thematic Courses (with at least one teacher completing the course(s) under each category as far as possible).

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4.5 Audit examined the attainment of BAT Courses training targets by all 844 public sector ordinary schools in the second and the third cycles based on the training position of schools in the end of 2016/17 (Note 11). Audit found that:

- (a) of the 844 schools, 37 (4%), 83 (10%) and 47 (6%) did not meet the training targets of the Basic Course, the Advanced Course and the Thematic Courses respectively applicable for the second cycle from 2012/13 to 2014/15. Of the 844 schools, 219 (26%), 572 (68%) and 326 (39%) schools did not meet the training targets of the Basic Course, the Advanced Course and the Thematic Courses respectively set for the third cycle from 2015/16 to 2019/20 (see Table 12); and

Note 11: *At the end of the first cycle (i.e. 2011/12), of the 857 schools, 277 (32.3%), 259 (30.2%) and 748 (87.3%) did not meet the training targets of the Basic Course, the Advanced Course and the Thematic Courses respectively. At the end of the second cycle (i.e. 2014/15), of the 847 schools, 97 (11.5%), 111 (13.1%) and 77 (9.1%) did not meet the training targets of the Basic Course, the Advanced Course and the Thematic Courses respectively.*

Table 12

**Attainment of BAT Courses training targets by schools
in the second and third training cycles
(training position of schools in the end of 2016/17)**

Attainment	Number of schools (percentage)		
	Basic Course	Advanced Course	Thematic Courses
<i>Second cycle (2012/13 to 2014/15)</i>			
Not meeting target	37 (4%)	83 (10%)	47 (6%)
Meeting target	807 (96%)	761 (90%)	797 (94%)
Total	844 (100%)	844 (100%)	844 (100%)
<i>Third cycle (2015/16 to 2019/20)</i>			
Not meeting target	219 (26%)	572 (68%)	326 (39%)
Meeting target	625 (74%)	272 (32%)	518 (61%)
Total	844 (100%)	844 (100%)	844 (100%)

Source: Audit analysis of EDB records

- (b) of the 844 schools, there were 11 schools that did not meet any of the training targets for the BAT Courses applicable for the second cycle and the third cycle. As at September 2016, there were 301 students with SEN in these 11 schools.

Audit recommendation

4.6 **Audit has recommended that the Secretary for Education should take measures to encourage schools to meet the BAT Courses training targets.**

Response from the Government

4.7 The Secretary for Education agrees with the audit recommendation. He has said that the EDB will:

- (a) step up monitoring the progress in target attainment of the schools through various means, such as school visits and reminders to individual schools concerned;
- (b) inform public sector ordinary schools of their teacher training situation on an annual basis so as to facilitate their school-based planning and review; and
- (c) evaluate the progress in target attainment of the schools.

School-based Educational Psychology Service

4.8 The SBEPS is an integrated educational psychology service provided to public sector ordinary primary schools and secondary schools aiming at enhancing schools' capacity to cater for students' diverse educational needs. The SBEPS is provided to schools either by the EDB direct or the school sponsoring bodies (SSBs). In 2016/17, there were 11 SSBs that provided the SBEPS. The SBEPS is delivered by qualified EPs through regular school visits. The EPs render remedial, preventive and developmental services at the school system level, the teacher support level and the student support level. Examples of the services provided by EPs include:

- (a) at school system level, EPs support schools in developing school policies and mechanism to meet the diverse educational needs of students;
- (b) at teacher support level, EPs support teachers in early identification of at-risk students, and planning and implementation of intervention measures of these students; and
- (c) at student support level, EPs provide psycho-educational assessment, counselling and guidance services to students, as well as promote home-school collaboration and deliver parent training programmes.

Teacher training and professional support

4.9 In 2016/17, to enhance support for schools to cater for students with SEN, the EDB extended the provision of SBEPs to cover all 844 public sector ordinary primary schools and secondary schools. The expenditure on the SBEPs was \$146.4 million comprising salaries and benefits of the EPs hired by the EDB and the grants given to the SSBs for operation of the SBEPs. The SBEPs was provided by 134 EPs comprising 65 (49%) EPs from the EDB and 69 (51%) from the SSBs.

4.10 The Chief Executive announced in the 2016 Policy Address that the Government would further enhance the SBEPs by progressively improving the ratio of EP to school for schools with a large number of students with SEN. From 2016/17 onwards, the EDB had provided the enhanced SBEPs to schools with a large number of students with SEN by phases. According to the EDB:

- (a) apart from helping the schools strengthen their preventive and developmental work, EPs will pay more frequent visits (not less than 30 days per school year) to each school receiving the enhanced SBEPs;
- (b) in selecting schools to receive the enhanced SBEPs, the EDB will accord priority to schools based on various factors such as the number of students with SEN and its proportion to the student population of the school, and the number of students requiring individual support; and
- (c) there is limited supply of EPs in Hong Kong. The shortage of manpower poses difficulties in catering for the increase of schools to be served by the enhanced SBEPs.

Need to extend the enhanced SBEPs

4.11 In 2016/17, 381 of the 844 schools applied for the enhanced SBEPs. Only 80 (21%) of 381 schools succeeded in obtaining the enhanced SBEPs. Thirty schools started receiving the enhanced SBEPs in 2016/17 and 50 schools in 2017/18. The remaining 764 (91%) schools of the 844 schools were not provided with the enhanced SBEPs and continued to receive regular SBEPs. Among the 764 schools not provided with the enhanced SBEPs, 74 (10%) schools each had more than 80 students with SEN in 2016/17 (see Table 13). The EDB needs to extend the enhanced SBEPs to cover more schools in order to better support them in meeting the needs of students with SEN as soon as practicable.

Teacher training and professional support

Table 13

Analysis of number of students with SEN in public sector ordinary schools
(2016/17)

No. of students with SEN	Total no. of schools	No. of schools provided with	
		enhanced SBEPS	regular SBEPS
1 to 40	349	1	348
41 to 80	370	28	342
81 to 120	94	26	68
121 to 160	23	17	6
161 to 200	5	5	0
201 or more	3	3	0
Total	844	80 (Note)	764

Source: *Audit analysis of EDB records*

Note: *Of the 80 schools that successfully obtained the enhanced SBEPS, 30 schools started receiving the enhanced SBEPS in 2016/17 and 50 schools in 2017/18.*

Need to rationalise SBEPS provided by EPs of the EDB and SSBs

4.12 The SBEPS is delivered by EPs through regular school visits. The EDB has stipulated in the SBEPS Guide that:

- (a) for schools receiving the enhanced SBEPS provided by EPs of the EDB or the SSBs, each school will have not less than 30 visit days from EPs per school year;
- (b) for schools receiving the regular SBEPS provided by the EDB's EPs, in general each school will have visit days from EPs ranging from 18 to 22 days per school year;

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- (c) for schools receiving the regular SBEPS provided by the SSB's EPs, each school will normally have not less than 14 visit days from EPs per school year; and
- (d) each SSB's EP will pay not less than 140 school visit days per school year (Note 12).

4.13 The objectives, nature and service scope of the SBEPS provided by the EDB direct and the SSBs are the same. There is no documentary evidence showing the justifications for the difference in the service level provided by the EPs of the EDB (in general 18 to 22 days) and the SSBs (normally 14 days). The EDB needs to rationalise the service level of the SBEPS provided by the EDB and the SSBs.

Need to step up measures to ensure that schools receive the required number of visit days by EPs

4.14 In 2016/17, of the 844 schools, 814 received the regular SBEPS (330 provided by the EDB and 484 provided by 11 SSBs) and 30 received the enhanced SBEPS. Audit examined the number of EP visit days of the 844 schools and found that:

- (a) for 27 (8%) of the 330 schools that received the regular SBEPS provided by the EDB, each received less than 18 visit days per school year (ranged from 10 to 17.5 days) specified in paragraph 4.12(b). The remaining 303 schools (92%) each received 18 or more visit days (see Table 14);

Note 12: *Apart from providing the SBEPS to schools, the EDB's EPs have other duties including the monitoring and development of the SBEPS, development of SEN-specific support models and strategies, etc. Therefore, some of the EDB's EPs are not required to pay 140 school visit days per school year.*

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Table 14

**Visit days by EDB's EPs
(2016/17)**

No. of visit days	No. of schools	Percentage
10 to <12	1 (Note)	0.3%
12 to <14	0	0.0%
14 to <16	8	2.4%
16 to <18	18	5.5%
18 to <20	112	33.9%
20 to <22	159	48.2%
22 or above	32	9.7%
Total	330	100.0%

Source: Audit analysis of EDB records

Note: The number of visit days for the school was 10.

- (b) for 11 (2%) of the 484 schools that received the regular SBEPs provided by the SSBs, each received less than 14 visit days per school year (ranged from 4 to 13.5 days) specified in paragraph 4.12(c). The remaining 473 schools (98%) each received 14 or more visit days (see Table 15); and

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Table 15

**Visit days by SSB's EPs
(2016/17)**

No. of visit days	No. of schools	Percentage
1 to <11	1 (Note)	0.2%
11 to <12	3	0.6%
12 to <13	5	1.0%
13 to <14	2	0.4%
14 to <16	41	8.5%
16 to <18	71	14.7%
18 to <20	89	18.4%
20 to <22	203	41.9%
22 or above	69	14.3%
Total	484	100.0%

Source: Audit analysis of EDB records

Note: The number of visit days for the school was 4.

- (c) for 4 (13%) of the 30 schools that received the enhanced SBEPS, each received less than 30 visit days per school year (ranged from 27 to 29 days) specified in paragraph 4.12(a). The remaining 26 schools (87%) each received 30 or more visit days.

As the numbers of visit days were less than required, the educational psychology service provided to the schools might have been affected. As the EDB has an established mechanism to collect the number of visit days by EPs, Audit considers that the EDB needs to make use of the information and step up measures to ensure that schools receive the required number of visit days by EPs.

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Need to strengthen monitoring of SBEPs provided by SSBs

4.15 For the SBEPs provided by the SSBs, the EDB enters into a service agreement with each SSB. According to the service agreement, the SSB is required to:

- (a) identify a school under its sponsorship to be the “base school” to handle the employment matters of the EP as the school’s non-teaching specialist staff; and
- (b) comply with the requirements as detailed in the SBEPs Guide.

4.16 To meet the operational expenses of the SBEPs provided by the SSBs, the EDB provides every base school with the SBEPs Grant on a recurrent basis. According to the SBEPs Guide:

- (a) the base school shall ensure this Grant is used for SBEPs-related expenditures, including the hiring of professional supervision for the EP (i.e. the EP supervisor) (Note 13); and
- (b) the EP supervisor shall aim to advise, facilitate and advance the development of the SBEPs under the SSB concerned in general and the practice of its individual EPs in particular. The EP supervisor:
 - (i) must be an experienced EP (generally with six years or more of EP experience); and
 - (ii) is required to provide about 130 hours of regular professional supervision and support to each EP under his supervision each year.

Note 13: *The amount of the SBEPs Grant is subject to adjustment according to the Composite Consumer Price Index. For 2017/18, the amount of each Grant was \$102,100. According to the EDB, about 60% of the Grant was used for the hiring of EP supervisors.*

4.17 Audit identified room for improvement in the EDB's monitoring of the SBEPS provided by the SSBs, as follows:

- (a) ***Need to strengthen monitoring of service provided by EP supervisors.*** In 2016/17, each of the 11 SSBs hired an EP supervisor to provide professional supervision to their EPs. The SBEPS Guide has set out the qualification and work requirements of EP supervisors. However, the EDB has not required the SSBs or their base schools to submit supporting documents to validate the qualifications of EP supervisors. In addition, the EP supervisors are employed by the SSBs through hire of service. Audit noted that while there were regular meetings between the EDB and the EP supervisors, the EDB had not set up a robust mechanism to monitor the service provided by EP supervisors. For instance, the EDB had not defined and monitored the scope and effectiveness of supervision and the number of supervision and support hours given by the EP supervisors to the EPs; and

- (b) ***Employment terms for and requirements on part-time EPs not stipulated in SBEPS Guide.*** In 2016/17, the SSBs hired 15 part-time EPs. Audit noted that the SBEPS Guide did not stipulate:
 - (i) the terms of employment for part-time EPs; and

 - (ii) the requirements on part-time EPs, such as the qualification and work experience requirements.

Audit considers that the EDB needs to step up its monitoring of the SBEPS provided by the SSBs by reviewing the mode of supervision, as well as requiring the SSBs or their base schools to provide documentary evidence on the qualifications of their EP supervisors. Audit also considers that the EDB needs to set out employment terms for and requirements on part-time EPs.

Audit recommendations

- 4.18 **Audit has *recommended* that the Secretary for Education should:**
- (a) **extend the enhanced SBEPS to cover more schools in order to better support them in meeting the needs of students with SEN as soon as practicable;**
 - (b) **rationalise the service level of the SBEPS provided by the EDB and the SSBs;**
 - (c) **step up measures to ensure that schools receive the required number of visit days by EPs; and**
 - (d) **step up its monitoring of the SBEPS provided by the SSBs, such as:**
 - (i) **reviewing the mode of supervision and monitoring of the supervision provided by EP supervisors;**
 - (ii) **requiring the SSBs or their base schools to provide documentary evidence on the qualifications of their EP supervisors; and**
 - (iii) **setting out employment terms for and requirements on part-time EPs.**

Response from the Government

4.19 The Secretary for Education agrees with the audit recommendations. He has said that:

- (a) the EDB has noted the schools' demand for more EP service for better support in meeting the needs of students with diverse educational needs, including students with SEN. The EDB will seek additional resources to extend the enhanced SBEPS provision to more schools, in particular schools with a great number of students with SEN. To achieve this, the EDB will also liaise with the local tertiary institutions to increase the EP training places in order to increase the supply of EPs;

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- (b) since the SBEPS provided by the EDB and the SSBs, including the requirements on school visit days, should be basically the same, the EDB will revisit the SBEPS Guide to align the requirements on school visit days for schools served by the EDB and the SSBs;

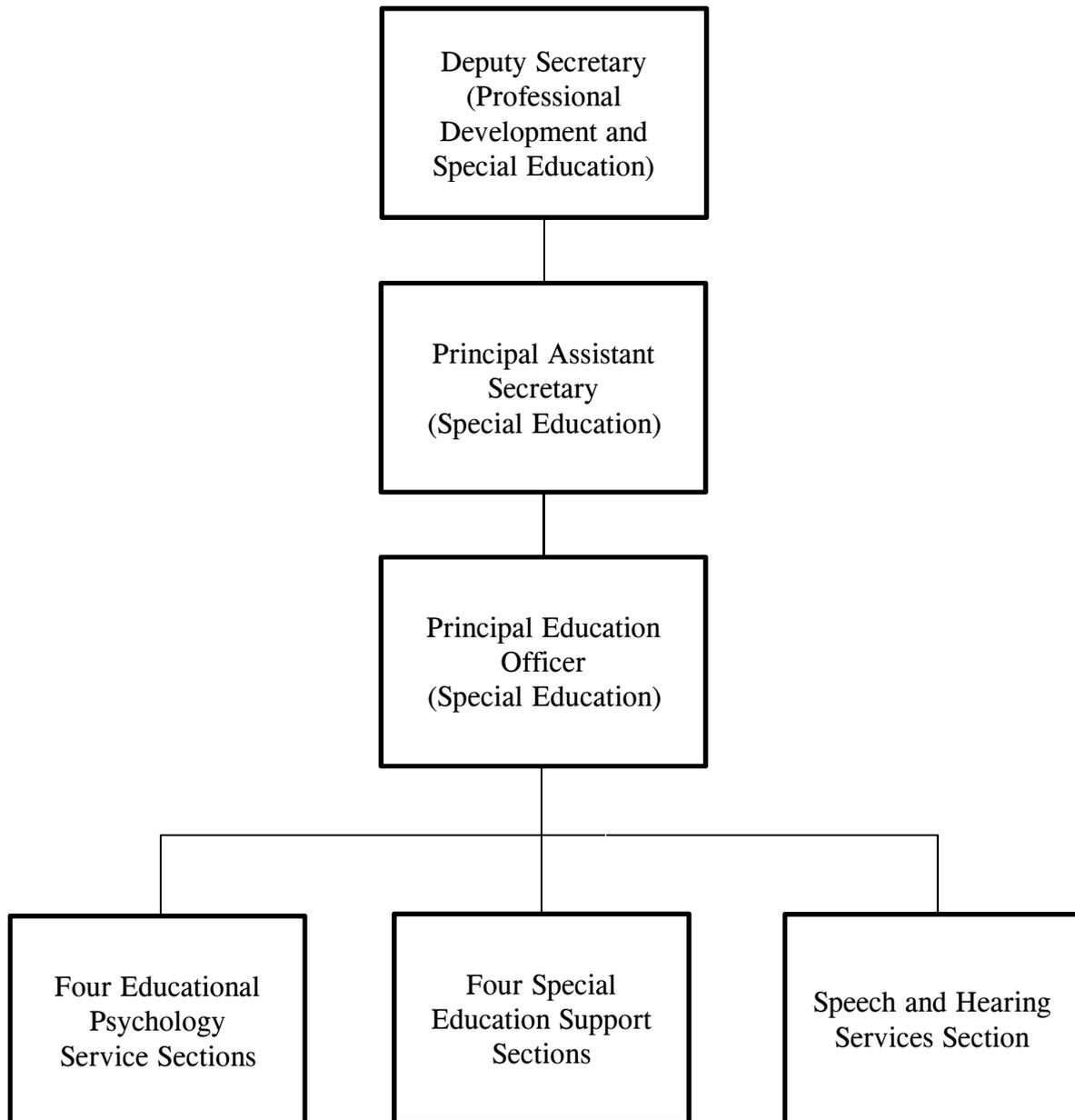
- (c) under the current monitoring system, the EDB requires EPs to submit information including the number of visit days paid to each school. In 2016/17, over 95% of schools that received the SBEPS were given visit days as stipulated on the SBEPS Guide. The major reasons for EPs paying less than the required number of days were sick leave and maternity/paternity leave. The EDB will step up measures to monitor the school visit days so that such situation can be identified and followed up in a timely manner; and

- (d) the EDB will step up the monitoring of the SBEPS, such as:
 - (i) stepping up the requirements for SSBs to collect the qualifications of the EP supervisors they hire, and data on the effectiveness of the supervision services to facilitate review of the supervision;

 - (ii) reviewing the mode of supervision to ensure the effectiveness of the SBEPS; and

 - (iii) revisiting the relevant guidelines and documents to review the need for setting out of the employment terms for and requirements on part-time EPs, and make the necessary revisions as and when appropriate.

**EDB's Special Education Division:
Organisation chart (extract)
(31 January 2018)**



Source: EDB records

A sample of the school year-end self-evaluation form (extract)

Aspect	Sub-item
<i>For schools</i>	
Inclusive culture	<ul style="list-style-type: none"> (a) Staff accept students with SEN and are committed to supporting them. (b) Staff share the concept of the Whole School Approach and support each other in the implementation process. (c) Students accept each other’s uniqueness and individual differences. (d) Learning activities are arranged in accordance with students’ abilities. (e) Staff generally agree that everyone is equal and has the right to participate in all school activities. (f) There is good home-school collaboration and frequent communication between parents and teachers about the student progress.
Inclusive policies	<ul style="list-style-type: none"> (a) The school management establishes policies to cater for students with SEN, and review the objectives and effectiveness regularly. (b) Continuing professional development on special education for staff is strategically planned. (c) With reference to the “Catering for Student Differences — Indicators for Inclusion”, a school development plan and contents of school self-evaluation are laid down according to the developmental needs of the school. (d) Schools resources are pooled and deployed flexibly to provide appropriate support to students.

Appendix B
(Cont'd)
(para. 3.25 refers)

Aspect	Sub-item
Inclusive practices	<p>(a) Teachers can early identify students' SEN through teachers' classroom teaching and the use of assessment tools provided by the EDB.</p> <p>(b) A Student Support Team or its equivalent has been established to follow up and coordinate support measures for students with SEN.</p> <p>(c) A SEN Register has been established and the effectiveness of support measures is periodically reviewed.</p> <p>(d) The school has improved the accessibility of its premises and assistive technology to cater for students with different needs.</p> <p>(e) Teaching skills are improved through professional exchange.</p> <p>(f) Diverse teaching strategies (such as collaborative teaching and co-operative learning) are used to facilitate students' learning.</p> <p>(g) Various classroom activities are conducted in accordance with students' abilities to facilitate the development of their potentials.</p> <p>(h) Various curriculum accommodation strategies are implemented to cater for students' needs.</p> <p>(i) Individual Education Plans are used to cater for those students in need of individual intensive support.</p> <p>(j) Peer support programmes provide learning support and facilitate the cultivation of an inclusive culture.</p>
<i>For students with SEN</i>	
Social adjustment	<p>(a) Compliance with the school regulations</p> <p>(b) Good relationship with peers</p> <p>(c) Good relationship with teachers</p> <p>(d) Participation in classroom or school activities</p> <p>(e) Self-esteem</p>

Appendix B
 (Cont'd)
 (para. 3.25 refers)

Aspect	Sub-item
Learning Performance	(a) Reading skills (b) Numeracy skills (c) Writing skills (d) Academic performance (e) Development of multiple intelligence
Learning attitude or motivation	(a) Completing the task within time limits (b) Working independently (c) Adjusting smoothly to the changes in the daily school routines

Source: EDB records

**Summary on self-evaluation results of primary schools and secondary schools
(2014/15 to 2016/17)**

Aspect	2014/15	2015/16	2016/17
<i>Primary schools</i>			
<i>Percentages of schools rating themselves at the levels of “highly satisfactory” or “satisfactory”</i>			
Inclusive culture	98%	99%	99%
Inclusive policies	96%	96%	96%
Inclusive practices	95%	96%	96%
<i>Percentages of schools rating the performance of students with SEN at the level of “no improvement”</i>			
Social adjustment	19%	19%	20%
Learning performance	30%	30%	31%
Learning attitude or motivation	27%	26%	27%
<i>Secondary schools</i>			
<i>Percentages of schools rating themselves at the levels of “highly satisfactory” or “satisfactory”</i>			
Inclusive culture	94%	94%	93%
Inclusive policies	92%	93%	92%
Inclusive practices	87%	88%	88%
<i>Percentages of schools rating the performance of students with SEN at the level of “no improvement”</i>			
Social adjustment	23%	22%	23%
Learning performance	32%	31%	31%
Learning attitude or motivation	26%	26%	26%

Source: Audit analysis of EDB records

Remarks: The percentage of each aspect was computed by Audit by taking simple average of the percentage of every sub-item under that particular aspect.

Acronyms and abbreviations

AD/HD	Attention Deficit/Hyperactivity Disorder
ALAs	Academic Low Achievers
ASD	Autism Spectrum Disorders
Audit	Audit Commission
BAT	Basic, Advanced and Thematic
DH	Department of Health
EDB	Education Bureau
EII Programme	Early Identification and Intervention Programme for Primary One Students with Learning Difficulties
EP	Educational Psychologist
HA	Hospital Authority
HI	Hearing Impairment
ID	Intellectual Disability
IE Operation Guide	Operation Guide on the Whole School Approach to Integrated Education
IRTP	Intensive Remedial Teaching Programme
LSG	Learning Support Grant
MI	Mental Illness
OCT	Observation Checklist for Teachers
PD	Physical Disability
Pilot Project	Pilot Project on Special Educational Needs Coordinators
SBEPS	School-based Educational Psychology Service
SEMIS	Special Education Management Information System
SEN	Special Educational Needs
SENCO	Special Educational Needs Coordinator
SLI	Speech and Language Impairment
SpLD	Specific Learning Difficulties
SSBs	School sponsoring bodies
VI	Visual Impairment

CHAPTER 4

**Development Bureau
Highways Department
Lands Department**

**Government's efforts in
managing excavation works on public roads**

**Audit Commission
Hong Kong
3 April 2018**

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. 70 of the Director of Audit contains 8 Chapters which are available on our website at <http://www.aud.gov.hk>

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GOVERNMENT'S EFFORTS IN MANAGING EXCAVATION WORKS ON PUBLIC ROADS

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GOVERNMENT'S EFFORTS IN MANAGING EXCAVATION WORKS ON PUBLIC ROADS

Executive Summary

1. Apart from carrying vehicular and pedestrian traffic, most of the 2,107 kilometres of public roads in Hong Kong also provide underground space for accommodating utility services. Road works are necessary from time to time for the installation, maintenance, repair and improvement of road sections and/or the public utilities underneath. According to the Transport Advisory Committee's Report of December 2014, road works were a major cause of road traffic congestion. Under the policy directives of the Development Bureau (DEVB), the Highways Department (HyD) coordinates and controls road openings through issuing excavation permits (XPs) to the works proponents, including government works departments and other utility undertakings (UUs). According to the Land (Miscellaneous Provisions) Ordinance (LMPO — Cap. 28), a person has to obtain an XP from the HyD for making or maintaining an excavation on streets maintained by the HyD over unleased government land (hereinafter referred to as public roads) and a land licence from the Lands Department (LandsD) for installing utility facilities. As an incentive for permittees to complete their works within the approved timeframe, the Government has imposed XP fees with special charging mechanism (an administration fee of \$650 and a daily fee of \$35 plus economic cost based on the traffic impact an excavation can cause) for permit extension since April 2004. In 2016-17, XP fees of \$180 million were collected. The costs associated with the coordination and control of road openings were incorporated in the HyD's 2016-17 expenditure of \$1,433.4 million on the programme area of district and maintenance works. Of the 1,011 staff working under the programme area in December 2017, 113 staff were responsible for matters relating to administration of road opening works. The Audit Commission (Audit) has recently conducted a review of the Government's efforts in managing excavation works on public roads with a view to identifying areas for improvement.

Management and monitoring of road excavation works

2. The two Regional Offices (i.e. Urban and New Territories) of the HyD are responsible for processing and issuing XPs using a web-based Excavation Permit Management System (XPMS). In 2016, the HyD issued 21,822 XPs comprising

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8,911 normal excavation permits (NXPs — for planned openings with a diameter of 450 metres (m) or less), 10 capital works excavation permits (CWXP — for planned openings with a diameter exceeding 450 m), emergency excavation permits (EXPs) for 11,171 emergency incidents and 1,730 small-scale works excavation permits (SSWXP — for areas of excavation each not exceeding 4 square metres and length of excavation not exceeding 6 m). If a permittee of an NXP or CWXP cannot complete the works within the specified XP period, it needs to apply for an extension. Extension is not normally allowed for an EXP or SSWXP. A permittee needs to complete excavation works within 7 days for each emergency incident under an EXP, and within 24 hours for each job affecting carriageway or within 48 hours for each job not affecting carriageway under an SSWXP (paras. 1.6, 2.2 and 2.3).

3. ***Need to remind government works departments to strengthen investigation of underground conditions before applying for XPs.*** While the total number of NXPs and CWXPs decreased from 13,297 in 2010 to 8,921 in 2016, the number of XPs with extension increased by 78% from 727 in 2010 to 1,293 in 2016. As a result, the number of XPs with extension as a percentage of NXPs and CWXPs authorised increased from 5% to 14%. The average extension period also increased by 90% from 48 days to 91 days during the period. Based on an analysis of the XPMS records as of November 2017, of the 1,061 XPs issued in 2016 which were granted extensions, 517 XPs (49%) were related to government departments, 348 (33%) to other UUs and 196 (18%) to infrequent applicants (i.e. ad hoc applicants). According to the HyD, obstruction by existing underground utilities, difficult underground conditions and inclement weather are common grounds for the extension of XP period. In view of the large percentage of extended XPs involving government projects, the DEVB should remind works departments to make greater efforts to ascertain the underground conditions before applying for XPs (paras. 2.3 to 2.5).

4. ***Need to improve the coordination of road openings in close proximity.*** In processing NXP applications for proposed works, the Regional Offices would check whether there are other proposed works plans within 30 m, and if so, the concerned applicants would be requested to coordinate their works (e.g. to group the excavations using a common trench) to avoid repeated openings. The HyD in general will not issue an XP on the same road section within three months (for other applicants) or six months (for the same applicant), except for emergency cases. Audit examination revealed that the HyD had not compiled statistics on the coordination work to evaluate the effectiveness of such a measure in reducing road openings. For ungrouped excavation works at the same location, the HyD would issue an XP if an applicant revised the works schedules to include a time break of three months or more but there

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was no requirement on the applicant to provide the justifications for failing to use a common trench for the proposed works. In these cases, the concerned excavation works were only deferred without any reduction in the number of road openings. Audit also noted that of 8,909 proposed works plans requiring coordination as of November 2017, 4,093 plans (46%) had remained uncoordinated for over two years. However, the XPMS did not keep information on whether these long-outstanding plans had become obsolete or had been abandoned. Audit's sample check revealed that in some cases, the HyD had required the applicants to coordinate their proposed works with other proposed works which were unlikely to have any conflicts among them, e.g. works located outside the 30-m boundary. This might affect the efficiency of coordination work (paras. 1.8(b) and 2.7 to 2.11).

5. ***Audit Inspection Team (AIT) inspections during excavation works.*** The HyD has established an AIT under its Research and Development Division to inspect XP sites for monitoring compliance with the XP conditions by permittees and their nominated permittees. Demerit points will be assigned to a permittee for any non-compliant items and sanction will be imposed if the overall demerit point is at 4 or above (paras. 1.8(e) and 2.19). Audit examination has revealed the following areas for improvement in AIT inspections:

- (a) ***Need to improve the inspection coverage of NXP and CWXP sites.*** According to the HyD, all XPs should be subject to at least one checking after commencement of works. Audit examination of the XPs issued in 2016 revealed that the overall coverage of the AIT inspection on active permit sites up to December 2017 was only 43%. Audit understands that there may be practical difficulty to cover all EXPs and SSWXPs given the large number of active permit sites and the short duration of these sites. However, there is a need to improve inspection coverage of NXPs and CWXPs for which the excavation works generally last longer, to ensure that the XP conditions have been complied with (paras. 2.20 and 2.21); and
- (b) ***Need to enhance compliance with XP conditions.*** While the compliance rate of XP conditions from 2013 to 2016 was 98.9% in general, the four frequently observed non-compliant items (viz. no continuous barriers to fence off obstruction or excavation from pedestrian flow; minimum clear footway width not provided and maintained for pedestrians; permit not displayed; and signs not provided in accordance with the approved temporary traffic arrangement) had remained at the same level over the period. Audit noted that among the permittees, the average number of the

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non-compliant items per permit in 2017 was higher for infrequent applicants (2.68) than for government departments (0.16) and for other UUs (0.3). The HyD needs to take measures to enhance compliance with the four frequently observed non-compliant items, e.g. considering stepping up publicity efforts with a view to promoting compliance with XP conditions, especially by infrequent applicants (para. 2.22).

6. ***Checking completion of works.*** When an XP expires or upon receipt of a Completion Notice (CN), the responsible Regional Office will arrange a CN inspection within seven working days to confirm works completion and acceptance of road reinstatement. If the reinstatement does not comply with the relevant requirements/specifications, the HyD will reject the permanent reinstatement (hereinafter referred to as “rejected CN”) and request the permittee to rectify the problem (para. 2.23). Audit examination has revealed the following areas for improvement:

- (a) ***Increase in substandard reinstatement works.*** While the number of XPs authorised decreased over the years, the number of rejected CNs was generally increasing (from 5,294 in 2011 to 6,191 in 2017), indicating an increase in substandard reinstatement works carried out by contractors (para. 2.24(a));
- (b) ***Long-outstanding rectification works.*** Of the 6,779 rejected CNs pending rectification of the reinstatement works as at December 2017, 2,581 (38%) had remained outstanding for over two years. There is safety concern for road users if substandard reinstatement works cannot be rectified in a proper and timely manner (para. 2.24(b));
- (c) ***Inspections for CNs not timely conducted.*** Of the 2,019 CN cases under processing as at the end of December 2017, the CN inspections and acceptance in respect of 1,297 (64%) cases were overdue by 1 month on average (5 months for the longest overdue case) (para. 2.24(c)); and
- (d) ***Delays in submitting and processing site photographs and test reports.*** Permittees are required to submit site photographs and test reports for the HyD to determine whether the standard of their reinstatement works is up to its satisfaction. However, as of December 2017, 3,618 site photographs and 2,441 test reports had not been submitted to the HyD, of which 483 (13% of 3,618) photographs and 771 (32% of 2,441) test reports had

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been outstanding for over three years. On the other hand, of 15,626 site photographs and 7,486 test reports submitted, 4,842 (31% of 15,626) photographs and 2,523 (34% of 7,486) test reports had not been reviewed by the Regional Offices for over three years (para. 2.24(d) and (e)).

7. ***Enforcement actions.*** According to the LMPO, any person who carries out road excavations without an XP/EXP or breaches any conditions of XP/EXP shall be guilty of an offence. Since 2009, the HyD has adopted a compliance-led approach to encourage permittees to rectify non-compliance with the XP conditions promptly by issuing an advisory letter if any contravention is found by the AIT. For non-compliance with the same inspection items after an advisory letter has been issued, the AIT refers the case to the Enforcement Team (ET) for conducting an independent investigation. If sufficient evidence is collected, the ET will make recommendations to the Department of Justice for instituting prosecutions. From 2013 to 2016, of the 4,338 cases referred to the ET for enforcement actions, only 162 (4%) cases proceeded to prosecutions. According to the HyD, as many non-compliant items had been rectified before the ET's inspections and the majority of the public complaint cases turned out to be invalid, no prosecutions had been taken for the remaining 4,176 cases (paras. 2.27 and 2.28). Audit examination has revealed the following areas for improvement:

- (a) ***Need to step up enforcement actions against serious and repeated non-compliant cases.*** The AIT only referred cases of serious and repeated non-compliance with permit conditions to the ET for taking enforcement actions. The number of such cases increased from 902 in 2013 to 1,446 in 2017, indicating an increasing trend in serious and repeated non-compliant cases. However, the number of cases proceeded to prosecutions totalled 209 from January 2013 to November 2017 because the permittees had been informed of the non-compliant results before the cases were referred to the ET and the bulk of the non-compliance had been rectified before the ET's inspections. There is a need to review the referral mechanism from the AIT to the ET for conducting prompt investigations and consideration of prosecution actions against serious and repeated non-compliant cases (para. 2.29); and
- (b) ***Need to review the referral mechanism on suspected breaches of the safety-related provision of the LMPO for conducting prompt investigations by the ET.*** Under section 10T of the LMPO, any contravention of the statutory provision to protect the safety of public or

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workers when making or maintaining an excavation would be liable to a maximum fine of \$200,000. From 2015 to November 2017, the HyD had not taken any prosecution actions on 84 cases of suspected breaches of section 10T of the LMPO. Audit's sample check of 10 such cases detected by the AIT's inspections revealed that the ET could not obtain sufficient prosecution evidence because: (i) in 4 cases, the cases were referred to the ET after the permittees had notified the AIT of the completion of the rectification works; and (ii) in 5 cases, the AIT referred the suspected-breach cases to the ET through advisory letters 3 to 6 days after its inspections, and there was a time gap of 6 to 8 days between the AIT's inspections and the ET's inspections (paras. 2.31 to 2.33).

Control of underground utility installation and space occupation

8. *Problems caused by congested utilities.* As of December 2017, there were 18 major UUs (12 telecommunications UUs and 6 other UUs) installing their utility services beneath public roads, up from 10 (4 telecommunications UUs and 6 other UUs) in 1995, mainly due to the increase in the number of UUs providing fixed telecommunications services. According to the HyD's consultancy report of December 2017, there was no standard mechanism to manage space occupation by UUs underneath public roads. Ineffective underground space management might cause improper use of space, damage to existing utilities, and delays in emergency repairs and excavation works (paras. 3.2 and 3.3).

9. *Need to improve control of underground utility installation.* Audit examination has revealed the following areas for improvement:

- (a) *Non-compliance with minimum-depth requirements.* In 2011 and 2012, the HyD received over 500 complaints relating to the breach of minimum-depth requirements of the XP condition. After investigation, the HyD found that in 203 cases involving six fixed network operators, the installation works did not meet the minimum-depth requirements. Up to January 2018 (about 4 years later), 3 non-compliant cases had not been rectified (para. 3.9); and
- (b) *Need to strengthen control over alignment and disposition of underground utility installation.* In 2010, the LandsD and the HyD received complaints

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on the erection of telecommunications poles on public pavements by a UU. The HyD found that 487 poles had been erected using the SSWXP procedures inappropriately and the CNs of 180 poles had been approved by the HyD. The HyD subsequently withdrew the approvals and upon the LandsD's request, the UU removed the poles. The unauthorised works in this case suggested inadequate checking of the completed works and some control weaknesses under SSWXP (i.e. without a requirement on UUs to provide details of proposed installations). While the HyD revised the SSWXP procedures in 2011 requiring works proponents to obtain the HyD's consent before carrying out non-standard works items (e.g. poles and other above-ground installations), there was no similar requirement for underground utility installations. According to the land licence condition, for utility installation, detailed alignment and disposition of the system in, on, over, along, across and under any public road or within any future road reserve shall be to the satisfaction of the Director of Highways. However, as shown in this case, the HyD did not check whether such alignment and disposition were up to its satisfaction. This situation is unsatisfactory as it is difficult to check the alignment and disposition of underground utility installations after reinstatement of road surface (paras. 3.11 and 3.12).

10. ***Need to improve management and control of underground space occupation.*** Both the master plan submitted by a UU upon land licence application and the road-opening plan submitted upon XP application do not show detailed records of the underground utility installations. As such, the HyD does not possess sufficient underground utility information to determine whether excavation works should be allowed. The HyD has therefore established forums to improve coordination among various government departments and UUs. As shown in paragraph 9 above, there is no assurance that the alignment and disposition of underground telecommunications systems have been installed to the satisfaction of the HyD because the Government does not maintain as-built records on such installations beneath public roads/unleased government land. While the HyD had commissioned a consultancy study in March 2013 to identify an effective system to tighten control over excavation works in areas with congested underground utilities, participating UUs found it difficult to add/modify their alignment plans and questioned the accuracy of the trial system. The HyD needs to, in collaboration with the LandsD, the DEVB and other bureaux with policy responsibilities on utilities, explore the development of an effective management and control system over underground space occupation (paras. 3.13 to 3.16).

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Exploring the use of common utility enclosures

11. *Long time taken in exploring the possible use of Common Utility Enclosures (CUEs).* The conventional approach of opening trenches in carriageways/footways for laying utility services is simple but has the disadvantages of causing disruption to vehicular/pedestrian traffic, and resulting in adverse environmental and social impacts. Internationally, a common approach to minimising the problems associated with utility provision in urban areas is to accommodate multiple utilities within a single structure beneath carriageways/footways. The different ways of housing underground utility services within single structures are collectively referred to as CUEs. Using CUEs to accommodate underground utility services has the advantage of reducing the need for road openings, thereby reducing traffic delays and nuisance to the public. The HyD's consultancy study of 2002 confirmed the technical viability of CUE though its implementation would be limited to new town development and subject to cost-and-benefit analysis. While the 2002 study recommended that some pilot schemes should be carried out in the Kai Tak Development to test and refine the implementation arrangements, only two trial CUEs were constructed in Yau Ma Tei and Chung Hom Kok in 2006. In 2011, the HyD decided not to construct trial CUEs in the Kai Tak Development because of limited benefit. The issue on the possible use of CUE was only revived in August 2017 after the publication of the Report of "Consultancy Study on Smart City Blueprint for Hong Kong" in June 2017 to support the smart city planning and development in Hong Kong. After obtaining the DEVB's policy support in August 2017, the HyD planned to conduct another consultancy study in 2018 on adopting CUEs in new development areas (paras. 4.2 to 4.4 and 4.12). Audit examination has revealed that the HyD could draw on the experience in constructing/planning trial CUE schemes to improve the installation of CUEs in new development areas:

- (a) *Low utilisation of trial CUEs and no evaluation of trial results.* The HyD had not consulted the relevant UUs on the selection of locations before constructing the two trial CUEs in 2006. While the trial CUE in Yau Ma Tei was close to the West Kowloon development area, the one in Chung Hom Kok was located in a low-density residential area. Up to January 2018, there were only two UUs utilising the trial CUE in Yau Ma Tei and one UU utilising the trial CUE in Chung Hom Kok. The HyD only planned to evaluate the trial results of the two CUEs in the 2018 consultancy study (paras. 4.5 and 4.15); and

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- (b) ***Proposed trial CUEs in Kai Tak Development not timely planned.*** While the 2002 consultancy study proposed to implement trial CUEs in the Kai Tak Development, the HyD had kept the planning of the proposed trial in abeyance until August 2009 when the Civil Engineering and Development Department (CEDD) sought the HyD's view of putting some pilot CUE facilities to trial in the Kai Tak Development. In November 2010, when the CEDD provided the HyD with a list of 14 road junctions for consideration of implementing trial CUEs, the construction works had already commenced, i.e. 8 road junctions under construction, leaving only 6 road junctions with potential for constructing the trial CUEs. In the event, the HyD decided in February 2011 not to construct any trial CUEs because of the limited benefit (para. 4.16).

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 Government should:**

- (a) **remind works departments to make greater efforts to ascertain the underground conditions, particularly in locations of potential conflicts between utilities and the permanent works before applying for XPs (para. 2.13);**
- (b) **compile statistics on coordination work, and periodically review and clear long-outstanding obsolete/abandoned plans in the XPMS (para. 2.12(a) and (c));**
- (c) **make greater efforts to improve the AIT inspection coverage for NXP and CWXP sites, and take measures to enhance the compliance with XP conditions (para. 2.25(a) and (b));**
- (d) **take measures to improve the permittees' reinstatement works and expedite actions to address the problem of long-outstanding rectification works (para. 2.25(c));**
- (e) **take appropriate improvement measures to ensure that CN inspections are carried out in a timely manner (para. 2.25(d));**

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- (f) **review the referral mechanism from the AIT to the ET for conducting prompt investigations and consideration of prosecution actions on cases of serious and repeated non-compliance with XP conditions, and suspected breaches of the safety precautions and support provisions under section 10T of the LMPO (para. 2.34);**
- (g) **expedite action to rectify the three outstanding non-compliant cases of minimum-depth requirement (para. 3.17(a));**
- (h) **consider enhancing the procedures and requirements on checking the alignment and disposition of underground utility systems (para. 3.17(c));**
- (i) **in collaboration with the LandsD, the DEVB and other bureaux with policy responsibilities on utilities, explore the development of an effective management and control system over underground space occupation (para. 3.17(e));**
- (j) **closely monitor the conduct of the consultancy study in 2018 and upon its completion, take timely follow-up actions on its findings and recommendations (para. 4.17(a)); and**
- (k) **draw on the experience in conducting/planning the trial CUE schemes to improve the installation of CUEs in new development areas and evaluate the effectiveness of the trial CUEs in a timely manner (para. 4.17(b) and (c)).**

Response from the Government

13. 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 Hong Kong has an extensive road network connecting various districts in the territory. As of September 2017, there were over 2,107 kilometres (km) of public roads in Hong Kong (442 km on Hong Kong Island, 472 km in Kowloon and 1,193 km in the New Territories). Apart from carrying vehicular and pedestrian traffic, most of the roads also provide underground space for accommodating utility services (e.g. water pipes, drainage pipes, gas pipes, power cables and telecommunications facilities — Note 1).

1.3 Road works are necessary for the installation, maintenance, repair and improvement of the road sections or the public utilities underneath. Road construction, major infrastructure projects initiated by different government departments such as the Highways Department (HyD) and the Civil Engineering and Development Department (CEDD), and the associated road works for railway development are vital for maintaining Hong Kong as a world-class city. Additionally, for the safety of road users, routine road maintenance and periodic road rehabilitation are required. Besides, utility undertakings (UUs — Note 2) including government departments have to carry out road works to maintain and expand their utility networks in order to provide a reliable and high quality utility service to the public.

Note 1: *According to the Highways Department, there are on average about 50 km of underground pipes/cables installed with utility services per km of public road.*

Note 2: *UU means any person, undertaking, company, organisation or government department which supplies or provides utilities (including electricity, lighting, traffic control, telecommunications, cable television, gas, water, drainage, sewerage and tramway) and engages in any associated work. As of December 2017, there were 18 major UUs which had applied for excavation permits for road works from the HyD (see para. 1.6).*

Introduction

1.4 However, road works carry a cost to society, as they pollute the environment, cause disruption to traffic and affect the well-being of the public. According to the Report on “Study of Road Traffic Congestion in Hong Kong” published by the Transport Advisory Committee (Note 3) in December 2014:

- (a) road works were a major cause of road traffic congestion. Better coordination among different road works was the key to minimising disruption caused to road users; and
- (b) road traffic congestion not only affected individual motorists, but also resulted in inconvenience and costs in both tangible and intangible terms to Hong Kong as a whole. These included an increase in travel time and cost in terms of economic production and impact on the business sectors, and in particular on those involved in delivery services and road-based public transport operators.

Given that road works are demand driven, the HyD has put in place a permit system (see para. 1.6) to manage road works. Photograph 1 shows a road section with road opening works.

Note 3: *The Transport Advisory Committee comprises 14 non-official members including the chairman and three ex-officio members, i.e. the Permanent Secretary for Transport and Housing (Transport) or his representative, the Commissioner for Transport and the Commissioner of Police or his representative. Its function is to advise the Chief Executive-in-Council on transport matters.*

Photograph 1

A road section with road opening works



Source: Photograph taken by Audit staff in January 2018

1.5 Under the policy directives of the Transport and Housing Bureau, the HyD is responsible for the planning, design, construction and maintenance of public roads in Hong Kong. In addition, under the policy directives of the Development Bureau (DEVB), the HyD also coordinates and controls road openings on streets under its maintenance responsibility over unleased government land (hereinafter referred to as public roads) through issuing excavation permits (XPs) to the works proponents including UUs. For unleased land other than streets maintained by the HyD, the works proponents are required to apply for permits from the Lands Department (LandsD) for carrying out excavation works. According to its Controlling Officer's Report (COR), the HyD spent a total of \$1,433.4 million in 2016-17 on the programme area of district and maintenance works, including the coordination and control of utility openings on public roads. Of the 1,011 staff working under the programme area in December 2017, 45 staff in the Research and Development Division and 68 staff of the two Regional Offices (i.e. Urban and New Territories) were responsible for matters relating to administration of road opening works (see para. 1.6). Table 1 shows the performance indicators related to road excavations reported by the HyD in its 2010 to 2016 CORs. During the period, while the number of excavation/road works permits authorised decreased by 28% from 30,540 to 22,030, the number of permits with extension increased by 78% from 727 to 1,293.

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Table 1

**Performance indicators in CORs
(2010 to 2016)**

	2010	2011	2012	2013	2014	2015	2016
(a) Number of excavation/road works permits authorised (Note)	30,540	25,826	24,847	24,407	23,769	21,797	22,030
(b) Average duration per permit (days)	71	73	88	79	77	73	66
(c) Number of inspections carried out on sites	95,822	99,120	94,731	97,423	97,030	97,410	98,400
(d) Items of non-compliance with XP conditions per total number of items inspected (%)	2.0	2.0	1.4	1.1	1.1	1.1	1.1
(e) Incidents of unattended sites per total number of XP (%)	0.7	0.8	0.6	0.6	0.6	0.6	0.6
(f) Incidents of damage to underground utilities by utility excavations and road works per total number of XP (%)	0.3	0.3	0.5	0.3	0.2	0.1	0.1
(g) Number of permits with extension	727	894	1,219	1,237	1,322	1,281	1,293

Source: HyD records

Note: Under the Land (Miscellaneous Provisions) Ordinance (Cap. 28), there are two types of XPs, namely emergency XPs and non-emergency XPs. For administrative purpose, the HyD further classifies non-emergency XPs into normal XPs, capital works XPs and small-scale works XPs. These four types of XPs accounted for some 99% of the total permits issued in a year (e.g. 21,822 out of 22,030 in 2016). The remaining 1% included expressway works permits and road works permits governed under other ordinances (e.g. Road Traffic (Expressway) Regulations — Cap. 374Q), which did not involve excavation works (e.g. cleaning of road drains). For simplicity, XPs referred to in this report includes both emergency XPs and non-emergency XPs, unless otherwise stated.

1.6 **Issue of XPs.** Most of the road works require excavation. According to Part III of the Land (Miscellaneous Provisions) Ordinance (LMPO — Cap. 28), a works proponent needs to acquire an XP from the HyD for making or maintaining an excavation on public roads (Note 4). Under that part of the LMPO, the HyD is the authority for issuing XPs for road excavation works on streets maintained by the HyD over unleased land (i.e. public roads — see para. 1.5). Each XP stipulates the conditions to be complied with by the works proponent (Note 5). For road works not involving excavation (e.g. maintenance of road side trees and cleaning of road drains), there is no need to obtain an XP. Any non-compliance with XP conditions constitutes an offence under sections 10(3), 10(4) and 10(5) of the LMPO (Note 6). Under the HyD, the Research and Development Division is responsible for developing and maintaining a web-based Excavation Permit Management System (XPMS — see para. 1.8) for administering and controlling road opening works through issuing XPs, and the two Regional Offices are responsible for processing and issuing XPs. An extract of the organisation chart of the HyD is at Appendix A.

1.7 **Issue of land licences.** Under Part II of the LMPO, a person needs to obtain a land licence (an individual or block licence), a deed or a memorandum of appropriation (which are different forms of giving permission to use the land) from the LandsD for occupying unleased government land. UUs are required to apply for a licence (normally a block licence) from the LandsD for the purpose of installing utility facilities. The LandsD imposes conditions in the licence, which include obtaining XPs before carrying out the related road excavation works or before erecting

Note 4: *A person making or maintaining an excavation without obtaining an XP or emergency XP shall be guilty of an offence and liable on conviction to a maximum fine of \$50,000 and to imprisonment for six months. Most of the XP applications come from UUs (including works departments such as the Water Supplies Department and the Drainage Services Department). Ad-hoc applicants (hereinafter referred to as infrequent applicants) include private developers and private property owners.*

Note 5: *For excavation on unleased land other than a street maintained by the HyD, the works proponent shall acquire an XP from the LandsD. The issue of such XPs by the LandsD is not covered in this audit.*

Note 6: *Any person who makes or maintains an excavation in unleased land in contravention of any condition of an XP shall be guilty of an offence and shall be liable on conviction to a maximum fine of \$50,000. A non-compliant department with the XP conditions would be subject to a reporting mechanism to the Secretary for Development.*

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utility installation, and submitting master plans of such installation at no cost to the Government if so required.

Monitoring of road excavation works

1.8 Since 2009, the HyD has implemented the web-based XPMS to administer and control road excavation works electronically (Note 7). The HyD has published an Excavation Permit Processing Manual (XPPM) specifying the procedures on application and administration of XPs as well as the site audit inspection procedures and standards. The procedures for issuing a non-emergency XP (see Note to Table 1 in para. 1.5) for planned road excavation works are as follows:

- (a) ***Registration of proposed excavation works plan.*** A works proponent is required to register its proposed road opening works with the HyD one to six months in advance of the planned commencement dates. After registering the proposed works plan for an XP application, the responsible Regional Office will assess the time required for carrying out the proposed works on site. Based on the assessment outcome, a reasonable time period will be allotted to the applicant for completing the road works to avoid unnecessary taking up of road space;
- (b) ***Coordination of road works.*** The Regional Offices are responsible for checking possible conflicts with other proposed road openings in the vicinity. If there are other proposed plans for carrying out road works in close proximity to each other, the concerned XP applicants will be requested to participate in a coordination process before their XP applications can be approved. This process ensures that any potential conflict amongst road works of different applicants can be identified and resolved as early as possible. It can also facilitate the coordination of concurrent or sequential implementation of the road works on the same road section. To avoid repeated openings on the same road section, the HyD in general will not issue an XP on the same road section within a period of three months (for other applicants) or six months (for the same applicant),

Note 7: *Before the launch of the XPMS, a Utility Management System (rolled out in October 1997) was used for applicants to submit textual data in text files. In September 2002, a web-based system known as Internet Interface to Utility Management System was rolled out to enable applicants to submit applications via the Internet. The data in the two separate systems were synchronised twice a day.*

except for emergency cases. Furthermore, road openings will not normally be allowed within a period of five years for newly constructed carriageways and one year for newly constructed footways as all excavation works, such as laying utilities and road paving, should have been coordinated and completed by relevant parties during the construction stage of the new carriageways/footways. However, XP applicants may apply for waivers to such restrictions under special circumstances (Note 8);

- (c) ***Traffic advice from the Transport Department (TD) and the Hong Kong Police Force (HKPF).*** Apart from registering the proposed excavation works plan with the HyD, an XP applicant needs to seek agreement from the TD and the HKPF for traffic advice relating to the excavation works and prepare a temporary traffic arrangement (TTA) proposal. The TD and the HKPF will scrutinise the proposal submitted by the applicant to ensure that traffic impact is acceptable. Where appropriate, specific TTA requirement from the TD and the HKPF may be included as part of the XP conditions. For road opening works which affect the vehicular flow in sensitive areas, the TD and the HKPF may require the XP applicant to conduct a traffic impact assessment to substantiate its TTA proposal. Furthermore, the HKPF also requires the XP applicant to apply for a “Road Works Advice” before the works commence on site. The HKPF will process the application having regard to the latest traffic conditions and impose specific TTA requirement where necessary, in consultation with the TD;
- (d) ***Issue of XP.*** Upon completion of the coordination and obtaining the support from the TD, the HKPF and other relevant authorities (e.g. the Leisure and Cultural Services Department for works in the vicinity of trees), the XP applicant can submit an application to the HyD for issuing an XP. The HyD will normally issue an XP within 10 working days upon receipt of an application and payment of a permit fee (see para. 1.10). A permittee needs to carry out the excavation works in accordance with the XP conditions; and
- (e) ***Research and Development Division’s audit inspection.*** The HyD has established an Audit Inspection Team (AIT) under the Research and

Note 8: *For XPs authorised from 2010 to 2017, the number of XPs or jobs with approved waivers for road opening restriction and repeated opening restriction decreased from 476 to 90 and 1,249 to 989 respectively.*

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Development Division to carry out audit inspections on XP sites to monitor permittees' and nominated permittees' (i.e. the contractor nominated to carry out the works) compliance with the XP conditions (i.e. recording "C" for compliance and "NC" for non-compliance). The common NC items include failure to provide minimum clear footway for pedestrians, failure to display permits on site, and unattended sites without a display board stating the reasons for leaving the site idle. While the HyD will notify a non-compliant permittee to rectify the problems on the same day, the permittee and its nominated permittee could be held liable to prosecutions under the LMPO for not executing the road excavation works in a manner complying with the XP conditions.

For emergency works (Note 9) covered by an emergency excavation permit (EXP), applicants (EXP may be issued to UUs, including government departments which have a genuine need to carry out emergency works) are required to obtain an EXP (a block permit valid for six months), and to report the emergency works (not exceeding 7 days — see Table 2 in para. 2.2) before carrying out any excavation works. While applicants are not required to go through the permit period assessment and the roadworks coordination process (see (a) and (b) above), they are still required to seek agreement from the TD and notify the HKPF before commencement of the emergency excavation.

1.9 To improve coordination among government departments and the major UUs for carrying out road excavation works, coordination forums are established for the top management, middle management and working-level, as follows:

- (a) ***Top management forum: Joint Utilities Policy Group (JUPG).*** With members comprising the Assistant Director (Technical) of Highways, representatives of the TD, the Water Supplies Department (WSD) and the Drainage Services Department (DSD), and senior representatives of other UUs, the JUPG meets quarterly to discuss the policy in relation to utility works and road openings. Representatives of the UUs take turns to chair the JUPG;

Note 9: *Emergency road openings may be required consequential upon the occurrence of emergency incidents as defined in section 2 of the LMPO. This is to facilitate urgent repair works on underground utilities by UUs, so that the essential utility services can be resumed within a short period.*

- (b) ***Middle management forum: Utilities Technical Liaison Committee (UTLC).*** The UTLC also meets quarterly to discuss technical and administrative matters in relation to utility openings. It is chaired by the Deputy Director of Highways and comprises management-level representatives of the HyD's Regional Offices and the Research and Development Division, and the UUs; and

- (c) ***Working-level forum: Road Opening Coordinating Committee.*** A Road Opening Coordinating Committee is set up in each of the HyD's Regional Offices to monitor the utility openings. Each committee comprises working-level representatives of the HyD, UUs and relevant government departments such as the TD and the HKPF. Meetings are held monthly and chaired by the Chief Highway Engineer of the respective Regional Office.

Imposition of XP fees

1.10 Before April 2004, XPs were issued free of charge. In order to provide an incentive for permittees to complete their works within the approved timeframe, the Government introduced legislative amendments to impose XP fees, which took effect from April 2004. Since then, a works proponent who carries out road excavation works has been required to pay an XP fee under the Land (Miscellaneous Provisions) Regulations (Cap. 28A). The current prescribed fees are as follows:

- (a) ***XP period.*** An administration fee of \$2,050 plus a daily fee of \$35 per day is levied for excavation works carried out during the approved XP period; and

- (b) ***Extended period.*** A special charging mechanism (an administration fee of \$650 and a daily fee of \$35 plus economic cost as explained below) is in place to encourage the completion of road works within the approved period. Under this mechanism, a permittee who anticipates that the road works cannot be completed on time should submit an application to the HyD for extending the permit period. In addition to the administration fee and daily fee for permit extension, the permittee is required to pay an additional permit fee which is the economic cost based on the traffic impact

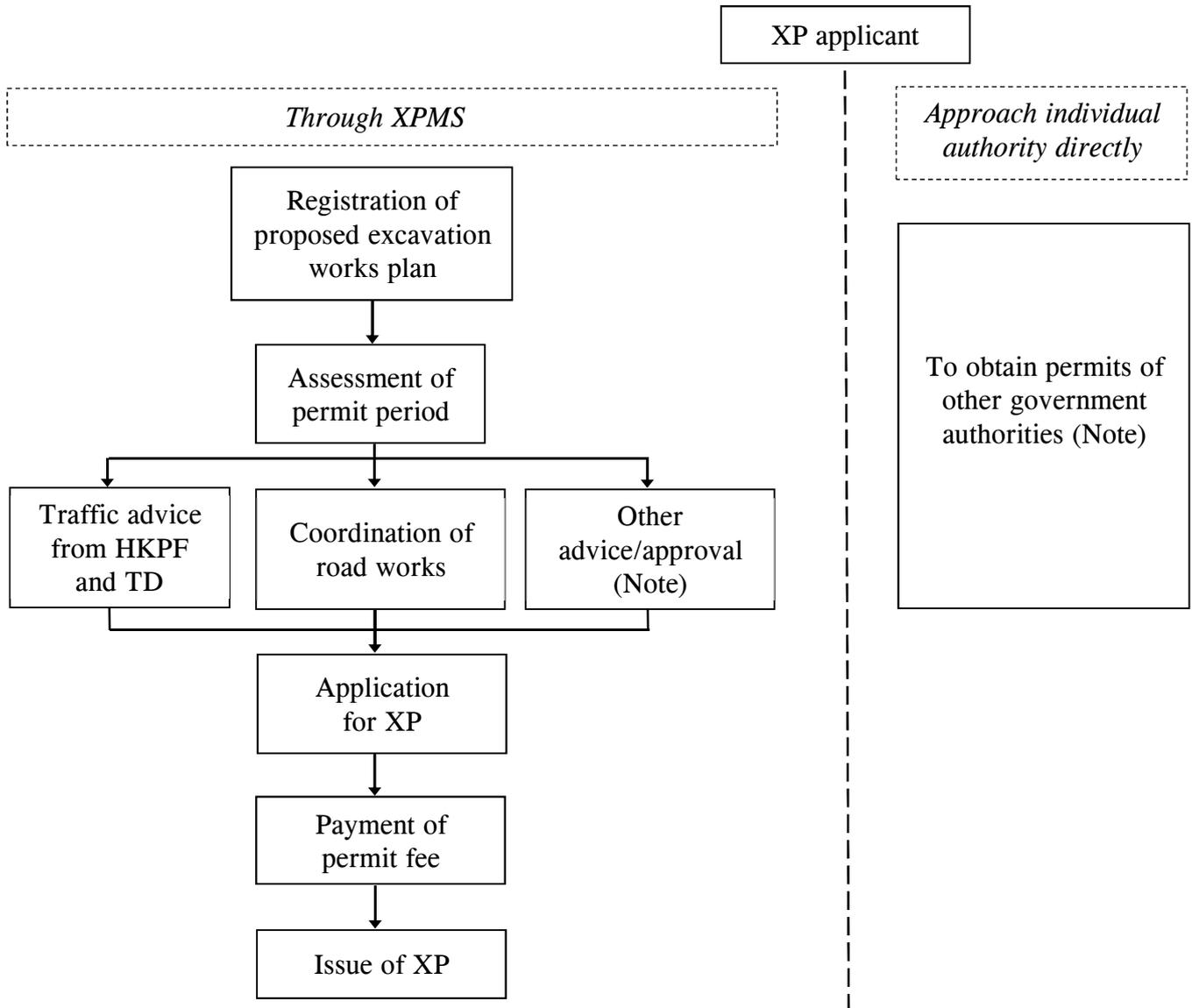
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an excavation can cause (i.e. \$21,800 per day for a “strategic street”, \$8,540 per day for a “sensitive street” and \$1,710 per day for a “remaining street” — Note 10).

In 2016-17, XP fees of \$180 million were collected. Figure 1 shows the workflow for issuing a non-emergency XP as mentioned from paragraphs 1.6 to 1.10.

Note 10: *According to the LMPO, the Director of Highways may, by notice published in the Gazette, designate any street or part of a street as a strategic street, a sensitive street or a remaining street after taking into consideration the economic costs of traffic delay in a carriageway caused or likely to be caused by an excavation carried out on the street. According to the HyD, the notice was prepared based on the TD’s regular updating on classification of roads in Hong Kong. As of January 2018, there were 109 strategic streets (e.g. Harcourt Road, Nathan Road and Tolo Highway) and 70 sensitive streets (e.g. Pedder Street, Kowloon Park Drive and Sha Tin Centre Street) in Hong Kong.*

Figure 1
Issue of a non-emergency XP



Source: HyD and LandsD records

Note: Before applying for an XP, pertinent UUs (excluding government departments) should have obtained a land licence from the LandsD. When processing an XP application, other authorities' advice and approval may be required on various occasions (e.g. works affecting any roadside tree require consent from the maintenance authorities such as the Leisure and Cultural Services Department, the Agriculture, Fisheries and Conservation Department and the Landscape Unit of the HyD).

Control of underground utility installation and space occupation

1.11 Recurring road opening works leading to road traffic congestion and disruption to the public (see para. 1.4) have been a major cause of concern for decades. According to a review report of the administration of XPs issued by the then Efficiency Unit (now the Efficiency Office — EffO) in July 2009 (Note 11):

- (a) the problems arising from road excavation works could be attributed to the absence of a government policy on the planning of underground space usage and the limit of utility services proliferation. Land was not exclusively reserved for the laying of utility services but most of the utility services were directly buried beneath the road network, which also carried pedestrian and vehicular traffic on the ground surface; and
- (b) the continual installation of new utility services to cope with developments, the opening up of the telecommunications services and the maintenance of existing services created a frequent need for road excavation, which competed with road works and the busy traffic for the limited road space.

At present, the Government does not maintain a database of underground utility installation in unleased government lands. There is also no standard mechanism to manage the space occupation by the UUs underneath public roads. As a result, the HyD does not possess sufficient underground utility information to determine whether excavation works should be allowed. Over the years, the HyD has been using the coordination forums (see para. 1.9) to coordinate underground utility excavation works among different major UUs for the purposes of regulating and controlling road opening works under Part III of the LMPO.

Note 11: *In response to the HyD's request, the EffO completed the review with recommendations aiming to improve the administration and monitoring of XPs to ensure safety of road users and pedestrians, and to minimise inconvenience and nuisance caused to the public.*

Exploring the use of common utility enclosures

1.12 Utility services in Hong Kong are normally buried underground with new or additional services very often being laid in parallel to the existing ones in response to a higher demand or the existing services becoming obsolete. At present, utility services are normally installed using the conventional approach of opening trenches in carriageways/footways for laying pipes, ducts and cables. This conventional approach causes disruption to pedestrian/vehicular traffic. In cases of congested underground utilities or the absence of feasible TTA for the proposed road works, UUs may consider adopting the trenchless excavation method (i.e. with most excavation works conducted underground) for installing utilities though it is more expensive. In March 2002, the HyD commissioned a consultant (Consultant A) to study the feasibility of implementing common utility enclosures (CUEs), which could organise and accommodate various utility pipes/ducts/cables in a single underground structure, with a view to reducing road openings by UUs. The study completed in 2003 considered that while adopting CUEs would be a feasible approach to reduce road openings for new development areas, retrofitting CUEs in built-up areas would be very difficult. In 2006, two trial CUEs were constructed for evaluating the effectiveness of using CUEs. In August 2017, the DEVB gave policy support for the HyD to conduct another consultancy study to take stock of the latest developments of CUEs and address the related implementation issues, such as the construction, management, maintenance, operation, security, liability and legal issues.

Audit review

1.13 Between 1991 and 2001, the Audit Commission (Audit) completed three reviews on road opening works, namely:

- (a) a review entitled “Measures to reduce the incidence of delays in the completion of utility works on Hong Kong roads” and the result was included in the Director of Audit’s Report No. 17 of October 1991;
- (b) another review entitled “The lane rental trial and other measures to reduce the incidence of delays in the completion of utility works on Hong Kong roads” and the result was included in the Director of Audit’s Report No. 24 of March 1995; and

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- (c) a further review entitled “Follow-up review on control of utility openings” and the result was included in Chapter 1 of the Director of Audit’s Report No. 36 of March 2001.

1.14 In November 2017, Audit commenced a review of the Government’s efforts in managing excavation works on public roads. The review focuses on the following areas:

- (a) management and monitoring of road excavation works (PART 2);
- (b) control of underground utility installation and space occupation (PART 3);
and
- (c) exploring the use of CUEs (PART 4).

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

Acknowledgement

1.15 Audit would like to acknowledge with gratitude the assistance and full cooperation of the staff of the HyD and the LandsD during the course of the audit review.

PART 2: MANAGEMENT AND MONITORING OF ROAD EXCAVATION WORKS

2.1 This PART examines the HyD's efforts in managing and monitoring road excavation works through the issue of XPs and the imposition of XP conditions, focusing on:

- (a) managing road excavation works (paras. 2.2 to 2.15);
- (b) monitoring compliance with XP conditions (paras. 2.16 to 2.26); and
- (c) enforcement actions (paras. 2.27 to 2.35).

Managing road excavation works

Different types of XPs

2.2 To facilitate proper management of road excavation works, works proponents are required to obtain XPs issued by the HyD before commencing any excavation works. Under the LMPO, there are two types of permits, namely EXP for excavation works to cater for occurrence of an emergency incident and non-emergency XP for planned excavation works (see para. 1.8). For administrative reasons, the HyD classifies XPs into one-off XPs for excavation works in a location specified therein and block XPs for excavation works where the locations are unknown at the time of issue but are within a region or district (see Table 2 for the different types of one-off XPs and block XPs).

Management and monitoring of road excavation works

Table 2

Types of XPs

Type	Scope	Duration	Number of XPs issued in 2016
<i>One-off XP</i>			
Normal excavation permit (NXP)	Planned road openings in an area with a diameter of 450 metres (m) or less	On a case-by-case basis	8,911 (Note 1)
Capital works excavation permit (CWXP)	Site area of works project with a diameter exceeding 450 m Works are continuous rather than a collection of individual works Project involves many interface issues which are difficult to be coordinated before the commencement of proposed works	On a case-by-case basis	10 (Note 1)
<i>Block XP</i>			
EXP	Excavation works to cater for occurrence of an emergency incident	6 months for block permit and 7 days for each emergency incident	11,171 (Note 2)
Small-scale works excavation permit (SSWXP)	Area of excavation does not exceed 4 square metres (m ²) and length of excavation does not exceed 6 m	184 days for block permit and 24 hours for each job affecting carriageway or 48 hours for each job not affecting carriageway	1,730
Total			21,822

Source: HyD records

Note 1: Most of the road excavation permits for capital works projects are NXPs. Only large-scale capital works require the issue of CWXPs.

Note 2: The number of EXPs authorised referred to the number of emergency incidents reported.

Extension of XP period

2.3 An XP applicant is required to plan and register its proposed excavation works at least one to six months before the works commencement date (see para. 1.8(a)). According to the “Guideline on Permit Period Assessment for Road Excavation Works” which sets out principles and criteria on approving XPs and procedures for applicants to follow during the permit period assessment, the applicant needs to indicate in its application the works duration category of its proposed works (Note 12). The respective Regional Office will assess the permit period proposed by the applicant, and may accept or amend the proposed period with reasons. An XP is valid for the period specified therein with a view to controlling the time of excavation and minimising disturbance to traffic network and road users. If a permittee cannot complete the works within the specified period, it needs to apply for an extension and pay the prescribed fee (see para. 1.10 and Note 13). According to the HyD’s records, of the four types of XPs mentioned in Table 2 of paragraph 2.2, extension is allowed for one-off XPs only, the number of which decreased from 13,297 (44% of 30,540) in 2010 to 8,921 (40% of 22,030) in 2016. In terms of the total number of permit-days per year, there was a decrease from 2,168,340 ($30,540 \times 71$) in 2010 to 1,453,980 ($22,030 \times 66$) in 2016 (see Table 1 in para. 1.5). However, Audit noted that the number of XPs with extension increased by 78% from 727 in 2010 to 1,293 in 2016. As a result, the number of XPs with extension as a percentage of the one-off XPs authorised increased from 5% in 2010 to 14% in 2016. Moreover, the average extension period had also increased by 90% from 48 days in 2010 to 91 days in 2016.

2.4 According to the HyD, the increase in the number/percentage of XPs extended for the years might be attributed to a number of factors, including uncharted underground utilities, unanticipated obstructions, unforeseen rectification works, change in construction methods, delay in material delivery, new site constraints identified and accidents causing works suspension and/or adverse weather conditions.

Note 12: *There are three works duration categories, namely: (a) short duration works with works period not exceeding 14 working days; (b) standard works with the works period to be computed using a standard template for each commonly undertaken activity for each trade; and (c) non-standard works with the works period to be substantiated by the applicant.*

Note 13: *A permittee can apply for an extension without any charge if it is unable to have access to a reasonably substantial portion of the street before the commencement of works, or can apply for refund of economic cost if the extension is caused by any reasons other than the fault of the permittee, its contractors and employees.*

Management and monitoring of road excavation works

Audit analysis of the XPMS records as at November 2017 showed that, of the XPs issued in 2016, 1,061 were granted extensions of permit periods, comprising 517 XPs (49%) to government departments, 348 (33%) to other UUs and 196 (18%) to infrequent applicants (e.g. private developers — see Note 4 to para. 1.6). Audit selected five cases with the longest extensions for examination (involving two government departments and two infrequent applicants). The reasons for granting extensions in these cases are as follows:

Case	Permittee	Extended day	Reason for granting XP period extension
A	WSD	502	<ul style="list-style-type: none"> • change in construction method to avoid congested underground utilities and concrete block • hard material encountered during trenchless work and unforeseen structures • additional Traffic Impact Assessment for counting traffic flow for implementation of 24-hour works to catch up the delay • inclement weather
B	Housing Department	462	<ul style="list-style-type: none"> • difficulties in locating existing water mains, realignment of proposed water mains and location of connection points • additional coordination with another excavation plan nearby to maintain a 30-m buffer zone • congested underground utilities leading to difficulties in locating existing water mains at footpath • inclement weather
C	WSD	446	<ul style="list-style-type: none"> • change in construction method to maintain vehicular access to a nearby residential building • hard material encountered during tunnelling works • additional Traffic Impact Assessment for main-laying works at road junctions resulting in realignment of proposed water mains and construction of additional connection points • inclement weather

Management and monitoring of road excavation works

Case	Permittee	Extended day	Reason for granting XP period extension
D	An infrequent applicant	440	<ul style="list-style-type: none"> • obstruction by congested underground utilities
E	An infrequent applicant	437	<ul style="list-style-type: none"> • obstruction of existing underground utilities • modification of drainage scheme • difficult underground condition (granite encountered) • obstruction of concurrent construction works at an adjacent street

2.5 *Need to remind government works departments to strengthen investigation of underground conditions before applying for XPs.* As shown in paragraph 2.4, obstruction by existing underground utilities, difficult underground conditions and inclement weather are common grounds for the extension of excavation period. According to Environment, Transport and Works Bureau Technical Circular (Works) No. 17/2004 entitled “Impossibility/Unforeseen Ground Conditions/Utility Interference” (which is still in force):

- (a) project officers should arrange to carry out all necessary site investigations and satisfy themselves that sufficient ground information has been made available prior to commencement and during the detailed design. The extent of ground investigation and/or geotechnical analysis should be adequate for estimating construction cost and duration to an acceptable degree of accuracy; and
- (b) before the completion of the detailed design, project officers should satisfy themselves that the utility records obtained from UUs or other sources are reasonably accurate. Depending on the scale and nature of the contract, project officers should conduct desk search and, if necessary, site inspection for the purposes of verifying the utility records (e.g. checking against other available records and checking on site that the manholes do exist at the locations indicated on the utility records). In areas of potential conflicts between utilities and the permanent works, which might have serious impact on the works, project officers should consider carrying out suitable investigations (e.g. trial pits) to verify the exact locations of these utilities.

Management and monitoring of road excavation works

The Technical Circular provides guidelines on risk management of undertaking underground works applicable to works departments including the HyD, the WSD, the Housing Department, the DSD and the CEDD. In view of the large percentage (49%) of XPs with extensions involving the government projects, the DEVB should remind works departments to make greater efforts to ascertain the underground conditions particularly in locations of potential conflicts between utilities and the permanent works as mentioned in the Technical Circular before applying for XPs.

Coordination of road openings in close proximity

2.6 According to the DEVB's reply to a question on the coordination of road excavation works raised by a Legislative Council Member in February 2013:

- (a) in processing XP applications, the HyD would consider the works in terms of their necessity and in particular, whether applicants had coordinated with other excavation works promoters, including government departments and other UUs, to reduce the chances of repeated road openings. For better management and coordination of road excavation works, the HyD provided a one-stop service for XP applications through a computerised management system to further enhance coordination and management of such works; and
- (b) as one of the permit application requirements, applicants should plan and register their proposed excavation works at least one to six months, depending on the category of streets and expected duration of the works, before the works commencement date. Through the computerised management system, the HyD could identify other proposed excavation works within 30 m of the proposed works site under application and assign an applicant among them to take the lead in coordinating with the other applicants concerned. For instance, the applicants concerned might jointly draw up a coordinated works programme to ensure that the trench opening could accommodate all the works of the applicants concerned and that the one last to complete its works according to the coordinated programme would reinstate the whole road surface once and for all after the orderly completion of all the works concerned. This arrangement would reduce the need for repeated openings in the same area. In case the applicants concerned could not draw up a coordinated plan to the satisfaction of the HyD, their road excavation applications might be rejected.

Management and monitoring of road excavation works

2.7 According to the XPPM (see para. 1.8), when a proposed works plan (which may have more than one excavation item) is registered, the HyD through the XPMS identifies any other proposed NXP works (Note 14) within 30 m of the site under application. Conflicting plans identified will be grouped into an uncoordinated case and the HyD will assign one of the applicants to take the lead in coordinating with the other applicants concerned. This applicant shall work out an agreed coordinated programme with other applicants so that all concerned applicants shall amend their plans to reflect the coordinated programme. After acceptance of the coordinated reports submitted by the applicants, the uncoordinated case will be updated as coordinated in the XPMS. For a plan with no conflict found, a new case should be formed to contain the plan and the case status in the XPMS will also be set as coordinated as this is a system rule of the XPMS before an XP can be issued. Audit scrutiny of the coordination reports of the 8,911 NXPs issued in 2016 revealed the following circumstances under which they were accepted by the HyD:

- (a) among those cases with conflicting plans identified for coordination, the HyD would accept the coordination reports submitted by XP applicants showing that:
 - (i) two or more excavations at the same location had been grouped into a single excavation (i.e. using a common trench); or
 - (ii) two or more excavations at the same location which had not been grouped together into a single excavation without documented justifications, but the concerned schedules had been revised after coordination to include a time break of three months or more; or
 - (iii) the proposed works did not overlap though they were located within 30 m from each other. The concerned works had been revised to be carried out in a coordinated manner (i.e. by coordinating the works programme to minimise the disturbance to the public); or
- (b) no conflicting plans were identified within 30 m of the proposed works during the periods concerned and hence no coordination was required.

Note 14: *The coordination procedures apply to NXPs only as CWXP-related works involve many interface issues which are difficult to coordinate before commencement of the proposed works. For the block XPs, the locations for excavation works are unknown at the time of issuing XPs.*

Management and monitoring of road excavation works

2.8 *Need to compile statistics on coordination work to evaluate the effectiveness of coordination arrangements in reducing road openings.* Audit noted that the HyD had not made use of the XPMS to compile statistics showing the breakdown of coordinated plans by categories as listed in paragraph 2.7(a) and (b). Without such statistics, the HyD was unable to ascertain the number of cases which had been grouped into a single excavation (see para. 2.7(a)(i)) to evaluate the effectiveness of the coordination arrangements in reducing road openings. In Audit's view, the HyD needs to make improvement in this regard.

2.9 *Need to tighten control over coordination work.* According to the XPPM, the primary objective of coordination is to implement the potentially conflicting works in an efficient and effective manner to ensure that nuisance caused to the public is kept to a minimum. As reported to the Legislative Council in February 2013 (see para. 2.6), the coordination arrangement (using a common trench — see para. 2.7(a)(i)) would reduce the need for repeated openings in close proximity and in case the applicants concerned could not draw up a coordinated plan to the satisfaction of the HyD, their road excavation applications might be rejected. Upon Audit's enquiry, in February and March 2018, the HyD said that:

- (a) most of the road works identified for coordination could not be grouped into a single excavation (see para. 2.7(a)(i)) for operational reasons (e.g. different works methods); and
- (b) the XP applicants would change the works programme in a coordinated manner to minimise the disturbance to the public (see para. 2.7(a)(ii) and (iii)).

Audit noted that for excavation works at the same location which had not been grouped together, the HyD did not require justifications from applicants which had included a time break of three months or more in their works schedules (see para. 2.7(a)(ii)) instead of adopting a common trench approach. In these cases, the concerned excavation works were only deferred and there was no reduction in the number of road openings. In this regard, the HyD needs to tighten the control by requiring such applicants to give reasons for failing to adopt a common trench approach, and consider rejecting their XP applications if no valid reasons are given (see para. 2.6(b)).

2.10 *Need to periodically review and clear long-outstanding obsolete/abandoned plans.* Audit examination of XPMS records showed that, as of November 2017, there were 5,303 cases involving 8,909 plans requiring case coordination. Of these 8,909 plans, 4,093 plans (46%) had remained uncoordinated for over two years. Audit noted that the XPMS did not maintain information on whether the long-outstanding cases/plans had become obsolete or had been abandoned due to unresolved difficulties. Given the long lapse in time, some of the proposed road opening works might no longer be required. Audit considers that the HyD needs to periodically review and clear long-outstanding obsolete/abandoned plans in the XPMS.

2.11 *Need to improve the identification of conflicting plans for coordination.* According to the Guidelines on Case Formulation and Case Coordination in the XPPM, a case for coordination should comprise a number of plans with locations in close proximity and the scheduled implementation timeframes are close to each other. The HyD officers should try to restrict the maximum number of plans to less than 10 (Note 15) and should not cover a road length longer than 1 km in a case requiring applicants to conduct coordination. According to the XPMS records, as of November 2017, there were 44 cases each consisting of 10 to 93 outstanding plans requiring coordination (involving a total of 893 plans). Audit conducted sample checks on the coordination reports of four XPs issued before November 2017. According to these coordination reports (P1, P2, P3 and P4), the number of plans identified for coordination were 166, 158, 154, 120 respectively. However, as shown in Table 3, 34 to 44 plans to be coordinated were submitted more than two years ago (i.e. they were likely to be obsolete plans) and 99 to 158 were located outside the 30-m boundary (i.e. they were unlikely to have any conflicts with the plans under application). These cases suggest room for improvement in the identification of conflicting plans for coordination.

Note 15: *According to the HyD, the “10-plan restriction” is not intended to be a restriction to be strictly followed. If there is a genuine need to coordinate more than 10 plans, such coordination will also be carried out to minimise disturbance to the public.*

Table 3

Summary of coordination reports submitted for four XPs
(November 2017)

Coordination report	Number of plans identified for coordination (a)	Number of plans which had been submitted more than two years ago (b)	Number of plans with works sites located outside 30-m boundary (c)
P1	166	43	153
P2	158	44	158
P3	154	44	152
P4	120	34	99

Source: *Audit analysis of HyD records*

Remarks: *Some of the plans submitted more than two years ago are also those with works sites located outside the 30-m boundary and hence the sum of them (i.e. (b) + (c)) is greater than the number of successfully coordinated plans (i.e. (a)).*

Audit recommendations

2.12 **Audit has recommended that the Director of Highways should:**

- (a) **compile statistics on coordination work in order to evaluate its effectiveness in reducing road openings;**
- (b) **for ungrouped excavation works proposed by applicants who have revised the works schedules to include a time break of three months or more instead of adopting a common trench approach for their proposed works on the same road section, require them to give reasons for such arrangements;**
- (c) **periodically review and clear long-outstanding obsolete/abandoned plans in the XPMS; and**

- (d) take measures to improve the identification of conflicting plans for coordination.

2.13 Audit has also *recommended* that the Secretary for Development should remind government works departments to make greater efforts to ascertain the underground conditions, particularly in locations of potential conflicts between utilities and the permanent works before applying for XPs as mentioned in Environment, Transport and Works Bureau Technical Circular (Works) No. 17/2004.

Response from the Government

2.14 The Director of Highways agrees with the audit recommendations in paragraph 2.12.

2.15 The Secretary for Development agrees with the audit recommendation in paragraph 2.13.

Monitoring compliance with excavation permit conditions

2.16 *AIT inspections.* A permittee or a nominated permittee (e.g. a contractor) is required to comply with the XP conditions. Before commencing works, a permittee or a nominated permittee is required to submit an Advance Notification (AN) not more than 14 working days but not less than 2 working days. Upon receipt of an AN, the AIT (Note 16) carries out audit inspections of the excavation site regularly and records NC items identified. For those permit sites with NC items, the AIT will notify the permittees/nominated permittees the inspection results for their rectification. For those safety-related items (e.g. providing continuous barrier to fence off excavation from pedestrian flow and adequate support to trench excavation to protect workers' safety) or repeated NC items, the AIT will refer the cases to the

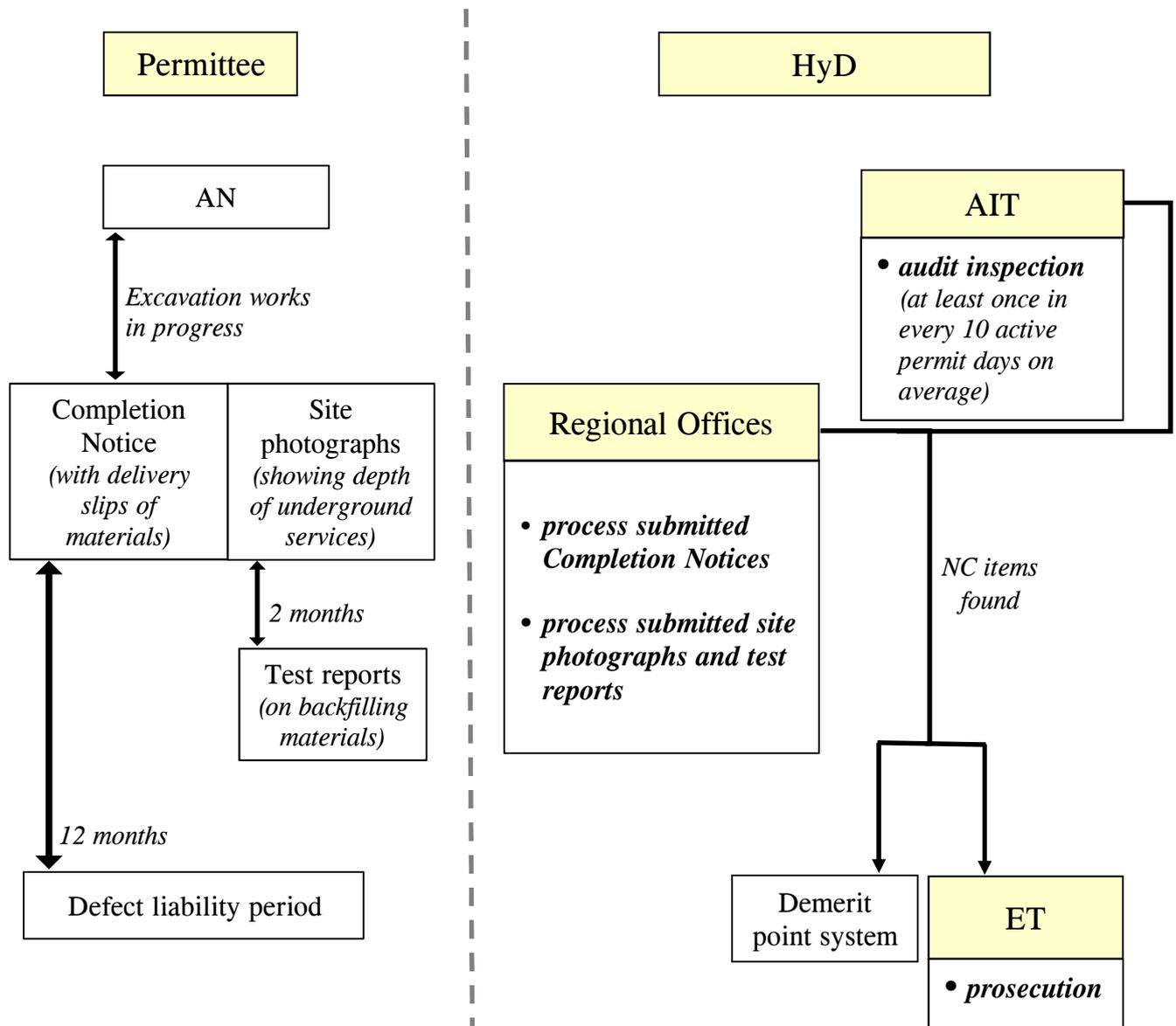
Note 16: *As of December 2017, the AIT established under the Research and Development Division had 40 staff, including professional and technical grade staff.*

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Enforcement Team (ET — Note 17) for prosecution actions. The ET subsequently conducts inspection visits to collect evidence and ascertain with the Department of Justice (DoJ) whether it is sufficient for prosecutions. Figure 2 shows the workflow on the monitoring of XP conditions.

Figure 2

Workflow on the monitoring of XP conditions



Source: Audit analysis of HyD records

Note 17: As of December 2017, the ET established under the Quality Management Unit had 12 staff, including professional and technical grade staff.

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2.17 ***Checking completion of works by Regional Offices.*** On completion of road excavation and reinstatement works, a permittee is required to submit a Completion Notice (CN) to the HyD. XP conditions also require the permittee to submit:

- (a) upon CN submission, delivery slips showing quantity of the bituminous materials delivered to the site;
- (b) upon CN submission, site photographs showing depth of the underground services (Note 18); and
- (c) test reports on the backfilling materials (e.g. soil compaction test) and other materials within two months from CN submission.

On receipt of CNs, officers of the respective Regional Office will arrange site inspections (i.e. CN inspections) within seven working days to confirm completion of works and acceptance of road reinstatement.

2.18 ***Defect liability period.*** In case of deterioration in the permanent reinstatement within 12 months from the submission date of an accepted CN, the permittee shall carry out necessary remedial works at its own expense, unless the permittee can prove that the defect is caused by a third party. The respective Regional Office would arrange inspection to identify any defects associated with the reinstatement before the end of the liability period.

2.19 ***Demerit point system.*** In August 2012, the HyD implemented a demerit point system with sanctioning measures to enhance control on road opening works. An NC item identified during audit inspection will attract a demerit point, amplified with appropriate multiplying factors assigned in accordance with pre-determined risk weightings (which are related to severity, repetition and promptness of rectifying NC item). In addition, demerit points will be assigned to a permittee which fails to comply with relevant permit condition due to delayed rectification of rejected permanent reinstatement, failure to submit site photographs and overdue test reports.

Note 18: *If the permittee fails to provide photograph submission to the satisfaction of the HyD, the permittee will be required to provide certified as-built records with clearly presented depth of services laid as supplement.*

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Sanctioning measure will be imposed on a party combination (i.e. permittee/work office/contractor) if its overall demerit point is at 4 or above. Starting from 30 September 2017, when a party combination is being sanctioned, the relevant contractor will not be approved as a nominated permittee in any new application for at least three months and until its overall demerit point level drops below 4 (Note 19).

AIT inspections during excavation works

2.20 The AIT inspects excavation works sites regularly according to schedules generated by the Audit Inspection Management System (AIMS) which are based on a set of prioritisation rules (see Appendix B), where priority is accorded to sites with poor performance records and sites not inspected in the past ten days (see (b)(ii) in Appendix B). According to the HyD, all XPs should be subject to at least one checking after commencement of works, and that for active permit sites, once in ten days. The inspection frequency of one-off XP (NXP and CWXP) sites is monitored bi-monthly by the HyD's Maintenance Working Group (Note 20). According to the bi-monthly reports, the target inspection frequency was met in 73 (90%) months of the 81 months from 2011 to 2017 (up to September).

2.21 ***Need to improve the inspection coverage of NXP and CWXP sites.*** While according to the HyD, all XPs should be subject to at least one checking, Audit examination of the XPs issued in 2016 revealed that the overall coverage of the AIT inspection on active permit sites up to December 2017 was only 43% (see Table 4). Audit understands that given the large number of active permit sites under the block XPs (i.e. EXPs and SSWXPs) and the short duration of works for these sites (see Note 20 to para. 2.20), there may be practical difficulty to visit all such active permit

Note 19: *Before 30 September 2017, any party combination whose demerit point level was at 4 or above would enter into a one-month abstention period. If the demerit point level remained at 4 or above throughout the period, the XPMS would suspend the contractor's pre-approved status, if it was on the pre-approved contractor list, until its demerit point level dropped below 4.*

Note 20: *The Maintenance Working Group is chaired by the Assistant Director (Technical) of Highways and comprises senior staff from the Research and Development Division and other maintenance divisions. According to the HyD, inspections for emergency openings under EXP and jobs under SSWXP were excluded from the calculation of inspection frequency because the short duration of excavation works of less than 2 days for SSWXP sites and a maximum of 7 days for EXP sites might have caused distortion.*

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sites. However, for NXP and CWXP sites for which the excavation works generally last longer, the HyD needs to make greater efforts to improve the inspection coverage to ensure that the XP conditions, especially the safety-related ones (see para. 2.16), have been complied with.

Table 4

**AIT inspections conducted
for XPs authorised in 2016
(as at December 2017)**

Type of XP sites (see Table 2 in para. 2.2)	Number of active permit sites (Note)	Number of sites with AIT's inspections (Inspection coverage)
<i>One-off XP site</i>		
NXP site	8,880	7,942 (89%)
CWXP site	37	35 (95%)
Sub-total	8,917	7,977 (89%)
<i>Block XP site</i>		
EXP site	11,171	2,723 (24%)
SSWXP site	26,755	9,505 (36%)
Sub-total	37,926	12,228 (32%)
Overall	46,843	20,205 (43%)

Source: Audit analysis of HyD records

Note: The number of active permit sites for NXP refers to the number of XPs authorised while those for EXP, CWXP and SSWXP refer to the number of emergency incidents, number of sections and number of jobs registered respectively.

2.22 Need to enhance compliance with XP conditions. The AIT devises an inspection checklist, in which each checklist item corresponds to a requirement

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specified in a clause or sub-clause of XP conditions, for AIT staff to follow in carrying out audit inspections. The HyD has adopted a compliance-led approach (see para. 2.27(b)) where permittees are requested to rectify an NC item observed during AIT inspection (Note 21). From 2013 to 2016, the compliance rate of XP conditions was 98.9% in general (see Table 1 in para. 1.5). However, Audit noted that the four frequently observed NC items had remained at the same level from 2013 to 2017 (see Table 5), indicating that there is a need to take measures to address the issue. Audit examination revealed that:

- (a) of the 20,099 XPs issued in 2017, 12,827 (64%) were related to government departments, 6,674 (33%) to other UUs and 598 (3%) to infrequent applicants (see Note 4 to para. 1.6);
- (b) in 2017, the total number of the four frequently observed NC items was 5,600 (see Table 5), of which 2,005 (36%) was related to government departments, 1,993 (35%) to other UUs and 1,602 (29%) to infrequent applicants; and
- (c) the average number of the four frequently observed NC items per permit in 2017 was 0.16 ($2,005 \div 12,827$) for government departments, 0.3 ($1,993 \div 6,674$) for other UUs and 2.68 ($1,602 \div 598$) for infrequent applicants. The compliance with XP conditions by infrequent applicants was less satisfactory than that of government departments and other UUs.

The HyD needs to take measures to enhance the compliance with the four frequently observed non-compliant XP conditions. Since the sanction under the demerit point system is not applicable to infrequent applicants, the HyD should also consider stepping up publicity efforts with a view to promoting their compliance with the pertinent XP conditions.

Note 21: *According to the HyD, of the 68,074 NC items identified by the AIT inspection from 2013 to 2017 (up to September), 46,048 (68%) had subsequently been rectified, of which 29,615 (64% of 46,048) had been rectified within 48 hours.*

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Table 5

**Four frequently observed NC items during AIT inspections
(2013 to 2017)**

NC item	Number					
	2013	2014	2015	2016	2017 (Note)	Total
<i>(a) No continuous barriers to fence off obstruction/excavation from pedestrian flow</i>						
Government departments	702	638	556	538	537	2,971
Other UUs	311	393	490	506	481	2,181
Infrequent applicants	429	453	451	610	539	2,482
Total	1,442	1,484	1,497	1,654	1,557	7,634
<i>(b) Minimum clear footway width not provided and maintained for pedestrians</i>						
Government departments	506	374	242	288	556	1,966
Other UUs	393	520	519	576	967	2,975
Infrequent applicants	159	152	194	281	305	1,091
Total	1,058	1,046	955	1,145	1,828	6,032
<i>(c) Permit not displayed</i>						
Government departments	418	474	438	405	469	2,204
Other UUs	176	190	223	359	298	1,246
Infrequent applicants	224	235	295	276	414	1,444
Total	818	899	956	1,040	1,181	4,894
<i>(d) Signs not provided in accordance with the approved TTA</i>						
Government departments	637	518	348	363	443	2,309
Other UUs	225	195	184	217	247	1,068
Infrequent applicants	238	218	269	265	344	1,334
Total	1,100	931	801	845	1,034	4,711

Source: Audit analysis of HyD records

Note: The four NC items totalled 5,600 in 2017, comprising 2,005 for government departments, 1,993 for other UUs and 1,602 for infrequent applicants.

Checking completion of works

2.23 The XPMS reports a CN automatically when an XP expires if no CN is submitted by the permittee upon XP expiry (see para. 2.17). In case of early completion of works, the permittee is required to report completion immediately after completion of works. The responsible Regional Office will arrange a CN inspection within seven working days to confirm works completion and acceptance of road reinstatement. After a CN inspection, the Regional Office will consider whether the reinstatement works should be accepted. If the reinstatement does not comply with the relevant requirements/specifications, the HyD will reject the permanent reinstatement (hereinafter referred to as “rejected CN”) and request the permittee to rectify the problem. The Regional Office is also responsible for inspecting and reviewing site photographs and test reports submitted by permittees in relation to CN submissions (see para. 2.17(b) and (c)). If defective reinstatement is found, the permittee is required to rectify the reinstatement works.

2.24 Audit examined the work of the Regional Offices on checking the completion of excavation and reinstatement works by extracting relevant records from the XPMS. Audit analysis of such records has revealed the following areas for improvement:

- (a) ***Increase in substandard reinstatement works.*** While the number of XPs authorised decreased over the years, the number of rejected CNs was generally increasing (see Table 6), indicating an increase in substandard reinstatement works carried out by contractors. This was unsatisfactory because permittees were required to obtain new XPs for carrying out rectification works, which would bring additional administrative work for HyD staff and further inconvenience to the public. For example, in 2016, 821 NXPs were authorised for carrying out rectification works involving 51,342 permit-days. The HyD needs to take measures to improve the permittees’ reinstatement works (e.g. issuing advisory letters to permittees and tightening the demerit point system);

Table 6

**Number of rejected CNs
(2011 to 2017)**

Permit type	2011	2012	2013	2014	2015	2016	2017
NXP	3,138	2,247	2,215	2,422	2,545	2,962	3,065
EXP	790	757	917	987	1,066	1,885	1,197
CWXP	48	0	0	0	0	0	12
SSWXP	1,318	1,204	992	694	750	2,351	1,917
Total	5,294	4,208	4,124	4,103	4,361	7,198	6,191

Source: HyD records

Remarks: To exclude repeated rejected cases, only the first rejected CN of a case was selected for audit analysis.

- (b) **Long-outstanding rectification works.** Table 7 shows that as of December 2017, of the 6,779 rejected CNs pending rectification of the reinstatement works, 2,581 (38%) had remained outstanding for over two years. In this connection, the HyD introduced measures by introducing risk weighting in the demerit point system (i.e. longer duration would attract higher demerit points) in September 2016. In September 2017, the HyD further enhanced these measures (Note 22). However, there is safety concern for road users if substandard reinstatement works cannot be rectified in a proper and timely manner. Moreover, the defect liability period may not be enforceable given the lapse of long time after CN submission. The HyD needs to expedite actions in implementing the enhanced measures to address the problem of long-outstanding rectification works;

Note 22: *The risk weighting will be increased progressively in six stages in 15 months and relevant contractors will not be approved as nominated permittees in any new application if the party combination has any rejected CN pending rectification for over two years with effect from 2019.*

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Table 7

Analysis of outstanding rejected CNs (December 2017)

Year of rejection	NXP	EXP	CWXP	SSWXP	Total
2010 or before	159	45	8	1,123	1,335
2011	135	1	26	114	276
2012	111	9	0	35	155
2013	130	10	0	40	180
2014	202	15	0	43	260
2015	298	21	0	56	375
2016	555	120	0	279	954
2017	1,763	451	5	1,025	3,244
Total	3,353	672	39	2,715	6,779

} 2,581

Source: Audit analysis of HyD records

- (c) **Inspections for CNs not timely conducted.** According to the HyD, of the 67,988 CNs received by the Regional Offices in 2017, CN inspections and acceptance in respect of 54,686 (80%) were completed within its internal target. However, Audit examination of the 2,019 CN cases under processing by the Regional Offices as at the end of December 2017 revealed that the CN inspections and acceptance in respect of 1,297 (64%) cases were overdue by 1 month on average (5 months for the longest overdue case). As explained by the HyD in February 2018, it had undergone some exercises in late 2017 which affected the number of CNs under processing as at the end of 2017 (e.g. the enhancement in the XPMS to cater for automatic reporting of CN for new SSWXP jobs in August 2017 had created additional workload and the Regional Offices had to take time to adapt to the new arrangement). In Audit's view, the HyD needs to monitor the situation and take appropriate improvement measures to ensure that CN inspections for confirming the completion of works and the acceptance of the reinstatement works (see para. 2.23) are carried out in a timely manner;

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- (d) *Late submission of site photographs and test reports.* As mentioned in paragraph 2.17(b) and (c), permittees are required to submit site photographs and test reports for the HyD to determine whether the standard of their reinstatement works is up to the HyD's satisfaction. However, as shown in Table 8, as of December 2017, 3,618 site photographs and 2,441 test reports had not been submitted to the HyD, of which 483 (13%) site photographs and 771 (32%) test reports had been outstanding for over three years respectively. The HyD needs to remind XP permittees to submit site photographs and test reports for checking in a timely manner. The HyD also needs to use the demerit point system to tackle those permittees with repeated records of late submission of such documents; and

Table 8

**Number of site photographs and test reports not submitted
(December 2017)**

Time lapse since submission of CNs	Number of CNs
(a) Site photographs (Note 1)	
One year or less	2,446
Over one year and up to two years	364
Over two years and up to three years	325
Over three years	483
Total	3,618
(b) Test reports	
Two months or less (Note 2)	349
Over two months and up to one year	879
Over one year and up to two years	232
Over two years and up to three years	210
Over three years	771
Total	2,441

Source: Audit analysis of HyD records

Note 1: Cases with outstanding site photographs included those with outstanding as-built records (see Note 18 to para. 2.17(b)).

Note 2: Test reports are required to be submitted within two months after CN submission.

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- (e) *Delay in processing submitted site photographs and test reports.* As shown in Table 9, as of December 2017, 15,626 site photographs and 7,486 test reports submitted had not been reviewed by the Regional Offices. These included 4,842 (31%) photographs and 2,523 (34%) test reports which had been pending review for over three years respectively. The HyD needs to expedite its processing work so as to ensure that the excavation works are completed up to the HyD's satisfaction.

Table 9

**Ageing analysis of site photographs and test reports pending review
(December 2017)**

Time lapse since submission of records	Number of CNs
(a) Site photographs (Note)	
One year or less	3,223
Over one year and up to two years	3,886
Over two years and up to three years	3,675
Over three years	4,842
Total	15,626
(b) Test reports	
Two months or less	523
Over two months and up to one year	1,610
Over one year and up to two years	1,290
Over two years and up to three years	1,540
Over three years	2,523
Total	7,486

Source: Audit analysis of HyD records

Note: Cases with site photographs pending review included those with as-built records (see Note 18 to para. 2.17(b)).

Audit recommendations

2.25 **Audit has recommended that the Director of Highways should:**

AIT inspections during excavation works

- (a) **make greater efforts to improve the AIT inspection coverage for NXP and CWXP sites;**
- (b) **take measures to enhance the compliance with the four frequently observed non-compliant XP conditions as mentioned in paragraph 2.22 (e.g. consider stepping up publicity efforts to promote the compliance, especially by infrequent applicants);**

Checking completion of works

- (c) **take measures to improve the permittees' reinstatement works, including issuing advisory letters to permittees and tightening the demerit point system, and expedite actions in implementing the enhanced measures to address the problem of long-outstanding rectification works;**
- (d) **monitor the situation of overdue CN inspections and take appropriate improvement measures to ensure that CN inspections for confirming the completion of works and acceptance of the reinstatement works are carried out in a timely manner;**
- (e) **remind XP permittees to submit site photographs and test reports for checking in a timely manner and use the demerit point system to tackle those permittees with repeated records of late submission of such documents; and**
- (f) **expedite the Regional Offices' processing of site photographs and test reports to ensure that the excavation works are completed up to their satisfaction.**

Response from the Government

2.26 The Director of Highways agrees the audit recommendations.

Enforcement actions

2.27 According to the LMPO (see para. 1.6), any person who carries out road excavations without an XP/EXP or breaches any conditions of XP/EXP shall be guilty of an offence. According to the HyD, on the recommendation of the EffO in 2009, the HyD adopted a compliance-led instead of an enforcement-focus approach in order to address the problem of large number of NC cases referred for enforcement actions. According to the EffO, the compliance-led approach (rather than an enforcement-focused approach) in regulatory checking and direct communication with the excavation permittees aimed to trigger immediate rectification as prolonged non-compliance situation might extend the existence of danger to public. The compliance-led approach included the implementation of administrative measures (e.g. demerit point system) to improve the permittees'/nominated permittees' compliance with XP conditions. According to the HyD's enforcement guidelines issued in 2009 (which are still in force):

- (a) **Enforcement authority.** The Director of Highways is empowered under sections 10A and 10C of the LMPO to issue XPs and EXPs, and under section 10 of the LMPO to exercise controls over all excavations in unleased land which is a street maintained by the HyD. Offences defined in the LMPO are classified into the following categories:
 - (i) excavation without valid XP/EXP (sections 10(1) and 10(2));
 - (ii) inadequate safety precautions and support (sections 10T(1), 10T(2) and 10T(3)); and
 - (iii) contravention of permit conditions (sections 10(3), 10(4) and 10(5));

- (b) **Compliance-led approach.** Having regard to the fact that the XP system was new to many UUs or works proponents (in 2009), the HyD aimed at promoting their awareness on requirements of the amended Ordinance and the permit conditions and encouraging them to rectify NC items promptly so as to minimise inconvenience to the public. For serious contraventions

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of LMPO provisions (e.g. excavation without a valid permit and inadequate provision of safety precautions and support) or XPs with a short remaining period or public complaints, the ET will carry out investigations as soon as possible (Note 23); and

- (c) ***Enforcement process.*** The AIT shall issue an advisory letter to the permittee/nominated permittee (i.e. the contractor), informing it of the contraventions found and the possible liability to prosecutions with a copy to the ET. For non-compliance with the same audit inspection checklist items after an advisory letter has been issued, the AIT should directly refer the case to the ET without further issuing another advisory letter. Upon receipt of case referrals from the AIT, the ET conducts an independent investigation (including carrying out site inspections as soon as possible) on the referred cases and if sufficient evidence is collected, the ET will make recommendations to the DoJ for instituting prosecutions. The DoJ will approve recommendations where appropriate and conduct prosecutions in court.

2.28 ***Prosecution actions.*** Table 10 shows the statistics on enforcement cases from 2013 to November 2017. Audit examination of the cases from 2013 to 2016 (Note 24) revealed that of the 4,338 cases referred to the ET for enforcement actions, 162 (4%) cases proceeded to prosecutions. According to the HyD, as many NCs had been rectified before the ET's inspections and the majority of the public complaint cases turned out to be invalid, no prosecutions had been taken for the remaining 4,176 (4,338 less 162) cases.

Note 23: *According to the HyD, the enforcement guidelines are intended for internal use of the AIT and ET only.*

Note 24: *Some of the 2017 cases were still under investigation.*

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Table 10

**Statistics on enforcement cases
(2013 to November 2017)**

	2013	2014	2015	2016	Total (2013 to 2016)	2017 (up to November)
(a) Number of cases opened (based on referral receipt date) (Note 1)	972	930	1,050	1,386	4,338	1,591
(b) Number of cases under processing	0	0	0	0	0	293
(c) Number of cases proceeded to prosecutions (based on summons issue date)						
(i) Contravention of XP conditions	8	12	57	53	130	37
(ii) Trench safety	0	0	0	0	0	0
(iii) Illegal excavation	7	5	8	12	32	10
Total	15	17	65	65	162	47
(d) Number of cases with convictions (based on judgement date)						
(i) Contravention of XP conditions (Note 2)	17	12	49	53	131	44
(ii) Trench safety	0	0	0	0	0	0
(iii) Illegal excavation	6	3	7	11	27	12
Total	23	15	56	64	158	56

Source: HyD records

Note 1: This included AIT referral cases and public complaint cases.

Note 2: The number of convicted cases was greater than the number of prosecution cases mainly because some prosecution cases in 2012 were concluded in 2013.

Need to step up enforcement actions against serious and repeated non-compliant cases

2.29 The compliance-led approach in handling NC items adopted by the HyD in 2009 was to promote awareness of the XP system and encouraged permittees to rectify NC items at an early opportunity (see para. 2.27(b)). With a lapse of nine years, most of the UUs and their contractors should have been familiarised with the requirements of the amended LMPO. Audit noted that under the compliance-led approach, besides serious contraventions of the LMPO provisions (e.g. excavation without a valid permit or inadequate provision of safety precautions and support), the AIT only referred cases of serious and repeated non-compliance with permit conditions to the ET for taking enforcement actions. According to the HyD, the number of such referral cases increased from 902 in 2013 to 1,446 in 2017, indicating an increasing trend in serious and repeated non-compliant cases. However, the number of cases proceeded to prosecutions totalled 209 from January 2013 to November 2017 because the permittees had been informed of the non-compliant results before the cases were referred to the ET and the bulk of the non-compliance had been rectified before the ET's inspections (Note 25). To step up enforcement actions against serious and repeated non-compliant cases, the HyD needs to review the referral mechanism from the AIT to the ET for conducting prompt investigations and consideration of prosecution actions.

Need to take stringent enforcement actions against NC cases involving construction safety

2.30 **Failure of trench excavation.** The Government attaches great importance to construction safety. In 2001, the Geotechnical Engineering Office (GEO) of the then Civil Engineering Department (now the CEDD) completed a study entitled "A study on past failures of trench excavations" and found that between 1986 and 2000, there were 15 reported failures associated with trench excavations, resulting in 10 deaths and 4 injuries. The Study concluded that the risk from trench excavation was not low and that the collapse of trenches was attributed to inadequate shoring and

Note 25: *In the 2009 review report issued by the EffO (see para. 1.11), it was recommended that part of the AIT be redeployed to the ET to form a new Compliance Team to bring synergy and benefits such as removing case referrals and reducing the time lags in taking prosecution actions. However, the HyD had reservation on the proposed merging of the two teams because: (a) there was a need to maintain the independence of the two teams; and (b) Works Supervisors in the AIT would not have the expertise to carry out enforcement duties.*

Management and monitoring of road excavation works

improper drainage provisions to prevent water ingress into trenches. Figure 3 shows some past cases of failure of trench excavation.

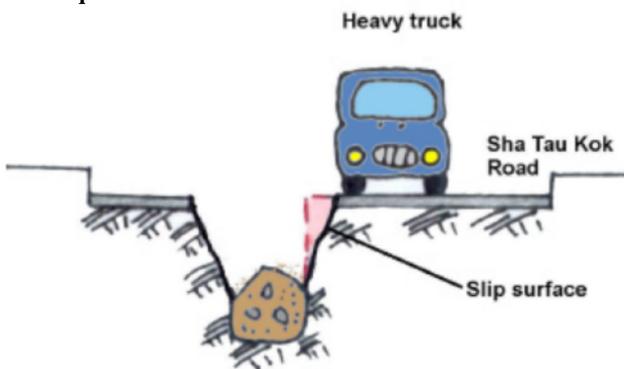
Figure 3

Cases of failure of trench excavation

Date: 11 January 1990

Probable causes of failure: *Absence of shoring and/or a heavy vehicle parked on the side of the trench*

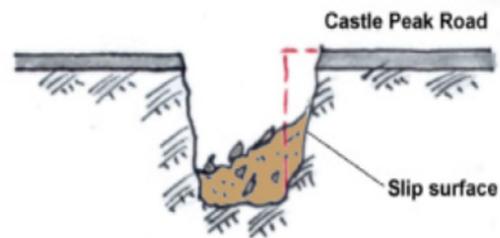
Consequence: *One worker killed*



Date: 26 February 1993

Probable causes of failure: *No shoring and/or poor groundwater control*

Consequence: *One worker killed and one injured*



Date: 6 May 1993

Probable cause of failure: *Inadequate shoring support*

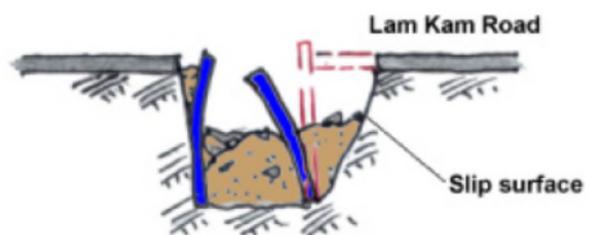
Consequence: *One worker killed*



Date: June 1992

Probable causes of failure: *Poor groundwater control and inadequate shoring*

Consequence: *Traffic disruption*



Source: *CEDD records*

2.31 **2003 Guideline.** In 2003, the GEO and the HyD published a guideline entitled "Guide to Trench Excavations (Shoring Support and Drainage Measures)" which provided guidance on good practice of shoring support and drainage measures

Management and monitoring of road excavation works

for trench excavation. Under section 10T (Note 26) of the LMPO, any contraventions of the statutory provision of safety precautions and support would be liable to a maximum fine of \$200,000, which is higher than the maximum fine of \$50,000 for contraventions of permit conditions (see Note 6 to para. 1.6).

2.32 ***No prosecution under section 10T of the LMPO.*** As shown in Table 10 of paragraph 2.28, from 2013 to November 2017, while the HyD had taken prosecution actions on cases of contraventions of XP conditions and illegal excavation without obtaining a permit, it had not taken any prosecution actions on trench safety under section 10T of the LMPO. In February 2018, the HyD informed Audit that:

- (a) of the 4,027 cases referred to the ET for action in the past three years from 2015 to November 2017, 84 (2%) cases were related to section 10T and the ET had taken prompt actions upon receipt of referral cases. In fact, these NC items had been rectified before the ET's inspections; and
- (b) with the promotion of construction safety by the Government, the industry had been vigilant in addressing the safety of trench works. The HyD was not aware of any serious casualties in recent years on trench excavation works in XP sites.

2.33 ***Need to review the referral mechanism on suspected breaches of section 10T for conducting prompt investigations by the ET.*** Audit sample checked 10 cases of suspected breaches of section 10T of the LMPO detected by the AIT's inspections. In these cases, after the AIT's inspections revealing that there was insufficient support to the trench excavation works, the AIT notified the permittees of the inspection results through electronic means on the same inspection day requiring the permittees to carry out rectification works. Under existing procedures, the AIT also issued advisory letters to the permittees with copies sent to the ET for investigations. Audit noted that:

Note 26: *According to section 10T of the LMPO, the permittee/nominated permittee shall adopt all necessary safety precautions to protect the public or any person making or maintaining an excavation to which the permit relates from any danger or injury.*

Management and monitoring of road excavation works

- (a) in 4 cases, the cases were referred to the ET after the permittees had notified the AIT of the completion of the rectification works (which often took place one or two days after AIT's inspections). In the event, no breach of section 10T could be observed during the ET's site inspections; and
- (b) in 5 cases, the AIT referred the suspected-breach cases to the ET through advisory letters 3 to 6 days after its inspections. In the event, there was a time gap of 6 to 8 days between the AIT's inspections and the ET's inspections. In this regard, the ET could not obtain sufficient evidence of the suspected breaches for taking prosecution actions.

The HyD needs to review the referral mechanism from the AIT to the ET for conducting prompt investigations and consideration of prosecution actions on serious and repeated breaches of permit conditions and suspected breaches of section 10T of the LMPO.

Audit recommendations

2.34 **Audit has *recommended* that the Director of Highways should review the referral mechanism from the AIT to the ET for conducting prompt investigations and consideration of prosecution actions on:**

- (a) **serious and repeated non-compliance with XP conditions; and**
- (b) **suspected breaches of the safety precautions and support provisions under section 10T of the LMPO.**

Response from the Government

2.35 The Director of Highways agrees with the audit recommendations.

PART 3: CONTROL OF UNDERGROUND UTILITY INSTALLATION AND SPACE OCCUPATION

3.1 Insufficient underground space and congested utilities beneath public roads, particularly in old urban areas, often cause delays to excavation works and hence traffic disruption to the public. This PART examines the Government's work on:

- (a) control of underground utility installation (paras. 3.6 to 3.12); and
- (b) management and control of underground space occupation (paras. 3.13 to 3.16).

Problems caused by congested utilities

3.2 As of December 2017, there were 18 major UUs installing their services beneath public roads for providing different public utility services in Hong Kong. While the number of UUs providing water, drainage, tramway, power and gas services/supplies remained at 6 (Note 27) in the past 20 years, the number of UUs providing fixed telecommunications services licensed by the Communications Authority (CA — Note 28) under the Telecommunications Ordinance (Cap. 106) with land licences granted by the LandsD for utility installation under the LMPO increased from 4 in 1995 to 12 in 2017 because of the deregulation and liberalisation of the

Note 27: *Water supply and drainage services are provided by the WSD and the DSD respectively. Tramway, power and gas supplies are provided by four different UUs.*

Note 28: *The CA, comprising not less than 5 and not more than 10 non-officials appointed by the Chief Executive and two public officers as members, is an independent statutory body established on 1 April 2012 under the Communications Authority Ordinance (Cap. 616) as the unified regulator of both the telecommunications and broadcasting sectors in Hong Kong.*

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local fixed telecommunications services market in 1995 and 2003 respectively (Note 29). Coupled with the continuous developments in the territory, the amount of underground utilities installed beneath public roads increased significantly. In particular, for the telecommunications services, the estimated length of telecommunications cables increased from 26,000 km in 2006 to 49,000 km in 2011 (Note 30). With the continual development and installation of the underground utility facilities including the telecommunications utilities, the underground space will be increasingly occupied and utilised, resulting in congestion of underground facilities beneath public roads in some districts, especially in urban areas developed in early years (Note 31). Photographs 2 and 3 show some congested utilities beneath a public road.

Note 29: *In 1995, the local fixed telecommunications services market was deregularised by introducing three new operators into the market in addition to the former monopoly operator. In the same year, the LandsD granted land licenses to the four operators. In 2003, the local fixed telecommunications services market was fully liberalised by introducing further market competition. As of December 2017, 27 licensees had been permitted to provide local fixed telecommunications services, of which 12 had obtained land licences granted by the LandsD for utility installation and 1 had applied for such licence.*

Note 30: *According to the HyD, the length of telecommunications cables was estimated based on data provided by UUs. Updated figures after 2011 were not available.*

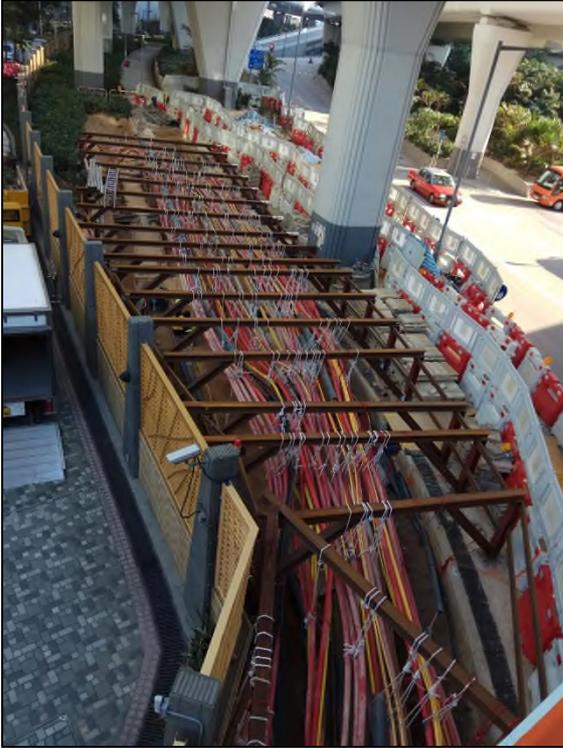
Note 31: *According to the HyD, telecommunications cables were mainly laid under footpaths, with cross-road ducts provided where necessary.*

Control of underground utility installation and space occupation

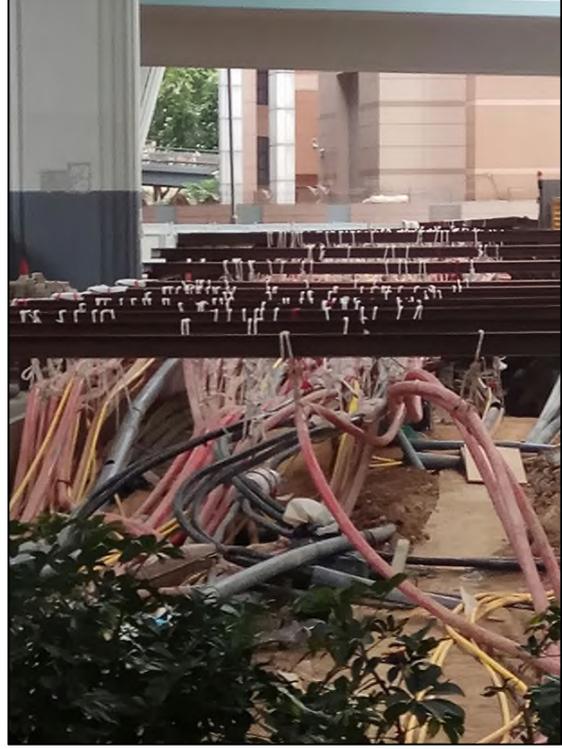
Photographs 2 and 3

Congested utilities beneath a public road

Photograph 2



Photograph 3



Source: Photographs taken by Audit staff in January 2018

3.3 According to the Final Report of a consultancy study commissioned by the HyD on the management of space occupation of December 2017 (see para. 3.15), there was currently no standard mechanism to manage space occupation by UUs underneath public roads. According to the HyD, the congested utilities beneath public roads often caused the following problems in carrying out road excavation works:

- (a) **Conflicts among different utilities.** UUs were generally self-regulatory to conduct planning of the alignment and level of their proposed underground services before application for the necessary XPs and carrying out their utility installation works. Ineffective underground space management might cause improper use of space, damage to existing utilities, and delays in emergency repairs and excavation works (see Cases A to E in para. 2.4);

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- (b) ***Difficulties encountered in laying new cables/pipes.*** Difficulties in laying works might result in delay in completing the road excavation works. In some extreme cases, when encountering problem of insufficient underground space for laying the services on site, some UUs' contractors might choose expedience over due regard to XP condition requirement, e.g. laying the cables/pipes at a depth not complying with the minimum-depth requirement (Note 32) in order to complete the installation works on time and within budget;

- (c) ***Fierce competition and strategic needs among different utilities.*** Some UUs might not fully consider whether underground space of the planned alignment of their utility services was sufficient to accommodate the utility services before carrying out the excavation/installation works. The HyD did not possess sufficient information to determine whether the related excavation works should be allowed on grounds of underground space availability; and

- (d) ***Risk of damaging buried utilities.*** Congested utilities might increase the risk of damaging buried utilities when carrying out road excavation works. In 2016, the JUPG issued a review report on "Measures for prevention of damage to utilities and procedures for reporting damage to utilities during excavation". According to the report:
 - (i) while the number of damage cases had reduced from 2007 to 2015, taking into account the fact that the report of damage incidents by UUs to the HyD was on a voluntary basis, the actual number of damage might be more than the reported figures;

 - (ii) a working group of the JUPG recommended enhancing the education and monitoring of contractors, and promoting Electronic

Note 32: *As required under the XP condition, a permittee shall ensure that underground services and installations be laid or placed in accordance with the minimum-depth requirement (i.e. 1 m below finished surface of a carriageway and 0.45 m below that of a non-carriageway). The minimum-depth requirement aims to avoid adverse effects on the structural integrity of road pavement, protect underground services from damage, and maximise use of underground space for accommodation of services while ensuring that sufficient space is reserved for installation of surface drainage system for proper operation of a highway.*

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Mark Plant Circulation System (Note 33) for obtaining marked plant drawings from other UUs before works commencement; and

- (iii) the working group also suggested introducing appropriate legislations for protection of telecommunications infrastructures (similar to electricity and gas supply infrastructures) and encouraging contractors to report all damage immediately.

3.4 ***Prolonged XP extensions.*** Audit examination on prolonged XP extension cases revealed that some extensions of excavation works were caused by congested underground utilities and insufficient underground space (see Cases A to E in para. 2.4). Under such circumstances, the contractors may need to temporarily lift or provide support to the existing utilities and find space to carry out construction/installation works which would lengthen the works process (see Photograph 3 in para. 3.2 for an example).

3.5 In February 2018, the HyD informed Audit that:

- (a) in Cases A to E, one of the reasons for extension of the XP periods was congested underground utilities leading to insufficient underground space. Other situations that might result in the need to extend the XP periods included uncharted underground utilities, unanticipated obstructions, unforeseen rectification works, delay in material delivery, new site constraints identified and accidents causing works suspension and/or adverse weather conditions; and
- (b) in view of the unforeseen factors, carrying out of excavation works on public roads might inevitably encounter delay beyond the permittees' control or their reasonable contemplation, resulting in extension of XP periods.

Note 33: *The Electronic Mark Plant Circulation System, launched in 2002, was jointly developed by major UUs and government departments to facilitate the speedy transfer of underground utility information for carrying out road excavation. Users of the system make requests and obtain plans of existing and/or proposed utility services from other UUs and government departments for planning of road excavation.*

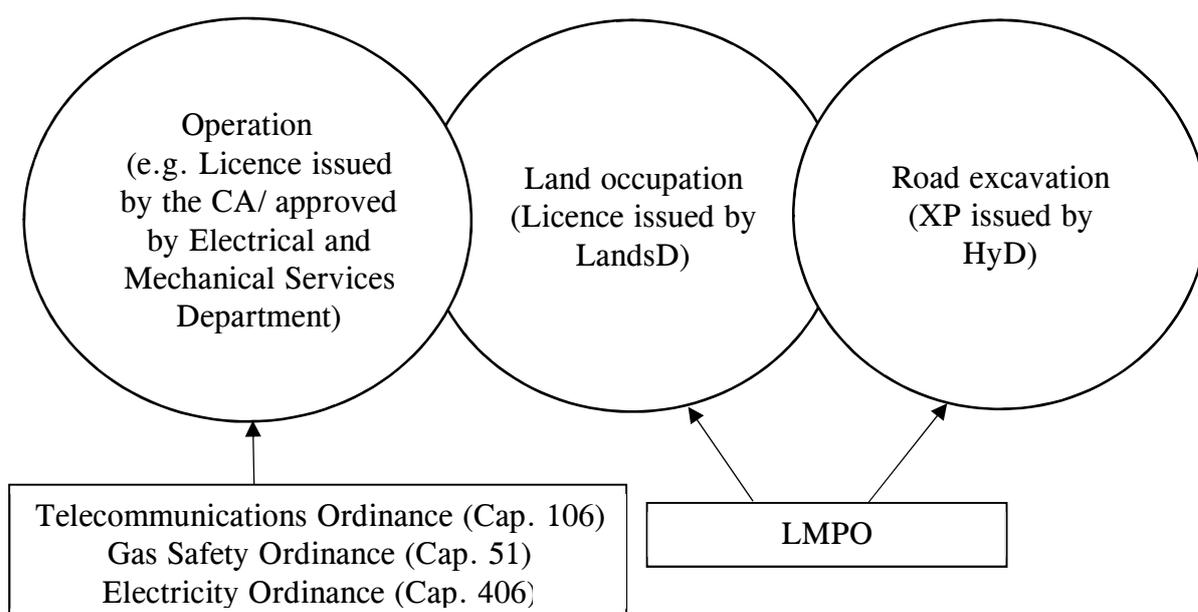
Control of underground utility installation

Statutory control framework of underground utility installation

3.6 As shown in Figure 4, the installation (i.e. land occupation and road excavation — see paras. 1.6 and 1.7) and operation of underground utilities of UUs are regulated by different government departments. Water supply and drainage systems are under the responsibilities of the WSD and the DSD respectively whereas power and gas supplies are provided by three different UUs. For the telecommunications industry, as of December 2017, there were 12 UUs providing local fixed telecommunications services with land licences granted for utility installation.

Figure 4

Statutory control framework of utility services



Source: HyD records

Remarks: According to the Electrical and Mechanical Services Department, only gas pipes operating at high pressures as defined in the Gas Safety Ordinance or liquefied petroleum gas pipes under public roads require its approval. The two UUs supplying power are required to meet the protection requirements for underground electricity supply cable installation, and the UU supplying gas is required to meet the relevant standards/code of practice for underground gas pipes installation. Besides, the Electricity Ordinance and the Gas Safety Ordinance regulate the works carried out in the vicinity of underground electricity cables and gas pipes to ensure that the works do not prejudice electrical/gas safety or the continuity of the electricity/gas supply.

Licences and permits issued for installation and operation of underground facilities for provision of local fixed telecommunications services and related road excavation works

3.7 Various authorities are responsible for issuing licences and permits for the installation and operation of underground facilities for the provision of local fixed telecommunications services and related road excavation works:

- (a) ***Unified carrier licence (UCL — Note 34).*** Under the Telecommunications Ordinance, a UCL is issued by the CA for the provision of facility-based public telecommunications services. The CA may grant authorisation to a relevant licensee to place and maintain a telecommunications line in, over, or upon public roads and unleased government land subject to consent in writing of the Director of Lands. Office of the Communications Authority (OFCA — Note 35), as the CA’s executive arm and secretariat, has promulgated the “Guidelines for Application of Road Opening Authorization and Procedure for Road Opening Works”, which set out the principles and criteria of the CA for granting of road opening authorisations and the procedures to be followed by authorised licensees when they carry out road opening works. These include the requirements on the submission of initial implementation plans and justifications such as information on the technology used for providing wireline-based fixed service that demands road opening and schedule of road opening activities for the initial three years;

- (b) ***Land licence.*** The LandsD may issue a land licence to UUs (Note 36) for occupying unleased government land associated with utility installation and operation. A UU with an appropriate UCL issued by the CA may apply to the LandsD for a land licence. If support from the concerned bureau is

Note 34: *Since 2008, the UCL has been introduced as a single licensing vehicle for both fixed and mobile telecommunications services to replace fixed carrier licence and mobile carrier licence. Fixed carrier licence and mobile carrier licence issued prior to introduction of UCL would be valid until their expiry dates.*

Note 35: *The role and functions of the CA are executed by its executive arm and secretariat, i.e. OFCA, which is a trading fund department headed by the Director-General of Communications.*

Note 36: *Installation of utilities by government departments (i.e. water mains by the WSD and sewage-mains by the DSD) does not require a land licence.*

Control of underground utility installation and space occupation

secured and no objection from the relevant departments is received, the LandsD would issue a land licence to the UU on the basis of the relevant policy directions and departmental advice. According to the land licence conditions:

- (i) the licensee will be allowed to place and maintain facilities on public roads and unleased government land as specified in the land licence and in accordance with the land licence conditions and master plans initially authorised by the CA (i.e. initial implementation plans — see (a) above), which may from time to time be amended pursuant to the land licence conditions;
- (ii) the licensee should obtain an XP before commencement of any excavation in public roads or before erecting any installations thereon;
- (iii) detailed alignment and disposition (Note 37) of the utility system (Note 38) in, on, over, along, across and under any public road or within any future road reserve shall be to the satisfaction of the Director of Highways;
- (iv) the licensee shall not alter, vary, modify, substitute, or make any addition to the system as indicated in the master plans without the prior written approval of the Director of Lands (Note 39); and
- (v) the licensee shall maintain and update the master plans to show all approved amendments and provide access and assistance to the Government as may be required to make search and enquiry on the master plans, and if so required by the Director of Lands, to supply

Note 37: *Alignment includes the meaning of “route” and “course” and disposition includes the meaning of “depth” and “position”.*

Note 38: *For the purpose of the land licence, installations such as cables, ducts, pipes, poles, and joint boxes installed under the licence, are referred collectively as the “system”.*

Note 39: *For land licences issued since 2015, the LandsD has specified in this condition that “the issue of XP” shall be regarded as the Director of Lands’ prior written approval.*

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copies of the plans and relevant documents at no cost to the Government; and

- (c) **XP.** According to the HyD, the issue of an XP mainly controls conducting or maintaining road excavation. Permittees need to comply with the XP conditions (e.g. on conducting excavation, reinstatement of roads and minimum-depth requirement — see Note 32 to para. 3.3(b)) to conduct a proper excavation during the XP validity period.

3.8 **Submission of plans.** For the purposes of granting the licences/permits, the authorities require UUs to submit different documents for examination and approval:

- (a) **UCL.** A UU is required to seek the CA's road opening authorisation by submitting, inter alia, an initial implementation plan to the CA showing the proposed routes of their telecommunications facilities such as telecommunications cables for the provision of local fixed telecommunications services. The UUs should submit updates of the plan to the CA thereafter as necessary or when required by the CA. Since 2008, there has been no requirement for seeking the CA's prior approval on any road opening works (after the CA's endorsement of the initial implementation plan) on a case-by-case basis before making an XP application;
- (b) **Land licence.** A UU is required to submit a set of master plan i.e. the implementation plan endorsed by the CA (see (a) above) in support of the land licence application. The intrinsic nature of the master plan is to control routes, levels (i.e. indicating whether installations are either underground or above-ground) and the area (i.e. indicating the installations are not exceeding 12 m² in area as required under the land licence) of utility installation over public roads and unleased government land. The master plans, which may cover installations over the whole territory, are not intended to show details such as the detailed design and exact locations of the installations. At present, although the land licence condition empowers the LandsD to require UUs to provide updated master plans of utility installation (see para. 3.7(b)(v)), only the two power and one gas supply UUs are required to submit updated master plans on strategic installations

Control of underground utility installation and space occupation

to the LandsD annually (Note 40). Other UUs providing telecommunications services are not required to submit such updated master plans to the LandsD. According to the LandsD, with the issue of an XP by the HyD, the LandsD's approval on the amendment of the master plan shall be deemed to have been obtained (see Note 39 to para. 3.7(b)(iv)); and

- (c) **XP.** A UU is required to submit a road-opening plan in the application of an XP showing the proposed location of the excavation and the period of road openings. Road-opening plans submitted by telecommunications operators only provide information on UU's installations in a piecemeal fashion. Such road-opening plans are different from the master plans which mainly furnish the Government with an overview of UU's proposed road excavation for their installations of services.

The level of details of utility information requirements varies because of the different purposes for granting approval of licences/permits by the CA, the LandsD and the HyD. Apart from requiring the two power and one gas supply UUs to submit updated master plans of strategic installations (see Note 40 to (b) above) annually, the LandsD has not required UUs to submit updated master plans of underground utility installed.

Need to improve control of underground utility installation

3.9 ***Non-compliance with minimum-depth requirements.*** As mentioned in paragraph 3.3(b), when contractors encountered insufficient underground space on site, some might choose to complete their utility installation works at a depth not complying with minimum-depth requirement (at shallow depth). This could result in adverse effects on the structural integrity of road pavements and inadequate protection of the underground services from traffic loadings and subsequent road opening works (see Note 32 in para. 3.3(b)). According to a UTLC paper of 2017:

- (a) in 2012, the HyD received complaints on shallow depth services from practitioners of the industry and media enquiries (see Case F). These complaints included locations scattered over the territory; and

Note 40: *The LandsD has since 2000 required only the two power and one gas supply UUs to provide updated master plans of strategic installation (which will take more than six months to divert). According to the LandsD, provision of updated master plan aims to allow more efficient planning for land disposal/development programmes.*

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- (b) this incident showed that some of the permittees had not exercised adequate supervision on their contractors to ensure compliance with the requirements. As of the end of 2016, there were 16 non-compliant cases of minimum-depth requirement not yet been rectified.

Case F

Non-compliance with minimum-depth requirement

1. Between October 2011 and October 2012, the HyD received over 500 complaints relating to the breach of minimum-depth requirement by various fixed network operators. After investigation, the HyD found that in 203 cases involving six fixed network operators, the installation works did not meet the minimum-depth requirements of the XP condition and the then telecommunications licence condition applicable to fixed network operators (Note). Between February 2012 and September 2014, the HyD requested the concerned fixed network operators to rectify the NC item and referred the cases to the OFCA (see Note 35 to para. 3.7(a)) for follow-up actions. Although the CA is not the enforcement agency for road opening requirements, taking into account the circumstances of the cases referred by the HyD and the nature of the breach and the number of non-compliant cases of each of the concerned operators, the CA issued a warning letter to one operator on 162 non-compliant cases and advisory letters to the remaining five operators on 1 to 26 non-compliant cases requiring them to comply with the minimum-depth requirement as determined by the HyD. Up to January 2018, the operator with 162 non-compliant cases had rectified all except 3 cases.

Audit comments

2. Audit noted that in order to tackle the non-compliance with the minimum-depth requirement, the HyD had since 2012 required permittees to submit record photographs to show whether the utility services have been installed at sufficient depth. However, it was unsatisfactory that after a lapse of about 4 years, 3 of the 203 non-compliant cases remained unrectified. The HyD needs to expedite rectification actions in this regard.

Source: Audit analysis of HyD records

Note: According to the telecommunications licence condition which was later removed in 2015 (in light of similar requirements already imposed in XPs issued under the LMPO), the network, or any part of it, if installed under, in, over or upon any public road, shall be at such depth, course, route and position as may be determined by the Director of Highways.

Control of underground utility installation and space occupation

3.10 According to the HyD, in relation to Case F:

- (a) owing to the intense competition in the telecommunications market and the incentive to establish the network infrastructure as fast as possible, there might be non-compliance with the minimum-depth requirement especially when laying their underground cable facilities in congested locations; and
- (b) underground space of public roads was indeed highly congested and there was a physical limit on the amount of underground facilities that could be accommodated in the underground space of public roads. It might not always be possible for new telecommunications licensees to have enough space under a particular road to install their own underground facilities.

Audit noted that the non-compliant cases with minimum-depth requirements might be partly attributed to congested underground space.

3.11 *Unsatisfactory alignment and disposition of underground utility systems.* According to the land licence condition, for utility installation, detailed alignment and disposition of the system in, on, over, along, across and under any public road or within any future road reserve shall be to the satisfaction of the Director of Highways (hereinafter referred to as the “alignment and disposition clause” — see para. 3.7(b)(iii)). However, according to the HyD, under the existing control mechanism, there is no documented standard on checking of the detailed alignment and disposition of the system, and it does not require the XP applicants to ascertain and confirm whether the related alignment and disposition of the proposed installations will be in conflict with other existing installations or proposed installations. In the event, the HyD does not check whether such alignment and disposition are up to its satisfaction, as illustrated in Case G.

Case G

Unauthorised installation of 487 poles

1. In January and February 2010, the LandsD and the HyD received complaints on the erection of telecommunications poles on public pavements by a telecommunications operator (Company A). According to the HyD, its investigations confirmed that 487 poles had been erected on roadside between January and February 2010 by inappropriately using the SSWXP procedures, and the CNs of 180 poles had been approved by the HyD inadvertently. The approvals were subsequently withdrawn upon further investigations.

2. In May and August 2010, the HyD and the LandsD requested Company A to remove the poles as they considered the detailed alignment and disposition of the installations were not to the satisfaction of the HyD under the land licence. By way of a judicial application, Company A challenged the LandsD's and the HyD's basis for requesting removal of the poles. In August 2011, the Court ruled that:

- (a) the alignment and disposition clause did not require the licensee to obtain prior consent or approval from the Director of Highways as to the alignment or disposition of the system or any part thereof before its installation;
- (b) the clause did not prescribe any point of time in which such satisfaction had to be obtained or met; and
- (c) the Director of Highways was entitled if he so wished to reconsider whether he was satisfied with the alignment and disposition of the poles either individually or as a whole.

3. In June 2012, the HyD confirmed that the alignment and disposition of the poles were unsatisfactory. Upon HyD's request, the LandsD issued a letter requesting Company A to remove the poles. In March 2013, Company A informed the HyD and the LandsD that it had removed all poles and reinstated the pedestrian pavements.

Case G (Cont'd)

Audit comments

4. The SSWXP was introduced for UUs to arrange their small-scale excavation works more efficiently. Under the SSWXP, an applicant was not required to provide details of proposed installation (e.g. disposition, alignment, and dimensions). The observed unauthorised works in this case suggested inadequate checking of the completed works and some control weaknesses under the SSWXP. According to the HyD, in 2011, it revised the SSWXP procedures (Note) requiring works proponents to obtain the HyD's consent before carrying out non-standard works items (e.g. poles and other above-ground installations). To strengthen the detective control under the SSWXP, the HyD needs to enhance its guidelines on the checking of completed works.

Source: Audit analysis of HyD and LandsD records

Note: When a UU registers its proposed works in the XPMS, it can choose from a list of pre-set standard works items (which differs from one UU to another), including duct/pipe laying and construction of associated structures. For pre-set standard works items in the XPMS, the HyD's consent on the proposed installation is not required. As regards non-standard works items, the UU is required to provide additional information on the installation works and obtain the HyD's consent before proceeding to apply for an XP.

3.12 ***Need to strengthen control over alignment and disposition of underground utility installation.*** According to the HyD, the statutory authorities bestowed upon the Director of Highways under the LMPO are to issue an XP which mainly controls conducting or maintaining road excavation to ensure that permittees comply with the XP conditions such as minimum-depth requirement (see para. 3.7(c) and Note 41) during the XP validity period. The revised SSWXP procedures put in place in 2011 (see para. 4 in Case G of para. 3.11) are only applicable to above-ground installations. As the works proponents are not required to obtain the HyD's consent for their underground utility installations, there is no assurance that the alignment and disposition would be up to the HyD's satisfaction. This situation is unsatisfactory as it is difficult to check the alignment and disposition of underground utility installations

Note 41: *Permittees are required to submit photograph records to show that the minimum-depth requirement of underground installation has been complied with.*

Control of underground utility installation and space occupation

after reinstatement of road surface. In Audit's view, there is a need to strengthen control on the alignment and disposition of underground utility installations, including the following:

- (a) in accordance with the land licence condition (see para. 3.7(b)(iii)), the HyD may consider enhancing the procedures and requirements on checking the alignment and disposition of the underground utility systems;
- (b) the HyD may consider exploring with the LandsD and other bureaux/departments with responsibilities on utilities the need to require UUs to submit as-built records and updated master plans (see para. 3.7(b)(v)) of underground utility systems for strategic locations (e.g. at road junctions/locations with busy vehicular traffic or pedestrian flow) to facilitate checking and controlling road excavation; and
- (c) as regards the two power and one gas supply UUs which provide updated master plans on strategic installations to the LandsD annually, the utility information collected has only been uploaded onto its Land Information System (Note 42) for internal use and not for sharing with the HyD. In this connection, the HyD needs to consider exploring with the LandsD the feasibility of sharing the annual updated master plans on strategic installations submitted by the power and gas supply UUs to better control road excavations.

Management and control of underground space occupation

3.13 *Need to develop an effective system on managing and controlling underground space occupation.* As mentioned in paragraph 3.8(b) and (c), both the master plan submitted upon land licence application and the road-opening plan submitted upon XP application do not show detailed records of the underground utility installations. As a result, the HyD does not possess sufficient underground utility information to assess whether sufficient underground space is available and determine whether excavation works should be allowed. According to the HyD, when exercising

Note 42: *The LandsD operates a Land Information System for maintaining updated digital maps and cadastral databases (i.e. computerised maps showing property boundaries) and hence providing a foundation geospatial data framework in Hong Kong.*

Control of underground utility installation and space occupation

its authority under Part III of the LMPO on controlling road excavation works, it often encounters problems of insufficient underground space for UUs to lay new services. The HyD has therefore established forums to improve coordination among various government departments and UUs (see para. 1.9) and the Electronic Mark Plant Circulation System (see Note 33 to para. 3.3(d)(ii)) to facilitate them to obtain existing underground utility information and avoid conflicts as far as possible before carrying out road excavation works. As illustrated in Case F in paragraph 3.9 and Case G in paragraph 3.11, there is no assurance that the alignment and disposition of underground telecommunications systems have been installed to the satisfaction of the HyD because the Government does not maintain as-built records on such installations beneath public roads/unleased government land. Audit considers that the HyD needs to, in collaboration with the LandsD, the DEVB and other bureaux with policy responsibilities on utilities, explore the development of an effective management and control system over underground space occupation.

Collaboration Study on Management of Space Occupation by Utilities Underneath Public Roads

3.14 To address the underground space occupation problems when the HyD is exercising the power under Part III of the LMPO on controlling road excavation works, in March 2013, the HyD commissioned a consultant (Consultant B) to conduct a “Collaboration Study on Management of Space Occupation by Utilities Underneath Public Roads” at a cost of \$1.3 million. The objective of the study was to explore and carry out trials on any proposed methodology with a view to identifying an effective instrument to tighten control over excavation works on public road sections with congested underground utilities. Three government departments and 13 major UUs participated in the study on a voluntary basis (Note 43). According to the consultancy agreement, Consultant B was required, among others, to carry out the following tasks:

- (a) to study on methods being adopted by other metropolises for managing the occupation of underground space and recommend a viable framework and methodology for strengthening road opening control in Hong Kong;

Note 43: *The three government departments were the WSD, the DSD and the HyD, and the 13 UUs were 2 power and 1 gas supply UUs and 10 local fixed-network operators.*

Control of underground utility installation and space occupation

- (b) to develop a computerised system to support the proposed methodology and administration measures, namely Consolidated Utility Installation Modelling System (CUIMS); and
- (c) to conduct a trial of a proposed methodology and a developed computerised system.

3.15 ***Final Report.*** In December 2017, Consultant B submitted the Final Report of the Collaboration Study with the following major conclusions and recommendations:

- (a) ***Planned methodology.*** A planned methodology (using the CUIMS — see Appendix C) was developed for trials in three selected areas (in the vicinities of Leighton Road, Hoi Bun Road and Wan Po Road). During the trial period, UUs were required to conduct detailed planning of the alignment and level of their proposed underground services within the trial areas. If it was demonstrated that sufficient space was available and conflicts with other proposed services were resolved, planning recommendation would be granted to the concerned underground services for application of XP. Upon completion of works, UUs were required to update the as-built records accordingly. However, in view of UUs' criticism on the user-friendliness of CUIMS (e.g. applicants found it difficult to add/modify their alignment plans) and doubts on the accuracy of the 3-dimensional models based on their own records, other more efficient and acceptable means/approach of methodology might be required;
- (b) ***Modelling underground utilities in 3-dimensional format.*** The idea of modelling the underground utilities in 3-dimensional format should be able to assist UUs to better plan their new installations by avoiding the areas congested with underground utilities. The utilisation of underground space could then be optimised to support continuous growth of public services, and unnecessary excavation works and/or prolonged opening up of the footpath surface could be prevented due to insufficient underground space to accommodate the utilities. However, such objective was difficult to achieve due to the following constraints:
 - (i) discrepancy between the 3-dimensional model and as-built locations of the underground utilities rendered the analysis under the CUIMS

Control of underground utility installation and space occupation

for identifying an alignment without conflict not too meaningful;
and

- (ii) a 3-dimensional model built by a third party would easily become outdated even with very accurate records provided by UUs at the beginning as as-built records were kept and owned by the respective UUs. Frequent updating of the records and verification of the accuracy of model would be required;

- (c) **Way forward.** In the long run, it would be necessary for the existing 2-dimensional record systems adopted by most UUs to be upgraded to 3-dimensional digital records so as to meet the rising expectation and demand for more accurate underground utility records by the public. In order to facilitate efficient building up of a 3-dimensional database/model, the standard and form of record kept by UUs should be aligned. A common platform for storing and viewing of all the 3-dimensional as-built records of UUs was recommended to be built. UUs should be responsible for uploading, updating and maintaining their own utility records shown in such platform; and

- (d) **Extending trial of the CUIMS.** Since the data obtained from the first 2-year trial of the CUIMS was limited, the trial should be extended for a longer period to gather more data for future analysis and determination on the way forward.

In November 2016, the HyD awarded a service contract to another consultant to maintain the CUIMS and extend the trial period to December 2018.

3.16 **Need to seek the LandsD's assistance in developing the CUIMS.** While the HyD had commissioned a consultancy study to identify an effective instrument to tighten control over excavation works in areas with congested underground utilities, feedback from participating UUs of the proposed CUIMS was that the trial CUIMS was not user friendly. In addition, the study also found that the format and standard of the as-built records kept by UUs were different. As the LandsD's Land Information System maintains records of updated master plans on strategic installations submitted by the two power and one gas supply UUs (see para. 3.8(b)), its experience may be useful for the development of the CUIMS. The HyD needs to seek the LandsD's assistance in developing the CUIMS for better utilisation of underground space in areas with congested underground utilities.

Audit recommendations

3.17 **Audit has recommended that the Director of Highways should:**

Control of underground utility installation

- (a) **expedite action to rectify the three outstanding non-compliant cases of minimum-depth requirement as mentioned in Case F in paragraph 3.9;**
- (b) **enhance the guidelines on the checking of completed works under SSWXP to detect unauthorised works;**
- (c) **consider enhancing the procedures and requirements on checking the alignment and disposition of underground utility systems before the road surface is reinstated;**
- (d) **consider exploring with:**
 - (i) **the LandsD and other bureaux/departments with responsibilities on utilities the need to require UUs to submit as-built records and updated master plans of underground utility systems for strategic locations (e.g. at road junctions/locations with busy vehicular traffic or pedestrian flow) to facilitate checking and controlling road excavation; and**
 - (ii) **the LandsD the feasibility of sharing the annual updated master plans on strategic installations submitted by the power and gas supply UUs to facilitate the HyD to better control road excavation;**

Management and control of underground space occupation

- (e) **in collaboration with the LandsD, the DEVB and other bureaux with policy responsibilities on utilities, explore the development of an effective management and control system over underground space occupation; and**

Control of underground utility installation and space occupation

- (f) **seek the LandsD's assistance in developing the CUIMS for better utilisation of underground space in areas with congested underground utilities.**

Response from the Government

3.18 The Director of Highways agrees with the audit recommendations in paragraph 3.17.

3.19 The Secretary for Development agrees with the audit recommendation in paragraph 3.17(e).

3.20 The Director of Lands agrees with the audit recommendations in paragraph 3.17(d), (e) and (f). He has said that:

- (a) regarding the audit recommendation in paragraph 3.17(d), on request by the HyD, the LandsD can require the licensees under the pertinent licence condition to share the information with the HyD. In addition, the relevant bureaux/departments under the licensing regime (e.g. the OFCA for telecommunications installations) should also be approached to assist in soliciting such information; and
- (b) regarding the recommendation in paragraph 3.17(f) on the development of the CUIMS, subject to the availability of resources, the Survey and Mapping Office will render support to the HyD in developing the system.

3.21 The Commissioner for Efficiency has said that the Government is in the progress of developing the Common Spatial Data Infrastructure by 2023 to enable sharing of geo-spatial data across sectors which would initially deal with information within the Government and specifically focusing on data relating to planning, land and infrastructure development and management. It will be progressively extended to different sectors of participants, such as professionals, property developers, utilities sector and the general public. The HyD may be able to make use of more comprehensive information to plan for and improve its monitoring of excavation works.

PART 4: EXPLORING THE USE OF COMMON UTILITY ENCLOSURES

4.1 By accommodating utility services within single structures beneath carriageways/footways, CUE has the potential for reducing road opening works. This PART examines the Government's efforts in exploring the use of CUEs.

Installation of underground utility services

4.2 In the installation of underground utility services (such as water, drainage, gas, power and telecommunications systems), the conventional approach is normally adopted in Hong Kong. Under this approach, workers excavate a trench in a carriageway/footway and either lay the utility apparatus (e.g. water pipes) directly within the trench on bedding materials or ducts within the trench for later installation of cables (e.g. power or telecommunications cables). After the utility installation works, the surface of carriageway/footway will be reinstated. This conventional approach is simple but has the disadvantages of causing disruption to vehicular/pedestrian traffic, and resulting in adverse environmental and social impacts. If underground utilities are congested or the implementation of TTA cannot be worked out at the concerned road section for the proposed road opening, UUs may adopt trenchless excavation (i.e. use of tunnels) to install utility services though this is more expensive. Trenchless excavation does not require an XP except for the end shaft chambers of the tunnels located within public roads. In recent years, the increase in the number of service providers in the telecommunications industry has led to the increase in underground utility services, resulting in a higher risk of damaging adjacent facilities when excavating for a particular utility system. Furthermore, with the continuous increase of such services, the underground space near the surface (especially for footpath) will eventually be saturated with cables/ducts making it very difficult, if not impossible, to go into the deeper sub-surface space for utility installation.

4.3 Internationally, a common approach to minimising the problems associated with utility provision in urban areas is to accommodate multiple utilities within a single structure beneath carriageways/footways. The different ways of housing underground utility services within single structures are collectively referred to as

Exploring the use of common utility enclosures

CUEs (Note 44). In general, CUEs are single utility corridor structures built underneath carriageways/footways to accommodate different types of utilities. According to the HyD, using CUEs to accommodate underground utility services has the following advantages:

- (a) substantially reducing the need for road openings to install and maintain utility services, thereby reducing traffic delays and nuisance to the public;
- (b) extending the service life of pavements by reducing the number of road excavations and lowering the recurrent highway maintenance costs;
- (c) improving urban streetscape by reducing the number of patched up road surfaces;
- (d) making more effective use of sub-surface spaces for potential underground space saving and accommodating long-term development needs more easily; and
- (e) enhancing safety of underground utility works and helping reduction of air and noise pollution caused by road works and machinery.

Photographs 4 and 5 show a conventional underground utility installation by trench excavation in 2018 and a trial CUE of single utility corridor constructed at Horizon Drive, Chung Hom Kok in 2006 (see para. 4.5).

Note 44: *Generic designs of CUEs include transfer type (trunk or tunnels), distribution type (troughs or ducts) and cross-road type (culverts or ducts).*

Photograph 4

**Conventional underground
utility installation by trench excavation
(2018)**



Source: Photograph taken by Audit staff in January 2018

Photograph 5

**A trial CUE constructed at Chung Hom Kok
(2006)**



Source: HyD records

Remarks: According to the HyD, the corridor is a cross-road type (culvert).

Developments of common utility enclosures

CUE Study in 2002

4.4 With the policy approval of the then Transport Bureau (Note 45) in September 2001, the HyD appointed Consultant A in March 2002 to conduct a study (the 2002 Study) on the feasibility of implementing CUEs in Hong Kong with an objective of reducing road openings by UUs. The 2002 Study was completed in December 2003 at a cost of \$1.74 million. The 2002 Study analysed road opening statistics to identify and assess the key problems associated with conventional utility installation, reviewed international and local experience in CUE implementation and studied the logistics of local utility services provision in the form of CUE. The 2002 Study concluded that:

- (a) CUE implementation would be limited to new town developments and wholesale redevelopment projects in older urban areas and subject to the evaluation of overall benefits. The Government should lead the implementation of CUEs in Hong Kong;
- (b) overall, the CUE options were considered technically feasible and provide particular benefits for UUs, Government and the public. The implementation of CUEs should be subject to cost-and-benefit analysis due to substantial capital costs required. If adopting CUE was found to be both technically feasible and financially sustainable, other issues such as the management, maintenance, operation, security, liability and legal issues had to be addressed; and
- (c) a trial on CUEs was considered necessary and conducive to ascertaining the way forward. Some pilot schemes on using the CUEs should be carried out in the South East Kowloon Development (subsequently retitled as Kai Tak Development) in order to test and refine the arrangements for implementation of CUEs.

Note 45: *Before July 2002, the then Transport Bureau was responsible for the policy portfolio on transport matters. In July 2002, the then Environment, Transport and Works Bureau was set up and took over the policy portfolio on transport matters from the then Transport Bureau. In July 2007, the Environment Bureau, the Transport and Housing Bureau and the DEVB were formed to take over the environment, transport and works policy portfolios respectively from the then Environment, Transport and Works Bureau.*

Two trial CUEs constructed in 2006

4.5 In 2004, the then Environment, Transport and Works Bureau gave policy support to the HyD for providing trial CUEs in order to evaluate the effectiveness of CUEs in various locations in Hong Kong. In 2006, the HyD constructed two trial cross-road type CUEs (see Note 44 to para. 4.3), one at Yan Cheung Road, Yau Ma Tei in Kowloon at a cost of \$1.8 million and the other one at Horizon Drive, Chung Hom Kok on Hong Kong Island at a cost of \$0.72 million (Note 46) with a total annual maintenance cost of about \$10,000. Gas mains, water mains and drainage pipes were excluded from the CUEs after taking into account the possible gas leakage problem and other design requirement. In 2007 and 2008, the HyD and the LandsD discussed and agreed the logistics, legal and contractual arrangements as follows:

- (a) for better control, a UU should apply for a works permit for using CUEs. A set of CUE works permit operation procedures had been prepared;
- (b) the existing land licences (see para. 3.7(b)) should cover the installation of utilities inside CUEs, and a separate supplementary agreement would not be required; and
- (c) the HyD had confirmed that the related CUEs were culverts (underground channels for electrical cables) and not tunnels. The fees under the Land (Miscellaneous Provisions) Regulations should not be imposed (Note 47).

Up to January 2018, two UUs had installed underground utility services inside the CUE at Yan Cheung Road and one UU had installed such services inside the CUE at Horizon Drive.

Note 46: *A CUE with a length of 26 m, width of 2.4 m and height of 2.8 m was built at Yan Cheung Road and another one with a length of 12 m, width of 2.6 m and height of 2.9 m was built at Horizon Drive.*

Note 47: *Under the Regulations, any pipes or cables laid through government tunnels should be charged at \$6 per 10-millimetre diameter per m per annum.*

No trial CUEs constructed in Kai Tak Development in 2011

4.6 In May 2009, the HyD discussed internally on whether CUEs would be suitable for further development and considered that:

- (a) the tunnel type CUE would not be suitable for existing urban areas but might be acceptable in new development areas such as the Kai Tak Development; and
- (b) for the Kai Tak Development, there were other more viable options such as providing a wider road reserve to accommodate the utilities. While the provision of CUEs (i.e. common utility troughs) could be considered, the costing and future maintenance responsibilities had to be addressed.

4.7 In August 2009, the CEDD as the works department responsible for the Kai Tak Development consulted the HyD on the latest position of adopting CUEs and sought its initial view of putting some pilot CUE facilities to trial at new road junctions in the Kai Tak Development. In the same month, the HyD informed the CEDD that policy support from the DEVB in installing trial CUEs in Kai Tak Development should be sought first. However, in September 2009 the CEDD replied that there was a decision not to pursue trial CUEs in Kai Tak Development. In September 2010, the HyD and the CEDD held a meeting to discuss the possible use of common utility trough in Kai Tak Development. After the meeting, the CEDD pointed out that the project design had allowed adequate space for laying utilities along footpaths and the benefits of implementing CUEs in the Kai Tak Development might be limited to reducing inconvenience to pedestrians only. With the support of the JUPG (see para. 1.9), the HyD and the CEDD explored the feasibility of constructing trial CUEs at road junctions provided that the development progress would not be affected. In November 2010, the CEDD provided the HyD with a list of 14 road junctions, setting out the opportunities and constraints of the trial works. Among the 14 junctions, 8 were already under construction according to the approved works programmes and only 6 had potential for installing CUEs. In this connection, the CEDD said that:

- (a) works for the section of the ring road at the former north apron serving the housing sites in the vicinity of a residential area had already commenced and the CEDD was under a very tight timeframe to complete the works by mid-2013 to tie in with the public housing developments; and

- (b) other sections of the ring road were also programmed to commence in phases to tie-in with the delivery of other housing sites and the Sha Tin to Central Link railway development.

4.8 In February 2011, after an internal discussion, the HyD informed the CEDD in a memorandum that:

- (a) after taking account of all relevant factors including the programme and other constraints, the HyD decided not to pursue the trial CUE proposals in the Kai Tak Development project because of limited benefit;
- (b) without the provision of cross-road CUEs, adequate reserve cross-road ducts should be installed during construction of the roads to minimise road openings in future; and
- (c) the CEDD should encourage UUs to adopt joint utilities manholes as far as possible to make the best use of the precious road space and to avoid proliferation of manholes at ends of critical crossings or road bends.

As a result, the recommendation of the 2002 Study on constructing trial CUEs in the Kai Tak Development had not materialised.

4.9 Up to January 2018, only two trial cross-road type CUEs had been installed at Yau Ma Tei and Chung Hom Kok in 2006 (see para. 4.5). In response to Audit's enquiry in February 2018, the HyD said that:

- (a) given that two trial CUEs had already been implemented, it was reckoned at that time that benefit to implement the third trial would be limited; and
- (b) according to a technical report of July 2006 on "Planning Department: South East Kowloon Development Comprehensive Planning and Engineering Review Stage 1: Planning Review – Feasibility Study", application of CUE in Kai Tak Development was technically feasible but there were issues that remained unresolved including maintenance responsibility, legal matter for land and the financial feasibility of investment in CUE. A utility corridor of 5 to 6 m wide was recommended

Exploring the use of common utility enclosures

to be reserved along footpath. Therefore, the CUE implementation in Kai Tak Development was not pursued at that stage.

Revival of CUEs in 2017

4.10 In June 2017, the Office of the Government Chief Information Officer published the Report of “Consultancy Study on Smart City Blueprint for Hong Kong” (The Smart City Consultancy Report — Note 48). According to the Smart City Consultancy Report, using a utility tunnel, utility corridor (known as utilidor) or other forms of CUEs to carry utility lines such as electricity cables, water supply pipes, sewer pipes and communications utilities (i.e. fibre optics, cable television and telephone cables) will reduce the overall encumbrance on surrounding developments by providing common access points and reducing the number of excavations. The Smart City Consultancy Report said that:

- (a) the feasibility of deploying CUEs in planned new development areas should be assessed as one of the short-term (2017 - 2020) objectives; and
- (b) as a medium-term (2021 - 2025) initiative, utilidors should be deployed in the planned new development areas where feasible.

In view of the latest experience on the extensive use of CUEs in overseas countries and the Mainland (e.g. Qianhai), the DEVB and the HyD considered it worthwhile to revive the CUE implementation.

4.11 In August 2017, the DEVB gave policy support for the HyD to conduct another consultancy study in 2018 (2018 Study) on adopting CUEs in new development areas. The objectives were to review the findings of the 2002 Study, report on the applicability of CUEs in new development areas and develop technical requirements for implementing CUEs in Hong Kong. Tenders for the consultancy

Note 48: *The objective of this report is to advise and provide recommendations to the Government on formulating a blueprint for long-term smart city planning and development in Hong Kong. The document provides Hong Kong with suggestions for governance arrangement, digital framework (including relevant technical standards), development plans, legal framework, public-private partnership, and possible pilot projects.*

study were invited in February 2018 with a view to completing the study in 2019. Extracts of the study brief is shown in Appendix D.

Long time taken in exploring the possible use of CUEs

4.12 Using CUEs to accommodate underground utility services has the advantage of reducing the need for road openings, thereby reducing traffic delays and nuisance to the public (see para. 4.3(a)). In fact, the CUE technology has been widely used in many overseas cities and Mainland cities. In Hong Kong, the 2002 Study had confirmed the technical viability of implementing CUEs and recommended that some pilot schemes should be carried out in the Kai Tak Development to test and refine the implementation arrangements. However, only two trial CUEs were constructed in Yau Ma Tei and Chung Hom Kok in 2006 and the HyD decided in 2011 not to construct trial CUEs in the Kai Tak Development because of limited benefit (see para. 4.8(a)). The issue on the possible use of CUE was only revived in August 2017 after the publication of the Smart City Consultancy Report in June 2017 (see para. 4.10) to support the smart city planning and development in Hong Kong. After obtaining the DEVB's policy support in August 2017, the HyD planned to conduct another consultancy study on adopting CUEs in new development areas in 2018 (see para. 4.11).

4.13 In February 2018, the HyD informed Audit that:

- (a) CUEs involved substantial capital cost. The implementation of CUEs should be pursued in new development areas subject to the evaluation of benefits on a case-by-case basis;
- (b) no further CUE trial was implemented in 2011 since the two trial CUEs were completed in 2006. The review on implementation of CUEs in new development areas revived in August 2017 shortly after the publication of the Smart City Consultancy Report in June 2017; and
- (c) the decision on the implementation of CUEs in new development areas was taken by the pertinent works departments. The detailed cost-and-benefit analysis would be carried out by the pertinent project offices.

Exploring the use of common utility enclosures

4.14 Audit considers that the HyD needs to closely monitor the conduct of the 2018 Study and upon its completion, in consultation with the DEVB, take timely follow-up actions on its findings and recommendations. In this connection, Audit notes that the new development programmes (Note 49) under planning may be suitable for CUE implementation. Audit has also found that there are lessons to be learnt in constructing/planning the trial CUE schemes after the 2002 Study, as elaborated in paragraphs 4.15 and 4.16.

Need to improve the planning of trial CUEs

4.15 ***Two trial CUEs in 2006.*** The objective of constructing the two trial CUEs in 2006 was to evaluate the technical viability, the contractual arrangement and the effectiveness of the CUEs before their widespread adoption. Audit has identified the following areas for improvement:

- (a) ***No consultation with UUs on selection of location for constructing trial CUEs.*** As far as Audit could ascertain, the HyD had not consulted the relevant UUs on the selection of locations before constructing the two trial CUEs in 2006;
- (b) ***Low utilisation of trial CUEs.*** Up to January 2018, only two UUs installed underground utility services in the trial CUE at Yan Cheung Road, Yau Ma Mei and one UU installed such services in the trial CUE at Horizon Drive, Chung Hom Kok (see para. 4.5). In this connection, Audit noted that:
 - (i) while Yan Cheung Road was close to the West Kowloon development area, the Horizon Drive was located in a low-density residential area; and
 - (ii) in June 2004, the Chief Highway Engineer (Bridges and Structures) of the HyD commented that, given the short length of the proposed CUE at Horizon Drive and the need to construct large access

Note 49: *The Hong Kong 2030: Planning Vision and Strategy promulgated in 2007 by the DEVB and Planning Department recommended proceeding with the development of new development areas at Kwu Tung North, Fanling North and Ping Che/Ta Kwu Ling and Hung Shui Kiu. The planning and implementation of the areas were in progress.*

chambers, it appeared that the proposed location was not a good location for the trial scheme; and

- (c) *No evaluation of trial results.* In October 2004, when the then Environment, Transport and Works Bureau gave policy support to the HyD for the two trial CUEs, it had requested the HyD to review the operation and users' comments on the CUEs, and report the condition in a year. Subsequently, in a JUPG meeting in May 2010, the HyD said that it would prepare a report after reviewing the result of the trial CUEs. However, the HyD could not produce records of the above report or any review results for Audit's examination. In January 2018, the HyD informed Audit that the effectiveness of the two trial CUEs would be evaluated in the forthcoming consultancy study to be carried out in 2018 (see para. 4.11).

Audit considers that the HyD needs to maintain records of the implementation results of the trial CUEs and evaluate their effectiveness in a timely manner. The pertinent works department should identify, in consultation with the relevant UUs, suitable locations for constructing trial CUEs in future with a view to obtaining representative trial results.

4.16 *Proposed trial CUEs in Kai Tak Development not timely planned.* As regards the trial CUEs proposed by the 2002 Study to be provided in the Kai Tak Development, Audit noted that the HyD had kept the planning of the proposed trial in abeyance in view of the 2006 planning review (see para. 4.9(b)) until August 2009 when the CEDD sought the HyD's view of putting some pilot CUE facilities to trial in the Kai Tak Development. In November 2010, when the CEDD provided the HyD with a list of 14 road junctions for consideration of implementing trial CUEs, the construction works had commenced, i.e. 8 road junctions had been under construction and only 6 road junctions had potential for constructing the trial CUEs. In the event, the HyD decided in February 2011 not to construct any trial CUEs because "it was reckoned that benefit would be limited notwithstanding the substantial resources and effort required" (see paras. 4.7 and 4.8). Audit considers that there is a need to conduct detailed cost-and-benefit analysis and improve the planning for implementing CUEs in future so as to dovetail with the construction programme of a new development area.

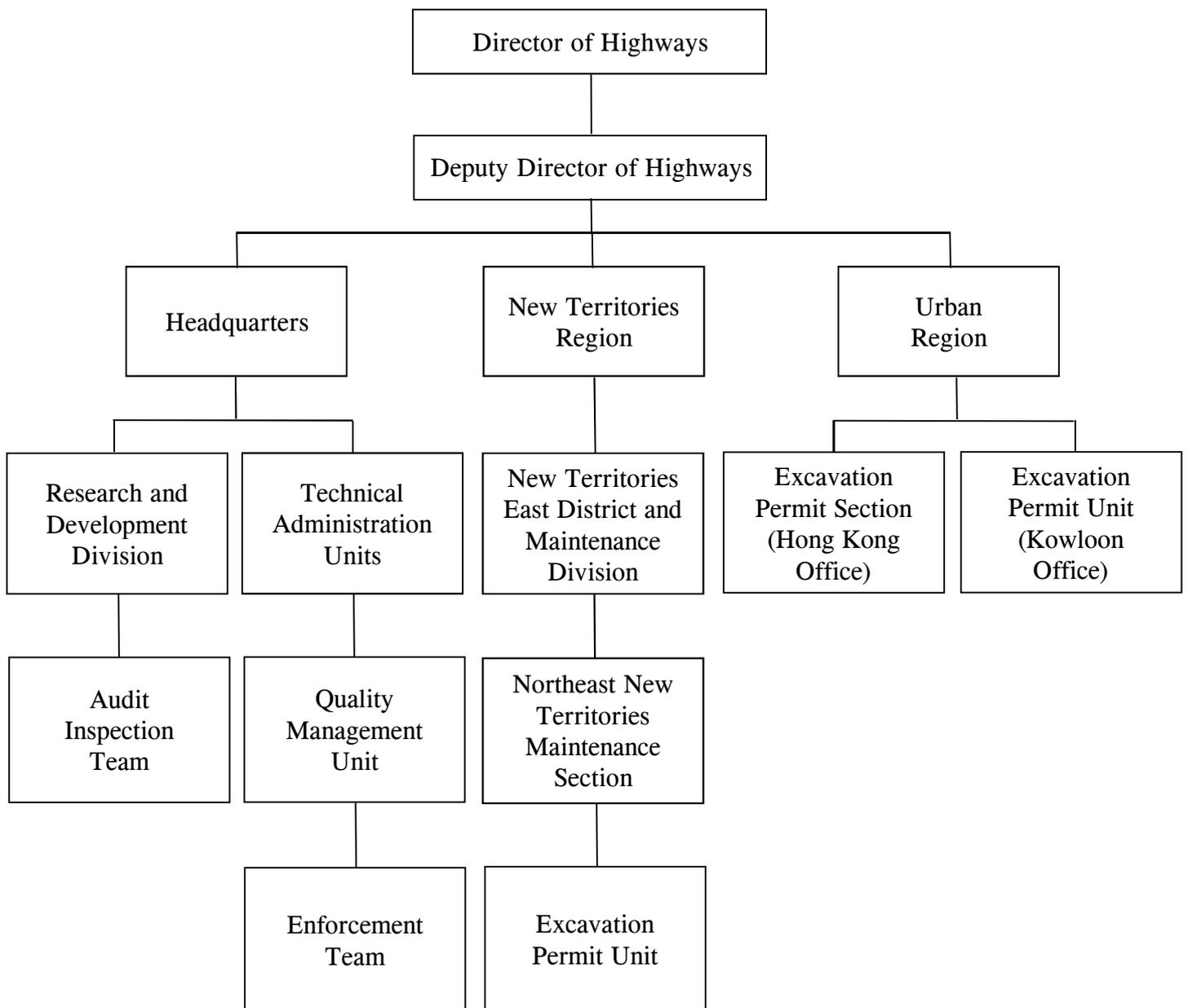
Audit recommendations

- 4.17 **Audit has recommended that the Director of Highways should:**
- (a) **in consultation with the Secretary for Development, closely monitor the conduct of the consultancy study in 2018 and upon its completion, take timely follow-up actions on its findings and recommendations with a view to reaping the benefits of using CUEs in new development areas as early as possible;**
 - (b) **draw on the experience in conducting/planning the trial CUE schemes to improve the installation of CUEs in new development areas by establishing procedures on:**
 - (i) **identification of suitable locations in consultation with the relevant UUs for constructing trial CUEs in future with a view to obtaining representative trial results;**
 - (ii) **planning of CUEs to dovetail with the construction programme of a new development area; and**
 - (iii) **conduct of detailed cost-and-benefit analysis; and**
 - (c) **maintain records of the implementation results of the trial CUEs and evaluate their effectiveness in a timely manner.**

Response from the Government

- 4.18 **The Director of Highways agrees with the audit recommendations.**

**Highways Department
Organisation chart (extract)
(31 December 2017)**



Source: HyD records

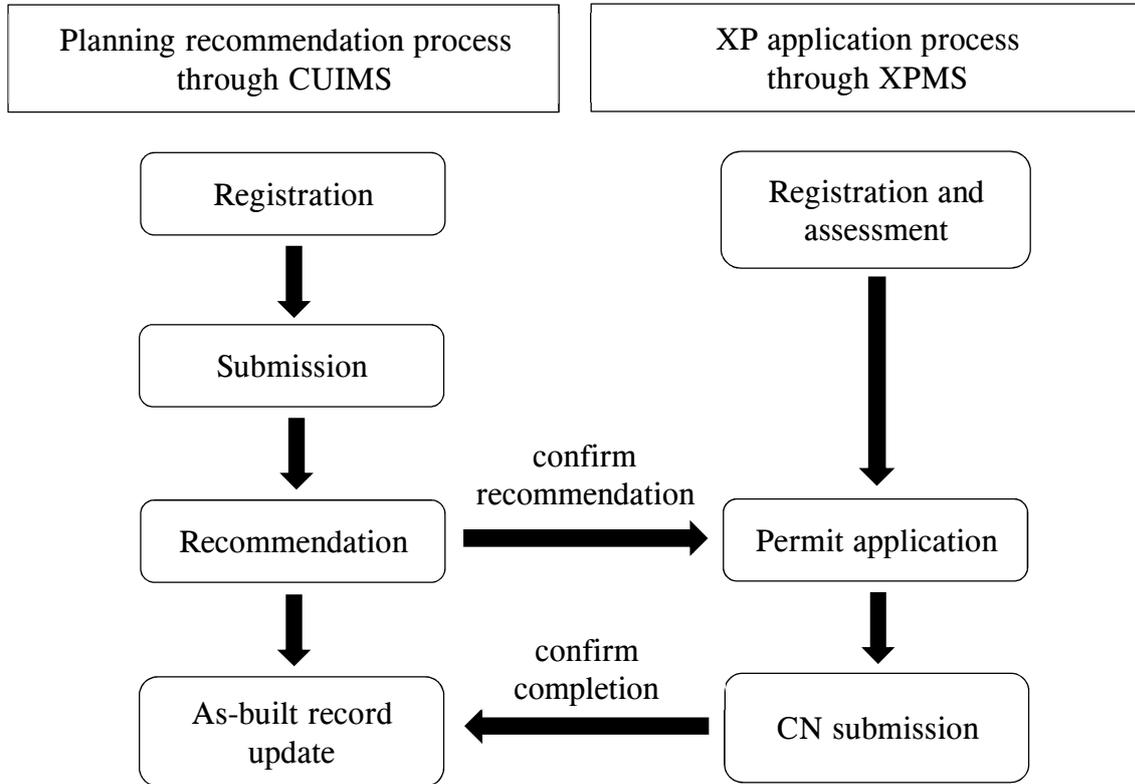
Inspection priority of the Research and Development Division's Audit Inspection Team

The AIT inspects excavation sites regularly in accordance with schedules generated by the AIMS which are based on a set of prioritisation rules:

- (a) a daily list of active permit sites from the XPMS would be compiled with the following criteria:
 - (i) any permit sites with permit commencement date elapsed (including those just to commence on the day of audit inspection);
 - (ii) EXP sites with emergency incidents number registered in the XPMS;
 - (iii) SSWXP sites with job registered in the XPMS; and
 - (iv) any permit sites with CN not yet submitted or just submitted on or after the previous working day, or with CN rejected by relevant Regional Offices; and
- (b) Inspectors of the AIT select permit sites from the daily list of active permit sites with the following order of priority:
 - (i) permit sites with poor performance records;
 - (ii) permit sites not inspected in the past ten active permit days, with the following order of priority:
 - new permit sites (those without previous inspections) with AN submitted; and
 - existing permit sites and new permit sites without AN submitted; and
 - (iii) permit sites with consistently good performance records.

Source: HyD records

**Planned methodology in determining
the alignment of utility systems**



Source: HyD records

**Extracts of study brief of
the 2018 Common Utility Enclosure Study**

According to the tender study brief:

- (a) given the rising public concern about road openings and the quest for a better living environment, it was anticipated that the Government would be asked to explain why CUEs could not be introduced in Hong Kong, particularly in new development areas;
- (b) Tokyo in Japan and some other European cities such as London, Paris, Madrid and Brussels had established the use of CUEs and had their own approaches in initiating, planning and implementing CUEs while the Mainland had recently adopted the use of CUEs in some new development areas (such as Qianhai). In view of the latest experience on the extensive use of CUEs in overseas countries and the Mainland, it was considered worthwhile to review the results and findings of the 2002 Study in order to take into account new factors, such as advancement in technology, recent overseas/Mainland experience, increasing social need to control road openings, more stringent environmental requirements and any special circumstances of new development areas; and
- (c) the Consultant would be required to:
 - (i) review the applicability of installing CUEs in new development areas after taking account of findings/recommendations in the 2002 Study, the effectiveness of the two trial cross-road type CUEs installed at Horizon Drive and Yan Cheung Road, the experience of other CUEs installed in Hong Kong and the latest experience in overseas countries and the Mainland. This included Qianhai and the experience of the CEDD in implementing of Common Utility Tunnel in their pilot new development areas projects;
 - (ii) develop assessment criteria and methodology with sufficient details so that it can be determined, at planning stage and design stage, whether CUEs shall be adopted in a new development area;

Appendix D
(Cont'd)
(para. 4.11 refers)

- (iii) consult the relevant stakeholders including the UUs and the relevant government departments for the study; and
- (iv) review the construction, management, maintenance, operation, security, liability and legal issues of CUEs in new development areas based on the 2002 Study and recommend an implementation framework for subsequent construction, maintenance, management and operation of CUEs in new development areas. Among other things, the study should include evaluating the social and economic benefits of implementing CUEs, the ownership arrangements and the cost-recovery mechanism.

Source: HyD records

Acronyms and abbreviations

AIMS	Audit Inspection Management System
AIT	Audit Inspection Team
AN	Advance Notification
Audit	Audit Commission
CA	Communications Authority
CEDD	Civil Engineering and Development Department
CN	Completion Notice
COR	Controlling Officer's Report
CUE	Common utility enclosure
CUIMS	Consolidated Utility Installation Modelling System
CWXP	Capital works excavation permit
DEVB	Development Bureau
DoJ	Department of Justice
DSD	Drainage Services Department
EffO	Efficiency Office
ET	Enforcement Team
EXP	Emergency excavation permit
GEO	Geotechnical Engineering Office
HKPF	Hong Kong Police Force
HyD	Highways Department
JUPG	Joint Utilities Policy Group
km	kilometres
LandsD	Lands Department
LMPO	Land (Miscellaneous Provisions) Ordinance
m	metres
m ²	square metres

Appendix E
(Cont'd)

NC	Non-compliance
NXP	Normal excavation permit
OFCA	Office of the Communications Authority
SSWXP	Small-scale works excavation permit
TD	Transport Department
TTA	Temporary traffic arrangement
UCL	Unified carrier licence
UTLC	Utilities Technical Liaison Committee
UU	Utility undertaking
WSD	Water Supplies Department
XP	Excavation permit
XPMS	Excavation Permit Management System
XPPM	Excavation Permit Processing Manual

CHAPTER 5

Department of Health

Department of Health's efforts in smoking control

**Audit Commission
Hong Kong
3 April 2018**

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. 70 of the Director of Audit contains 8 Chapters which are available on our website at <http://www.aud.gov.hk>

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DEPARTMENT OF HEALTH'S EFFORTS IN SMOKING CONTROL

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DEPARTMENT OF HEALTH'S EFFORTS IN SMOKING CONTROL

Executive Summary

1. In Hong Kong, it is the Government's policy to discourage smoking, contain the proliferation of tobacco use and minimise the impact of passive smoking on the public. The Department of Health (DH) is the government department responsible for implementing the Government's smoking control efforts through a multi-pronged approach, comprising legislation, enforcement, publicity, education and smoking cessation services. There are two ordinances for governing smoking control, namely the Smoking (Public Health) Ordinance (SPHO — Cap. 371) and the Fixed Penalty (Smoking Offences) Ordinance (FPSOO — Cap. 600). The SPHO provides a legal framework for restricting the use, sale and promotion of tobacco products in Hong Kong:

- (a) ***Smoking ban at designated areas.*** Any persons who smokes or carries a lighted cigarette, cigar or pipe at a statutory no smoking area (NSA) designated by the SPHO commits an offence and is liable on summary conviction to a maximum fine of \$5,000. Statutory NSAs include indoor workplaces and public places (e.g. restaurants and bars), some outdoor public places (e.g. public transport facilities) and public transport carriers;
- (b) ***Regulation on sale of tobacco products.*** No person shall sell any cigarettes, cigars, pipe tobacco or cigarette tobacco unless the packet and the retail container bear a health warning in the form and manner prescribed by the SPHO; and
- (c) ***Regulation on tobacco advertisements.*** No person shall print, publish, display, broadcast, exhibit by films, or place on the Internet any tobacco advertisements as defined by the SPHO.

The FPSOO introduced a fixed penalty system for smoking offences to enhance the efficiency and effectiveness in enforcing the smoking ban. The FPSOO provides for a fixed penalty of \$1,500 payable for smoking offences at statutory NSAs under the SPHO.

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2. The DH has implemented various promotional activities relating to smoking control, such as distributing no-smoking signs and publicity materials, providing health talks and producing announcements in the public interest. It also provides funding to the Hong Kong Council on Smoking and Health (COSH) which conducts publicity campaigns to encourage smokers to quit smoking, and garners public support for establishing a smoke-free Hong Kong. Moreover, the DH operates an integrated Smoking Cessation Hotline (the Quitline) to provide professional counselling and information on smoking cessation. It also subvents six non-governmental organisations (NGOs) and a university to deliver smoking cessation services and smoking prevention programmes.

3. The DH's smoking control efforts are implemented through the Tobacco Control Office (TCO), which was set up under the DH in 2001. In 2016-17, the TCO's expenditure on smoking control amounted to \$101.3 million while the DH's subventions to COSH, the six NGOs and the university (see para. 2) amounted to \$83.2 million. The Audit Commission (Audit) has recently conducted a review of the DH's efforts in smoking control.

Enforcement work of the TCO

4. *Handling of smoking complaints.* The TCO makes use of a record system, which is a computerised spreadsheet, for recording details of complaint cases (para. 2.6). Audit found that:

- (a) *Need to develop a computer system to properly record and monitor the performance in complaints handling.* Details of complaint cases had not been completely recorded in the record system. Of the 18,354 complaint cases received by the TCO in 2017, the interim reply dates of 7,003 (38%) cases, the first inspection dates of 7,542 (41%) cases, the inspection results of 8,334 (45%) cases, and the final reply dates of 6,401 (35%) cases had not been recorded in the record system (para. 2.7); and
- (b) *Need to disclose the TCO's guidelines on the timeframes for handling complaints.* For the 10,812 complaints received in 2017 with first inspection dates recorded, the first inspections had been conducted on average eight calendar days after receiving the complaints. Although the TCO has set internal guidelines on the timeframes (e.g. for issuing interim replies and conducting first inspections) for handling complaint cases, it

Executive Summary

does not consider these guidelines to be performance pledges. It therefore has not disclosed any of these guidelines (paras. 2.11 and 2.12).

5. ***Enforcement of smoking offences.*** Audit found that:
- (a) ***Need to provide additional guidelines to determine the frequency of inspections on complaints and inspections at locations requiring enhanced inspections (LREIs).*** The number of inspections conducted by Tobacco Control Inspectors (TCIs) on complaints and at LREIs was left to the individual judgment of the TCIs and thus varied considerably. For example, in an audit sample of 493 complaints received by the TCO in August 2017, 1 inspection had been conducted for each of the 191 complaints while 5 inspections had been conducted for each of the 7 complaints. In August 2017, of the 353 LREIs inspected by TCIs, 1 inspection had been conducted at each of the 109 LREIs while 5 inspections had been conducted at each of the 26 LREIs (paras. 2.17, 2.18, 2.22 and 2.23);
 - (b) ***Need to conduct more inspections at venue types having higher incidences of smoking offences.*** Audit’s analysis of the 8,066 complaint inspections and LREI inspections conducted by the TCO at 2,387 venues in August to October 2017 revealed that for some types of venues (e.g. bus interchange and amusement game centre), the percentage of inspections with smoking offences detected were generally higher. The TCO needs to consider conducting more inspections at the types of venues where there are higher incidences of smoking offences (paras. 2.25 and 2.26); and
 - (c) ***Need to carry out more “overnight” inspections.*** TCIs carried out inspections at different time sessions, namely “morning and afternoon”, “afternoon and evening”, “evening” and “overnight” sessions. Of the 8,066 inspections conducted in August to October 2017, “overnight” inspections had the highest percentage of inspections with smoking offences detected but accounted for only 1.6% of all the inspections conducted (paras. 2.27 and 2.28).
6. ***Fixed penalty system.*** Under the FPSOO, when witnessing a smoking offence at a statutory NSA, a TCI can issue a fixed penalty notice (FPN) to the offender, demanding a fixed penalty of \$1,500. Furthermore, authorised officers of

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the Food and Environmental Hygiene Department (FEHD), the Housing Department (HD) and the Leisure and Cultural Services Department (LCSD) as well as police officers are also empowered to issue FPNs (paras. 2.35 and 2.36). Audit found that:

- (a) ***Need to properly handle omissions or errors in FPNs.*** For the FPNs issued in 2013 to 2017, 306 had been withdrawn due to various reasons. The reason of “omission or error in the FPN” accounted for 139 (45%) of the 306 withdrawals. The FPNs withdrawn due to this reason were issued by enforcement departments other than the TCO. Instead of withdrawing an FPN, the TCO would decide on a case-by-case basis to issue an amendment notice, which would rectify the omission or error, to the offender. The TCO needs to disseminate to other enforcement departments its practice of issuing amendment notices rectifying omissions or errors in FPNs issued to offenders (paras. 2.38 to 2.40); and

 - (b) ***Need to facilitate local and non-local offenders to settle FPNs.*** As at 31 December 2017, for the FPNs issued in 2013 to 2017, the unsettlement rate of FPNs of non-local offenders visiting Hong Kong (21.5%) was much higher than that of local offenders residing in Hong Kong (1.3%). Furthermore, the unsettlement rate of FPNs of local offenders rose from 0.4% in 2013 to 3.2% in 2017. The TCO needs to explore more ways to facilitate offenders, in particular non-local offenders, to settle FPNs (paras. 2.41 and 2.42).
7. ***Need to address tobacco advertisements at convenience stores and newspaper stands.*** Under the SPHO, tobacco advertisements are banned. In recent years, the TCO had received complaints about tobacco advertisements at convenience stores and newspaper stands (i.e. 8, 8 and 4 complaints in 2015, 2016 and 2017 respectively). Such advertisements were in the form of displaying packets of cigarettes in display units. Given that there are other similar tobacco advertisements at convenience stores and newspaper stands, the TCO needs to enhance the publicity to the trade on the legal requirement of banning tobacco advertisements, and take enforcement actions against tobacco advertisements where warranted (paras. 2.45, 2.46 and 2.48).

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8. ***Scope for improvement in the conduct of surprise checks.*** The inspection work of the TCO's enforcement teams is subject to supervisory checks by 4 Executive Officers of the TCO. Audit examined the 51 supervisory checks conducted in the 12-month period from November 2016 to October 2017 and found that: (a) in 20 (39%) checks, the Executive Officers were unable to find the enforcement teams at the inspection venues; (b) among the 21 enforcement teams, the number of supervisory checks conducted on the teams ranged from 0 to 9; and (c) no supervisory checks were conducted before 9:30 a.m. or after 7:30 p.m. while the enforcement teams were required to conduct inspections round the clock (paras. 2.51 and 2.53).

Facilitating the work of venue managers

9. ***Need to improve the display of no-smoking signs.*** The TCO has advised venue managers of statutory NSAs (e.g. management companies) to display sufficient no-smoking signs in prominent positions to remind people that smoking is prohibited at statutory NSAs. To this effect, the TCO has prepared no-smoking signs, which can be freely obtained from the TCO by venue managers. The Food and Health Bureau has also required bureaux and departments to post sufficient no-smoking signs, showing the fixed penalty level, at statutory NSAs under their control and management. Audit selected four types of statutory NSAs (see (a) to (d) below) to inspect the display of no-smoking signs (paras. 3.8 to 3.10). Audit's findings were as follows:

- (a) ***Enclosed public places.*** Enclosed public places include enclosed staircases and enclosed pedestrian pavements. Audit visited 4 enclosed staircases and 4 enclosed pavements in three districts in the territory and found that there were no display of no-smoking signs and evidence of smoking as cigarette butts were found on the stairs or ground (paras. 3.12 and 3.13);
- (b) ***Outdoor escalators.*** Audit visited 20 outdoor escalators (located in public housing estates of two districts and in Wan Chai) each for half an hour. Audit found that at only 5 (25%) of the 20 escalators, no-smoking signs were displayed. Furthermore, Audit spotted 6 persons smoking at 5 of the 15 escalators at which no-smoking signs were not displayed, but did not spot any persons smoking at the 5 escalators at which no-smoking signs were displayed (paras. 3.14 and 3.15);
- (c) ***Public pleasure grounds (PPGs).*** Audit visited 9 PPGs managed by the LCSD (located in three districts) each for one hour. Audit found that at all

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of the 9 PPGs, no-smoking signs/banners were displayed, the vast majority of which were the LCSD's own signs/banners. Unlike the TCO's signs/banners, the LCSD's signs/banners did not show information on the fixed penalty for violation and the complaint hotline of either the LCSD or the TCO. Furthermore, at 8 (89%) of the 9 PPGs, Audit spotted 33 persons smoking. At all of the 9 PPGs, cigarette butts were found (para. 3.16); and

- (d) ***Public transport facilities (PTFs).*** The TCO is responsible for displaying no-smoking signs and banners at PTFs. Audit visited 9 PTFs (located in three districts) each for one hour, and spotted 12 persons smoking at 6 (67%) of the 9 PTFs where no-smoking signs and banners were displayed (para. 3.17).

10. ***Need to step up enforcement efforts.*** As shown in paragraph 9, there were incidents where people were found smoking at statutory NSAs under the management of government departments (e.g. outdoor escalators in public housing estates managed by the HD and PPGs managed by the LCSD). Audit analysed the FPNs issued by the FEHD, the HD and the LCSD in 2013 to 2017 and found that the number of FPNs issued by the FEHD and the LCSD was much lower than that of the TCO and the HD. For example, in 2017, the FEHD issued 52 FPNs at statutory NSAs under its management, the LCSD issued 54 FPNs at statutory NSAs under its management, while the TCO issued 517 FPNs and 495 FPNs at statutory NSAs under the management of the FEHD and the LCSD respectively. In the same year, the HD issued 410 FPNs at statutory NSAs under its management (para. 3.22).

Smoking cessation services and other management matters

11. ***Provision of smoking cessation services through subvented organisations and a DH clinic.*** Audit found that:

- (a) ***Scope for improving the monitoring of subvented organisations' performance.*** The DH monitored the performance of the seven subvented organisations (see para. 2) mainly by reviewing the performance reports submitted regularly by them, and by holding meetings with them to discuss their performance. According to the TCO, it had conducted ad-hoc inspections at the organisations. For example, in 2015 to 2017, as part of the international training programmes on smoking control organised by the

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TCO annually, TCO staff (and training programme participants) paid visits to the smoking cessation clinics operated by two organisations. As the TCO's inspections are only conducted on an ad-hoc basis, the TCO needs to take measures to better plan its inspections at the seven subvented organisations taking into account the frequency of inspections and the need to conduct surprise inspections. The TCO also needs to conduct the inspections in a more comprehensive manner. For example, it needs to ascertain whether proper systems are in place for reporting performance and controlling the use of DH subventions (paras. 4.5 and 4.6); and

- (b) ***Need to review the way forward of a DH clinic.*** The DH provides smoking cessation services to members of the public through a primary care out-patient clinic. DH records indicated that, in 2009 to 2017, the number of referrals by the DH Quitline (see para. 2) to the DH clinic had decreased from 619 in 2009 by 606 (98%) to 13 in 2017, and the number of new cases had decreased from 354 in 2009 by 348 (98%) to 6 in 2017. Given the small number of referrals and new cases of the clinic in recent years and the fact that similar smoking cessation services are being provided by DH subvented organisations, the DH needs to conduct a review on the way forward of the clinic's smoking cessation services (paras. 4.8 and 4.10).
12. ***Scope for setting additional performance indicators.*** Audit noted that in the DH's Controlling Officer's Reports for 2013 to 2017, there was only one performance indicator (i.e. the number of publicity or educational activities delivered by COSH) that was relevant to the DH's smoking control efforts. The DH needs to set and publish additional performance indicators (paras. 4.14 and 4.15).

Operation of COSH

13. ***Governance of COSH.*** COSH is a statutory body established in 1987 pursuant to the Hong Kong Council on Smoking and Health Ordinance (Cap. 389). As at 31 December 2017, COSH consisted of 17 members, including the Chairman, the Vice-Chairman and 15 other members (including 2 government officials, i.e. the Deputy Director of the DH and the Assistant Director (Publicity and Promotions) of the Information Services Department (ISD)). Under COSH, five committees and a Secretariat have been set up to assist it in carrying out its functions (paras. 5.2 and 5.3). Audit found that:

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- (a) *Need to enhance attendance rates at meetings.* In 2013-14 to 2017-18 (up to January 2018), for meetings of the Council and the Executive Committee, the overall attendance rates were above 70% and 90% respectively. However, for some meetings of the other four committees, the overall attendance rates were below 70%. Furthermore, the attendance rates of some members (e.g. 5 members in 2016-17) were below 50% and, in particular, 1 member did not attend any meetings in 2016-17 (paras. 5.7 and 5.9);
- (b) *Need to address issues relating to the attendance of government officials at meetings.* The Deputy Director of the DH had participated in the meetings of the Council/Executive Committee in which the annual budget and the application for supplementary grant were discussed and approved for submission to the Government. In February 2018, the TCO informed Audit that the Deputy Director's presence in the meetings did not imply that COSH's programme and budget proposals would invariably be approved by the DH subsequently. As a good governance practice, COSH and the DH need to ensure that members of the Council/Executive Committee fully understand the roles and functions of the Deputy Director in the Council/Executive Committee. Furthermore, Audit noted that in 2013-14 to 2017-18 (up to January 2018), a Principal Information Officer of the ISD had represented the ISD's Assistant Director to attend all the meetings of the Council and the Education and Publicity Committee. COSH, however, had not laid down rules for alternate members to attend meetings (paras. 5.11 to 5.14); and
- (c) *Need to disclose remunerations of senior staff.* In March 2003, the Director of Administration issued a Circular Memorandum, promulgating a set of guidelines for the control and monitoring of remuneration practices in subvented bodies by the Government. COSH had published on its website a message that the remuneration packages of its staff at the top three tiers had been reviewed and recommended to remain unchanged. COSH, however, did not publish on its website information such as the number, rank and remuneration packages of its staff at the top three tiers (paras. 5.17 and 5.18).
14. *Implementation of programmes by COSH.* COSH implements three types of programmes, namely community education programmes, publicity programmes,

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and research and conference programmes (para. 5.23). Audit examined two major programmes and found that:

- (a) ***Interactive Education Theatre Programme.*** In every school year, COSH cooperates with a local professional troupe to produce a show. The troupe stages a show performance at each of the primary schools participating in the Programme to inform students of the harmful effects of smoking, and to equip them to promote a smoke-free lifestyle and encourage their family members to quit smoking. In the five school years 2012/13 to 2016/17, some 230 schools had participated in the Programme, accounting for about 46% of all primary schools. However, about 270 (54%) schools had not participated in the Programme (paras. 5.25 and 5.27); and
- (b) ***“Quit to Win” Smoke-free Community Campaign.*** COSH recruits district organisations as district partners and offers financial support to them for organising smoke-free promotion activities. However, Audit noted that no district organisations had been recruited for a number of districts in recent years to participate in the Campaign. For example, no district organisations had been recruited for the 5 Campaigns since 2012-13 for 3 districts (paras. 5.28 and 5.30).

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 Director of Health should:**

Enforcement work of the TCO

- (a) **closely monitor the implementation of the Tobacco Control Office Information System to ensure that there is no undue delay in enhancing the monitoring of performance in complaints handling (para. 2.14(a));**
- (b) **take measures to ensure that data relating to complaints handling are entered into the Tobacco Control Office Information System in a timely and complete manner for proper monitoring of performance in complaints handling (para. 2.14(b));**

Executive Summary

- (c) **consider disclosing the TCO’s guidelines on the timeframes for handling complaint cases together with the extent that the timeframes have been achieved (para. 2.14(c));**
- (d) **provide additional inspection guidelines to facilitate TCIs to determine the frequency of complaint inspections and LREI inspections (para. 2.33(a));**
- (e) **consider conducting more inspections at the types of venues having higher incidences of smoking offences (para. 2.33(b));**
- (f) **consider conducting more “overnight” inspections (para. 2.33(c));**
- (g) **disseminate to other enforcement departments the TCO’s practice of issuing amendment notices rectifying omissions or errors in FPNs issued to offenders (para. 2.43(a));**
- (h) **explore more ways to facilitate offenders, in particular non-local offenders, to settle FPNs (para. 2.43(b));**
- (i) **enhance the publicity to the trade on the legal requirement of banning tobacco advertisements and the legal definition of such advertisements, and take enforcement actions against tobacco advertisements where warranted (para. 2.49);**
- (j) **take measures to deal with the situations where the enforcement teams could not be found at inspection venues during surprise checks (para. 2.54(a));**
- (k) **lay down guidelines to facilitate Executive Officers to conduct surprise checks (para. 2.54(b));**

Facilitating the work of venue managers

- (l) **identify enclosed public places and outdoor escalators at which there are no display of no-smoking signs, and encourage venue managers of these venues to display no-smoking signs (para. 3.19(a));**

Executive Summary

- (m) **advise venue managers to display no-smoking signs containing messages relating to the smoking ban (e.g. the fixed penalty for violation and the TCO's complaint hotline) (para. 3.19(b));**
- (n) **at statutory NSAs of which the venue managers are government departments, urge the managers to follow the requirements of the Food and Health Bureau (para. 3.19(c));**
- (o) **provide the FEHD, the HD and the LCSD with information on recurrent complaints about smoking at the statutory NSAs managed by them on a more frequent basis so as to facilitate them to initiate enforcement actions more effectively, and conduct more joint operations with these departments so as to provide more training to their authorised officers (para. 3.24);**

Smoking cessation services and other management matters

- (p) **take measures to better plan the TCO's inspections at the organisations subvented by the DH for providing smoking cessation services and conduct more comprehensive inspections (para. 4.11(a));**
- (q) **review the way forward of the smoking cessation services provided by the DH clinic to members of the public (para. 4.11(b));**
- (r) **consider setting and publishing additional performance indicators so as to enhance the transparency and accountability of the DH's efforts in smoking control (para. 4.16); and**

Operation of COSH

- (s) **consider requiring COSH to publish details concerning remunerations of the staff at the top three tiers of COSH (para. 5.20).**

16. **Audit has also *recommended* that the Director of Food and Environmental Hygiene and the Director of Leisure and Cultural Services should review the enforcement operations at the statutory NSAs under their**

Executive Summary

management and step up enforcement efforts at these NSAs where warranted (para. 3.25).

17. **Audit has also *recommended* that COSH should:**
- (a) **monitor the overall attendance rates of members at Council/committee meetings and take measures to improve the overall attendance rates where warranted (para. 5.19(a));**
 - (b) **take measures to improve the attendance rates of members with low attendance rates at Council/committee meetings (para. 5.19(b));**
 - (c) **in conjunction with the DH, take measures to ensure that members of the Council/Executive Committee fully understand the roles and functions of the DH's Deputy Director in the Council/Executive Committee (para. 5.19(c));**
 - (d) **in conjunction with the ISD, review and revise the arrangement whereby the ISD's Assistant Director is represented by a Principal Information Officer in all Council/committee meetings (para. 5.19(d)); and**
 - (e) **enhance the efforts to recruit schools that have not participated in the Interactive Education Theatre Programme to join the Programme, and to recruit district organisations from those districts where no organisations have been recruited in recent years to participate in the "Quit to Win" Smoke-free Community Campaign (para. 5.31).**

Response from the Government and COSH

18. The Director of Health, the Director of Food and Environmental Hygiene, the Director of Leisure and Cultural Services and COSH agree with the audit recommendations.

PART 1: INTRODUCTION

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

Background

1.2 According to the Department of Health (DH), the harm of smoking, including exposure to passive smoking, is well-established by scientific research and well-recognised by international communities. To address tobacco dependence as a public health epidemic, the World Health Organization (WHO) has developed a Framework Convention on Tobacco Control which has 168 signatories (Note 1). According to the Framework Convention, various measures are required to deal with the epidemic, including measures regulating and reducing tobacco demand (Note 2).

1.3 In Hong Kong, it is the Government's policy to discourage smoking, contain the proliferation of tobacco use and minimise the impact of passive smoking on the public. This policy, according to the Government, has paid full regard to the provisions of the Framework Convention on Tobacco Control (Note 3). The DH is the major government department responsible for implementing the Government's smoking control efforts through a multi-pronged approach, comprising legislation, enforcement (see paras. 1.4 to 1.6), publicity, education and smoking cessation

Note 1: *China is a signatory of and has ratified the Framework Convention on Tobacco Control.*

Note 2: *The Framework Convention on Tobacco Control is a treaty negotiated under the auspices of the WHO. According to the WHO, the convention represents a paradigm shift in developing a regulatory strategy to address addictive substances. It asserts the importance of demand reduction strategies. The core demand reduction provisions in the convention include protection from exposure to tobacco smoke; regulation of the contents of tobacco products; regulation of tobacco product disclosures; packaging and labelling of tobacco products; education, communication, training and public awareness; tobacco advertising, promotion and sponsorship; demand reduction measures concerning tobacco dependence and cessation; and price and tax measures to reduce demand for tobacco.*

Note 3: *The application of the Framework Convention on Tobacco Control has extended to Hong Kong since 2006.*

Introduction

services (see paras. 1.7 and 1.8 — Note 4). The DH's vision is to promote a smoke-free culture, so as to safeguard the health of the community.

Legislation and enforcement

1.4 There are two ordinances for governing smoking control, namely the Smoking (Public Health) Ordinance (SPHO — Cap. 371) and the Fixed Penalty (Smoking Offences) Ordinance (FPSOO — Cap. 600).

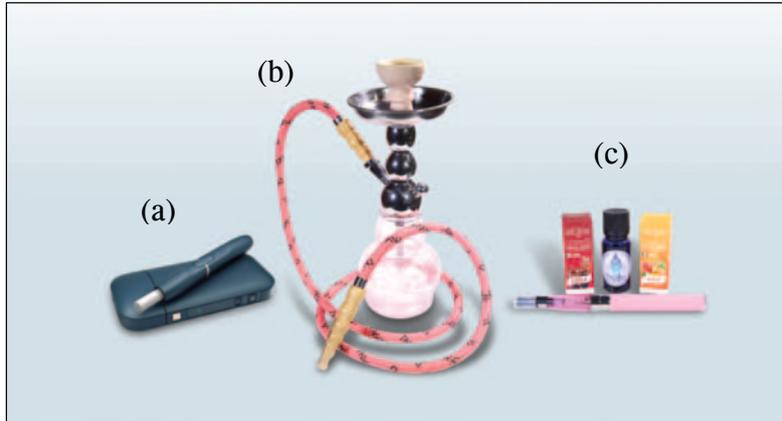
1.5 **SPHO.** The ordinance was first enacted in 1982 to provide a legal framework for restricting the use, sale and promotion of tobacco products in Hong Kong. Over the years, it has been progressively amended to tighten smoking control in various regards, taking into account prevailing community opinions and international developments. The smoking control regime, as provided by the SPHO, is broadly as follows:

- (a) ***Smoking ban at designated areas.*** Statutory no smoking areas (NSAs) are designated by the SPHO and one of its subsidiary regulations, the Smoking (Public Health) (Designation of No Smoking Area) Notice (Cap. 371D). At present, statutory NSAs include indoor workplaces and public places (e.g. restaurants and bars), some outdoor public places (e.g. public transport facilities) and public transport carriers. Appendix A shows a list of statutory NSAs. Any person who smokes or carries a lighted cigarette, cigar or pipe at a statutory NSA commits an offence and is liable on summary conviction to a maximum fine of \$5,000. According to the DH, waterpipe smoking and smoking of heat-not-burn cigarettes as well as electronic cigarettes in statutory NSAs will also be prosecuted (see Photograph 1);

Note 4: *According to the Framework Convention on Tobacco Control, price and tax are also effective and important means of reducing tobacco consumption. The Food and Health Bureau and the DH monitor changes in tobacco retail prices and the overall smoking situation in Hong Kong, and review tobacco duty rates regularly. In Hong Kong, tobacco duty rates (for cigarettes, cigars, etc.) were last increased by 12% in 2014. Furthermore, the Customs and Excise Department combats illicit tobacco activities.*

Photograph 1

Other forms of smoking



- Legend: (a) a heat-not-burn cigarette
(b) a waterpipe for smoking
(c) an electronic cigarette

Source: *Hong Kong Council on Smoking and Health records*

Remarks: *According to the DH, a heat-not-burn cigarette uses real tobacco refills called tobacco sticks which are heated. The smoker inhales the aerosol produced which contains nicotine. Regarding waterpipe smoking, tobacco is heated to give off smoke which passes through a water bowl and is inhaled by the smoker through the hose of a waterpipe. An electronic cigarette is an electronic device which resembles a cigarette or cigar and has a cartridge for storing a liquid which vaporises. The smoker inhales the vapour produced which may contain toxic substances.*

- (b) **Regulation on sale of tobacco products.** No person shall sell any cigarettes, cigars, pipe tobacco or cigarette tobacco unless the packet and the retail container bear a health warning in the form and manner prescribed by the SPHO; and
- (c) **Regulation on tobacco advertisements.** No person shall print, publish, display, broadcast, exhibit by films, or place on the Internet any tobacco advertisements as defined by the SPHO.

Introduction

1.6 ***FPSOO.*** The ordinance was enacted in 2008 to introduce a fixed penalty system for smoking offences (which came into effect in 2009) to enhance the efficiency and effectiveness in enforcing the smoking ban. The FPSOO provides for a fixed penalty of \$1,500 payable for smoking offences at statutory NSAs under the SPHO. Payment of the fixed penalty by an offender will have the effect of discharging his/her liability to conviction for the smoking offence.

Publicity and education and smoking cessation services

1.7 ***Publicity and education.*** The DH has implemented various promotional activities relating to smoking control. These include distributing no-smoking signs and publicity materials, providing health talks and producing announcements in the public interest. The DH also provides funding to the Hong Kong Council on Smoking and Health (COSH — see paras. 1.12 to 1.14) which conducts publicity campaigns to encourage smokers to quit smoking, and garners public support for establishing a smoke-free Hong Kong.

1.8 ***Smoking cessation and related services.*** To complement the various measures for smoking control (see paras. 1.4 to 1.7), the DH operates an integrated Smoking Cessation Hotline (the Quitline) to provide professional counselling and information on smoking cessation. It also runs a smoking cessation mobile application. Furthermore, six DH clinics provide smoking cessation services as part of their clinical services (Note 5). Moreover, the DH subvents organisations to deliver smoking cessation services and smoking prevention programmes. At present, the subvented organisations comprise six non-governmental organisations (NGOs) and a university (see Table 3 in para. 1.16). The NGOs and the university deliver smoking cessation services and smoking prevention programmes through different means and approaches (e.g. counselling, clinical consultation, mobile clinics, and outreach services to workplaces).

Note 5: *67 clinics of the Hospital Authority also provide smoking cessation services (as part of clinical services) to smokers under the Hospital Authority's Smoking Counselling and Cessation Programme. Their services, which are limited to smoking cessation, are not covered in this audit review. This audit review covers the smoking control efforts of the DH, which is the major government department responsible for implementing the Government's smoking control efforts through a multi-pronged approach (see para. 1.3).*

Tobacco Control Office

1.9 The DH's smoking control efforts are implemented through the Tobacco Control Office (TCO), which was set up under the DH in 2001. According to the DH, the TCO's functions are to:

- (a) act as a principal enforcement agency under the SPHO;
- (b) assist venue managers (Note 6) of statutory NSAs to ensure public compliance with the SPHO;
- (c) promote a smoke-free culture and enhance public compliance with the SPHO through publicity and health education;
- (d) coordinate smoking cessation services of the DH; and
- (e) assist the Food and Health Bureau (FHB — the policy bureau of the DH) in reviewing smoking control legislation.

1.10 The TCO comprises three units (i.e. the Enforcement Unit, the Smoking Cessation and Publicity Unit, and the Administration Unit). The Head, TCO (a Principal Medical and Health Officer) oversees the TCO. For 2017-18, the TCO has an establishment of 140 posts (comprising the Head, 106 posts for the Enforcement Unit, 11 posts for the Smoking Cessation and Publicity Unit, and 22 posts for the Administration Unit). Appendix B shows an organisation chart of the TCO as at 31 December 2017.

1.11 Table 1 shows the TCO's key activities on smoking control in 2013 to 2017.

Note 6: *According to the SPHO, the venue manager of a statutory NSA means:*

- (a) *any person who is responsible for the management or is in charge or control of the area, and includes an assistant manager and any person holding an appointment analogous to that of a manager or assistant manager; or*
- (b) *in the case where there is no such person, the owner of the area.*

Table 1

**TCO's key activities on smoking control
(2013 to 2017)**

Activity	2013	2014	2015	2016	2017
	(Number)				
Enforcement of SPHO					
(a) Complaints (on smoking at statutory NSAs) received (Note 1)	18,079	17,354	17,875	22,939	18,354
(b) Inspections conducted	27,461	29,032	29,324	30,395	33,159
(c) Fixed penalty notices issued	8,330	7,834	7,693	8,650	9,711
Publicity and health education					
(a) Educational materials distributed (Note 2)	424,000	552,000	254,000	246,000	224,000
(b) Seminars on SPHO conducted	12	9	12	9	11
Smoking cessation					
(a) Calls to the Quitline handled (Note 3)	13,079	13,203	9,301	7,782	7,355
(b) Seminars on smoking cessation conducted (Note 4)	43	41	51	27	27

Source: DH records

Note 1: According to the DH, the large increase (27% from 18,079 in 2013 to 22,939 in 2016) in the number of complaints on smoking offences received might be related to the designation as statutory NSAs in 2016 of eight bus interchanges at tunnel portal areas (see Note 11 to para. 2.2(a)).

Note 2: According to the DH, the large decrease (47% from 424,000 in 2013 to 224,000 in 2017) in the number of educational materials distributed was mainly due to the fact that such educational materials had also been placed on the TCO's website and available for downloading by the public.

Note 3: According to the DH, the large decrease (44% from 13,079 in 2013 to 7,355 in 2017) in the number of calls to the Quitline handled was due to reduced smoking prevalence and increased proportion of smokers who were unwilling to give up smoking.

Note 4: According to the DH, the large decrease (37% from 43 in 2013 to 27 in 2017) in the number of seminars on smoking cessation conducted was due to a number of factors such as reduced number of requests and inability to arrange enough manpower on short notice.

COSH

1.12 COSH is a statutory body established in 1987 pursuant to the Hong Kong Council on Smoking and Health Ordinance (Cap. 389). The Ordinance provides that COSH's functions are to protect and improve the health of the community by:

- (a) informing and educating the public on the harm of smoking and its adverse effects on health;
- (b) conducting and coordinating research into the cause, prevention and cure of tobacco dependence; and
- (c) advising the Government, community health organisations or any public bodies on matters relating to smoking and health.

1.13 As at 31 December 2017, COSH had 17 members, including the Chairman, the Vice-Chairman, a representative of the DH and a representative of the Information Services Department. To support COSH's operation, five committees and a Secretariat (see para. 5.3) have been established under COSH.

1.14 The DH provides annually a recurrent subvention and a supplementary grant to COSH to finance its operation (\$22.9 million in 2016-17). The DH has entered into a Funding and Service Agreement (FSA) with COSH. The FSA specifies the scope, basis (i.e. discretionary grant basis — Note 7) and use (i.e. for subvented activities only) of the DH's funding. The FSA also specifies the arrangements for the DH to monitor COSH's performance (e.g. through pre-set performance standards and regular reporting of performance statistics). More details are shown in PART 5 of this Audit Report.

Note 7: *A discretionary grant is designed to assist an organisation to meet the cost, either in whole or in part, of a programme of activities approved by the Government. The degree of financial assistance is entirely at the Government's discretion.*

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DH's expenditure on smoking control

1.15 Table 2 shows the TCO's expenditure on smoking control in 2012-13 to 2016-17.

Table 2

**TCO's expenditure on smoking control
(2012-13 to 2016-17)**

Expenditure	2012-13	2013-14	2014-15	2015-16	2016-17
	(\$ million)				
Enforcement of SPHO	39.6	42.7	49.9	51.5	54.5
Publicity and health education and smoking cessation	46.3	48.2	45.1	46.7	46.8
Total	85.9	90.9	95.0	98.2	101.3

Source: DH records

1.16 Table 3 shows the DH's subventions to COSH, the six NGOs and the university (see paras. 1.7 and 1.8).

Table 3

**DH's subventions to COSH, NGOs and university
(2012-13 to 2016-17)**

Subvented organisation	2012-13	2013-14	2014-15	2015-16	2016-17
	(\$ million)				
COSH	20.7	22.0	24.3	22.4	22.9
Tung Wah Group of Hospitals	26.5	34.7	37.0	39.1	41.5
Pok Oi Hospital	6.0	7.3	7.8	7.3	7.6
United Christian Nethersole Community Health Service	Nil (Note)	2.6	2.6	2.6	2.6
Lok Sin Tong Benevolent Society Kowloon	1.4	1.9	1.9	2.3	2.4
Life Education Activity Programme	Nil (Note)	1.3	2.3	2.3	2.3
Po Leung Kuk	1.7	2.2	2.0	2.2	2.0
University of Hong Kong	Nil (Note)	Nil (Note)	1.5	2.3	1.9
Total	56.3	72.0	79.4	80.5	83.2

Source: DH records

Note: Subventions have been provided to the United Christian Nethersole Community Health Service and the Life Education Activity Programme since 2013-14, and to the University of Hong Kong since 2014-15.

Smoking prevalence

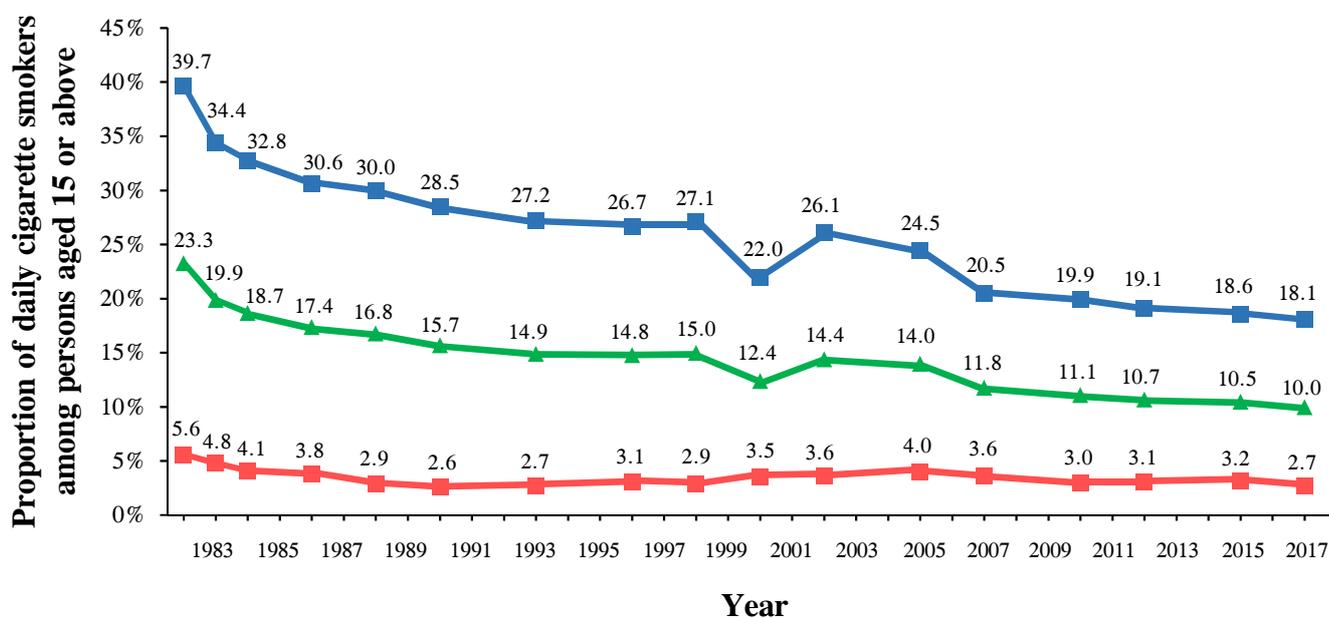
1.17 According to the DH, tobacco consumption is the single most important preventable risk factor responsible for main causes of death and chronic diseases, including cancers and cardiovascular diseases. Smoking prevalence is generally indicated by the proportion of daily cigarette smokers among the population of persons aged 15 or above. According to the results of various rounds of the Thematic

Introduction

Household Survey conducted by the Census and Statistics Department, the smoking prevalence had decreased from 23.3% in 1982 to 10% in 2017 (see Figure 1). In 2017, there were some 615,000 daily cigarette smokers. Nevertheless, according to the DH, efforts in smoking control will be sustained to bring down further the smoking prevalence rate. In particular, it faces challenges posed by electronic smoking devices which have become more popular. The 2017 Thematic Household Survey showed that the number of daily electronic cigarette users was 5,700 persons in 2017, while no significant number (estimated to be less than 1,000) was recorded in 2015.

Figure 1

Smoking prevalence (1982 to 2017)



Legend:
■ Daily male cigarette smokers
■ Daily female cigarette smokers
▲ Daily cigarette smokers

Source: *Census and Statistics Department Thematic Household Surveys*

Remarks: *The Census and Statistics Department did not conduct survey on smoking every year in its regular Thematic Household Survey. Figures for the proportion of daily cigarette smokers among persons aged 15 or above are therefore not shown for those years in which no survey on smoking had been conducted.*

Audit review

1.18 In October 2017, the Audit Commission (Audit) commenced a review of the DH's efforts in smoking control. The review focused on the following areas:

- (a) enforcement work of the TCO (PART 2);
- (b) facilitating the work of venue managers (PART 3);
- (c) smoking cessation services and other management matters (PART 4); and
- (d) operation of COSH (PART 5).

1.19 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 and COSH

1.20 The Director of Health and COSH agree with the audit recommendations. The Director of Health thanked Audit for the invaluable recommendations made on the Department's measures in smoking control. COSH also thanked Audit for the efforts and coordination extended to COSH during the audit review.

Acknowledgement

1.21 Audit would like to acknowledge with gratitude the assistance and full cooperation of the staff of the DH and COSH during the course of the audit review.

PART 2: ENFORCEMENT WORK OF THE TOBACCO CONTROL OFFICE

2.1 This PART examines the TCO's enforcement work, focusing on the following areas:

- (a) handling of smoking complaints (paras. 2.5 to 2.16);
- (b) enforcement of smoking offences (paras. 2.17 to 2.34);
- (c) fixed penalty system (paras. 2.35 to 2.44);
- (d) enforcement on illegal tobacco advertisements (paras. 2.45 to 2.50); and
- (e) supervisory checks (paras. 2.51 to 2.55).

Tobacco Control Office's enforcement teams

2.2 The TCO's Tobacco Control Inspectors (TCIs) are empowered under the SPHO to enforce against smoking offences at venues designated as statutory NSAs in Hong Kong (Note 8). As at 31 December 2017, the TCO had the following staff:

Note 8: *In addition to enforcing against smoking offences at venues, TCIs are also empowered under the SPHO to enforce other laws under the SPHO, for example, enforcement against illegal tobacco advertisements and sales of tobacco products to minors. In 2017, there were 18,354 complaints of smoking at statutory NSAs (see Table 1 in para. 1.11), 80 complaints of illegal tobacco advertisements and 4 complaints of sales of tobacco products to minors.*

Enforcement work of the Tobacco Control Office

- (a) 89 full-time civil service TCIs comprising 6 Senior TCIs, 23 TCIs and 60 Assistant TCIs (Note 9). They formed 21 enforcement teams, which were led by the 6 Senior TCIs. Each of the teams comprised 1 TCI and 2 to 3 Assistant TCIs. Of the 21 teams, 20 were responsible for carrying out inspections concerning complaints about smoking at venues (Note 10) at the 18 districts in Hong Kong, and 1 was responsible for the same at eight bus interchanges (which are statutory NSAs — Note 11). In addition, the 21 teams also carried out inspections at locations requiring enhanced inspections (LREIs) (see para. 2.21);
- (b) 36 part-time non-civil service contract TCIs. They accompanied and assisted full-time TCIs in their inspections; and
- (c) 20 full-time non-civil service contract TCIs (who were retired police officers). They formed 4 special enforcement teams, which were established in December 2017 to conduct inspections focusing on LREIs particularly during night time and public holidays. Each of the teams comprised 1 Senior TCI and 4 TCIs.

Note 9: *As at 31 December 2017, the establishment and strength of the full-time civil service TCIs were 89 and 81 respectively. To address the shortfall of 8 (89 minus 81) TCIs, the TCO hired 6 full-time non-civil service contract TCIs thereby bringing the shortfall from 8 to 2.*

Note 10: *TCIs are also responsible for conducting other inspections such as those concerning illegal tobacco advertisements and sales of tobacco products to minors.*

Note 11: *The eight bus interchanges were located on both sides of the respective toll plazas of the Cross-Harbour Tunnel, the Eastern Harbour Crossing, the Lion Rock Tunnel, the Shing Mun Tunnels, the Tai Lam Tunnel, the Tate's Cairn Tunnel, the Tsing Sha Highway and the Western Harbour Crossing.*

Enforcement work of the Tobacco Control Office

2.3 For the 21 enforcement teams of full-time TCIs, they carry out inspections at different time sessions, i.e. “morning and afternoon” session, “afternoon and evening” session and “overnight” session. For the part-time TCIs, since February 2017, in addition to assisting the full-time TCIs in carrying out inspections, they have been conducting more “evening” inspections (Note 12). For the 4 special enforcement teams responsible for conducting inspections at LREIs, they mainly carry out “afternoon and evening” and “overnight” inspections.

2.4 According to the TCO, as the act of smoking lasts for a short period of time and there are a large number of venues in the territory, it is impossible for TCIs to conduct a complaint inspection immediately upon receiving a smoking complaint. Instead, TCO enforcement teams will group the venues having smoking complaints together with the LREIs to design routes for inspections. The teams will inspect all the venues and LREIs along the routes at scheduled time slots (e.g. a venue will be visited at 10:00 a.m. and the next venue at 10:30 a.m.).

Handling of smoking complaints

2.5 According to the TCO’s enforcement guides, the procedures in handling complaints about smoking at statutory NSAs (Note 13) are as follows:

- (a) **Complaints.** Complaints can be made through various channels, for example, telephone, letters or e-mails;

Note 12: *The durations of the time sessions are as follows:*

- (a) *“morning and afternoon” session: 6:00 a.m. to 6:00 p.m.;*
- (b) *“afternoon and evening” session: 12:00 noon to 11:00 p.m.;*
- (c) *“evening” session: 6:00 p.m. to 11:00 p.m.; and*
- (d) *“overnight” session: 8:00 p.m. to 6:00 a.m. of next day.*

Note 13: *The procedures apply also to the handling of other complaints (e.g. complaints about illegal tobacco advertisements and sales of tobacco products to minors).*

Enforcement work of the Tobacco Control Office

- (b) ***Interim replies.*** Upon receipt of a complaint, the TCO will contact the complainant for further information and issue an interim reply;
- (c) ***Inspections.*** The TCO will conduct inspections at the venue concerned; and
- (d) ***Final replies.*** After conducting the first inspection and subsequent inspections (where necessary) at the venue, the TCO will issue a final reply to the complainant informing him/her of the inspection results.

2.6 The TCO prepares a manual investigation report for each complaint case, which records details of actions taken on the complaint (i.e. conversations made with the complainant, inspections conducted, and replies issued). The TCO also makes use of a record system known as the Master Case Log, which is a computerised spreadsheet, for recording details of complaint cases. It records information on complaint details, interim reply dates, inspection dates, inspection results and final reply dates.

Need to develop a computer system to properly record and monitor the performance in complaints handling

2.7 Audit examined the recording of information on smoking complaints received in 2017 into the Master Case Log. Audit found that of the total number of complaint cases of 18,354 in 2017, the following information had not been recorded in the Log:

- (a) the interim reply dates of 7,003 (38%) cases;
- (b) the first inspection dates of 7,542 (41%) cases;
- (c) the inspection results of 8,334 (45%) cases; and
- (d) the final reply dates of 6,401 (35%) cases.

2.8 In February 2018, the TCO informed Audit that the reasons for incomplete recording of information in the Master Case Log included:

Enforcement work of the Tobacco Control Office

- (a) for some complaint cases, there were no contact information and hence there were no interim replies to the complainants; and
- (b) for some complaint cases received in November and December 2017, the follow-up actions had not yet been completed and therefore the information relating to the complaint cases had not been entered into the Master Case Log.

2.9 In February 2018, the TCO also informed Audit that:

- (a) the Master Case Log was not for monitoring the performance in complaints handling, but for facilitating retrieval of old records for analysis purpose;
- (b) to monitor the performance in complaints handling, 40 complaint cases were randomly selected for checking on a monthly basis. Furthermore, the performance in complaints handling was also monitored through the monthly reports issued by the Government's Integrated Call Centre (through which the TCO's complaint hotline was operated) in which any overdue cases were reported; and
- (c) a computer system called the "Tobacco Control Office Information System" was being developed and would be launched in the second quarter of 2018. The System would replace the Master Case Log and facilitate the input of enforcement data and help ensure the completeness of information relating to complaints handling. The TCO would also make use of the System to monitor the performance in complaints handling.

2.10 The information gap outlined above (see para. 2.7) is unsatisfactory. Audit considers that the TCO needs to closely monitor the implementation of the Tobacco Control Office Information System to ensure that there is no undue delay. The TCO also needs to take measures to ensure that data relating to complaints handling is entered into the System in a timely and complete manner for proper monitoring of performance in complaints handling.

Need to disclose the TCO’s guidelines on the timeframes for handling complaints

2.11 The TCO has set internal guidelines on the timeframes for handling complaint cases (Note 14). According to the TCO, the guidelines are to provide general guidance to TCIs in handling complaint cases. The TCO also informed Audit that the lead time of a first inspection is affected by a number of factors, such as the time needed for contacting the complainant for more detailed information, the complexity of the case, the remoteness of the venue concerned, and the manpower constraint.

2.12 Based on the recorded interim reply dates of 11,351 (i.e. 18,354 minus 7,003 — see para. 2.7(a)) complaint cases and the recorded first inspection dates of 10,812 (i.e. 18,354 minus 7,542 — see para. 2.7(b)) complaint cases, Audit conducted an analysis to ascertain the extent that the TCO had handled these complaint cases within the timeframes set under the internal guidelines (see Table 4).

Table 4

**Handling of recorded complaint cases
(2017)**

	No. of recorded cases handled within the timeframe set under the TCO’s internal guidelines	Average timeframe
Issuing interim reply	10,645 (94% of 11,351 cases with available interim reply dates)	2.7 working days
Conducting first inspection	10,658 (99% of 10,812 cases with available first inspection dates)	8 calendar days

Source: Audit analysis of TCO records

Note 14: *According to the TCO, the internal guidelines are not performance pledges and hence are not to be disclosed.*

Enforcement work of the Tobacco Control Office

2.13 Except for the 7,003 cases missing the interim reply dates and the 7,542 cases missing the first inspection dates (see para. 2.12), as shown in Table 4, the majority of the remaining complaint cases had been handled within the timeframes set under the TCO's internal guidelines. To enhance transparency and accountability, Audit considers that the DH needs to consider disclosing the internal guidelines on the timeframes for handling complaint cases together with the extent that the timeframes have been achieved (e.g. on the DH's website and Controlling Officer's Report).

Audit recommendations

2.14 **Audit has *recommended* that the Director of Health should:**

- (a) **closely monitor the implementation of the Tobacco Control Office Information System to ensure that there is no undue delay in enhancing the monitoring of performance in complaints handling;**
- (b) **take measures to ensure that data relating to complaints handling are entered into the System in a timely and complete manner for proper monitoring of performance in complaints handling; and**
- (c) **consider disclosing the TCO's guidelines on the timeframes for handling complaint cases together with the extent that the timeframes have been achieved.**

Response from the Government

2.15 The Director of Health agrees with the audit recommendations in paragraph 2.14(a) and (b). She has said that:

- (a) measures have long been in place to assure the quality of complaints handling in the TCO. These measures include staff training and provision of enforcement internal guidelines as well as an effective monitoring and auditing system to keep track of the performance in complaints handling; and

- (b) to further enhance the efficiency in monitoring the performance in complaints handling, the Tobacco Control Office Information System is being developed and will be launched in the second quarter of 2018. It will facilitate the timely input of enforcement data and help ensure the completeness of information. The DH will make use of this newly developed information system to monitor the performance.

2.16 The Director of Health notes the audit recommendation in paragraph 2.14(c). She has said that the DH will examine whether the publication of the TCO's internal guidelines will jeopardise the law enforcement effectiveness.

Enforcement of smoking offences

Need to provide additional guidelines to determine the frequency of complaint inspections

2.17 Audit selected a sample of smoking complaints received in August 2017 and conducted an analysis of the inspections carried out by the TCO for these complaints. All these inspections had been conducted by the end of October 2017. Table 5 shows the results of Audit's analysis.

Table 5**Inspections conducted for complaints received in August 2017
(August to October 2017)**

No. of inspections conducted for each complaint	No. of complaints received	No. of complaints with smoking offences detected in inspections
1	191 (38.7%)	32 (16.8%)
2	214 (43.4%)	36 (16.8%)
3	57 (11.6%)	22 (38.6%)
4	23 (4.7%)	11 (47.8%)
5	7 (1.4%)	1 (14.3%)
6	1 (0.2%)	0 (0.0%)
Overall	493 (100.0%)	102 (20.7%)

Source: Audit analysis of TCO records

Remarks: In August 2017, the TCO received a total of 1,455 complaints. Audit examined 493 (34%) of the 1,455 complaints.

2.18 As shown in Table 5, the number of inspections varied considerably among the complaints. For example, 1 inspection had been conducted for each of the 191 complaints while 5 inspections had been conducted for each of the 7 complaints.

2.19 The number of inspections was left to the individual judgment of the TCIs. The TCO's inspection guidelines as laid down in the TCO's Enforcement Protocol state that "if there is reasonable suspicion that a relevant offence has been or is being committed, the TCI should formulate an action plan". In February 2018, the TCO informed Audit that there were several factors affecting the number of inspections required to be conducted at the venue of a complaint case. These factors included:

- (a) the need for conducting inspections to familiarise with a venue newly inspected;

Enforcement work of the Tobacco Control Office

- (b) whether there was evidence of smoking (e.g. cigarette butts and smell);
- (c) whether there was history of relatively serious smoking problems;
- (d) whether additional information had been provided by the complainant;
- (e) whether there were multiple time periods of offences reported;
- (f) the nature of the venue;
- (g) public concern;
- (h) characteristics of smoking offenders; and
- (i) any other reasons that the enforcement team considered that more frequent inspections for stronger deterrent effect was needed.

2.20 To ensure that TCI resources are properly deployed, Audit considers that the TCO needs to provide additional inspection guidelines in the TCO's Enforcement Protocol to facilitate TCIs to determine the frequency of complaint inspections in different case scenarios.

Need to provide additional guidelines to determine the frequency of LREI inspections

2.21 The TCO maintains a list of venues that have been subjects of frequent smoking complaints and therefore would require more inspections (i.e. LREIs). The TCO has laid down criteria (e.g. based on specified number of complaints) for including venues in the list of LREIs. The list of LREIs is reviewed and updated at the end of each month according to the laid-down criteria. According to the TCO, TCIs conduct at least one monthly inspection for each venue in the list.

2.22 Audit conducted an analysis of the LREI inspections conducted in the two months of August and September 2017. Table 6 shows the results of Audit's analysis.

Enforcement work of the Tobacco Control Office

Table 6

Inspections conducted at LREIs (August and September 2017)

No. of inspections per LREI in the month	Inspections in August 2017		Inspections in September 2017	
	No. of LREIs inspected	No. of LREIs with smoking offences detected	No. of LREIs inspected	No. of LREIs with smoking offences detected
1	109 (30.9%)	40 (36.7%)	106 (30.0%)	32 (30.2%)
2	92 (26.1%)	52 (56.5%)	106 (30.0%)	49 (46.2%)
3	64 (18.1%)	44 (68.8%)	65 (18.4%)	37 (56.9%)
4	42 (11.9%)	32 (76.2%)	40 (11.3%)	21 (52.5%)
5	26 (7.4%)	17 (65.4%)	20 (5.7%)	14 (70.0%)
6	9 (2.5%)	6 (66.7%)	8 (2.3%)	7 (87.5%)
7	9 (2.5%)	8 (88.9%)	4 (1.1%)	3 (75.0%)
8	1 (0.3%)	1 (100.0%)	2 (0.6%)	2 (100.0%)
9	1 (0.3%)	1 (100.0%)	N.A.	N.A.
20	N.A.	N.A.	1 (0.3%)	1 (100.0%)
21	N.A.	N.A.	1 (0.3%)	1 (100.0%)
Overall	353 (100.0%)	201 (56.9%)	353 (100.0%)	167 (47.3%)

Source: Audit analysis of TCO records

Remarks: There were 353 LREIs in August and September 2017.

2.23 The number of inspections was left to the individual judgment of the TCIs (see para. 2.19) and, as shown in Table 6, varied considerably. For example, in August 2017, 1 inspection had been conducted at each of the 109 LREIs while 5 inspections had been conducted at each of the 26 LREIs.

2.24 As in the case of complaint inspections (see paras. 2.17 to 2.20), the TCO needs to provide additional inspection guidelines to facilitate TCIs to determine the frequency of LREI inspections.

Need to conduct more inspections at venue types having higher incidences of smoking offences

2.25 Audit conducted an analysis of the 8,066 complaint inspections and LREI inspections conducted by the TCO at 2,387 venues in August to October 2017. Table 7 shows the results of Audit's analysis.

Enforcement work of the Tobacco Control Office

Table 7

Analysis of inspections conducted at venues (August to October 2017)

Venue type	No. of venues (a)	No. of inspections (b)	No. of inspections with smoking offences detected (c)	Percentage of inspections with smoking offences detected (d) = (c) ÷ (b) × 100%
(a) Bus interchange	8	264	103	39%
(b) Amusement game centre	90	528	192	36%
(c) Billiard establishment	30	129	37	29%
(d) Mahjong-tin kau premises	57	315	86	27%
(e) Public transport facility/carrier	208	762	173	23%
(f) Shopping mall/shop	324	1,353	302	22%
(g) Market/cooked food centre	155	737	164	22%
(h) Public pleasure ground	160	478	89	19%
(i) Commercial/ industrial building	465	1,543	265	17%
(j) Bar/club	206	413	67	16%
(k) Food premises	402	871	105	12%
(l) Footbridge/subway/ walkway	59	167	15	9%
(m) Residential building	138	317	17	5%
(n) Others (Note)	85	189	38	20%
Overall	2,387	8,066	1,653	20%

Source: Audit analysis of TCO records

Note: Other types of venues included airport facility, bath establishment, beach, columbarium, construction site, government/NGO office, hospital, karaoke, public toilet and university. For these other types, the number of inspections per type was relatively small. For example, during August to October 2017, 2 inspections had been conducted for each of the types of columbarium and construction site.

2.26 As shown in Table 7, for some types of venues (e.g. venue types (a) to (g)), the percentage of inspections with smoking offences detected were generally higher. To enhance the enforcement against smoking offences, in addition to conducting complaint inspections and LREI inspections, the TCO needs to consider conducting more inspections at the types of venues where there are higher incidences of smoking offences.

Need to carry out more “overnight” inspections

2.27 As mentioned in paragraph 2.3, TCIs carried out inspections at different time sessions. For the 8,066 inspections conducted in August to October 2017 (see para. 2.25), Audit conducted an analysis of the inspections according to the inspection time sessions (see para. 2.3). Table 8 shows the results of Audit’s analysis.

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Table 8

**Inspections conducted at different time sessions
(August to October 2017)**

Time session	No. of time sessions (a) (% of all sessions)	No. of inspections conducted in the time sessions (b) (% of all inspections)	No. of inspections with smoking offences detected (c)	Percentage of inspections with smoking offences detected (d) = (c) ÷ (b) × 100%
“Morning and afternoon” (6:00 a.m. to 6:00 p.m.)	358 (73.5%)	5,737 (71.1%)	1,152	20%
“Afternoon and evening” (12:00 noon to 11:00 p.m.)	109 (22.4%)	1,837 (22.8%)	431	23%
“Evening” (6:00 p.m. to 11:00 p.m.)	13 (2.7%)	362 (4.5%)	31	9%
“Overnight” (8:00 p.m. to 6:00 a.m. of next day)	7 (1.4%)	130 (1.6%)	39	30%
Overall	487 (100%) (Note)	8,066 (100%) (Note)	1,653 (Note)	20%

Source: Audit analysis of TCO records

Note: In August to October 2017, the TCO carried out 8,066 inspections in 487 time sessions. Offences were detected in 1,653 inspections.

2.28 As shown in Table 8, “overnight” inspections had the highest percentage of inspections with smoking offences detected. However, they accounted for only 1.6% of all the inspections conducted in August to October 2017. To enhance the effectiveness of enforcement against smoking offences, the TCO needs to consider conducting more “overnight” inspections.

Need to have a computer system to record inspection results

2.29 It is the TCO’s practice that after the completion of inspections (complaint inspections and LREI inspections), TCIs will prepare manual inspection reports to record details of inspections conducted (e.g. the venues inspected, the venue locations, the time of inspections, and the number of smoking offences detected). The TCO did not have a computer system to record these details. The establishment of a computer system could more readily generate data on inspections conducted for management information and review purposes, and would facilitate the TCO to perform more analyses and identify higher-risk venues for inspections.

2.30 In February 2018, the TCO informed Audit that the Tobacco Control Office Information System (see para. 2.9(c)) was being developed and would facilitate the input of enforcement data and help ensure the completeness of enforcement information. Audit considers that the TCO needs to take measures to ensure that enforcement data are entered into the System in a timely and complete manner so as to efficiently generate information for the planning and reviewing of enforcement work.

Need to provide additional guidelines on conducting inspections in plain clothes

2.31 According to the TCO’s enforcement guidelines, TCIs have to wear TCO vests or jackets in conducting inspections. Nevertheless, the guidelines provide that when a venue is subject to repeated complaints and no offence is found in conducting inspections, the enforcement team should examine the case thoroughly to identify whether a spotter is in place. The enforcement team may consider wearing plain clothes when entering the venue for inspection, and putting on TCO vests or jackets when taking prosecution actions against an offender.

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2.32 Audit noted that, according to the manual inspection reports (see para. 2.29), it was not uncommon that enforcement teams found cigarette butts, ashes and smell at the venues inspected, but no offender was found. To enhance the effectiveness of inspections, Audit considers that the TCO needs to provide additional guidelines to enforcement teams on conducting inspections in plain clothes (e.g. guidelines on applicable circumstances and procedures to be followed).

Audit recommendations

2.33 **Audit has *recommended* that the Director of Health should:**

- (a) **provide additional inspection guidelines to facilitate TCIs to determine the frequency of complaint inspections and LREI inspections;**
- (b) **consider conducting more inspections at the types of venues having higher incidences of smoking offences;**
- (c) **consider conducting more “overnight” inspections;**
- (d) **take measures to ensure that enforcement data are entered into the Tobacco Control Office Information System in a timely and complete manner; and**
- (e) **provide additional guidelines to TCO enforcement teams on conducting inspections in plain clothes.**

Response from the Government

2.34 The Director of Health agrees with the audit recommendations. She has said that:

- (a) guidelines have been laid down for TCIs on arranging inspections in response to complaints and LREIs. Besides, this is the existing strategy of the TCO to conduct more inspections at venues where there are higher incidences of smoking offences;

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- (b) starting from 2017, the TCO has adopted measures to mobilise manpower resources, including setting up special enforcement teams (see para. 2.2(c)) to conduct more inspections at venues where there are higher incidences of smoking offences especially during night time and public holidays;
- (c) the TCO understands the special role of plain clothes in certain scenarios and has all along been deploying plain clothes TCIs for reconnaissance and to serve as witnesses for prosecution during appropriate enforcement operations; and
- (d) looking forward, the DH will enrich the guidelines to facilitate TCIs to determine the frequency of inspections and will closely monitor the patterns of complaints received and smoking offences found at different time sessions to guide the effective deployment of the enforcement manpower in future. The DH will also continue to enhance the role of plain clothes officers and review the protocol in this regard.

Fixed penalty system

2.35 Under the FPSOO, when witnessing a person smoking or carrying a lighted cigarette, cigar or pipe at a statutory NSA, a TCI can require the offender to provide his/her name, address, telephone number and proof of identity. The TCI will then issue a fixed penalty notice (FPN) to the offender, demanding a fixed penalty of \$1,500. According to the FPSOO:

- (a) within 21 days of the FPN date, the offender is required to settle the fixed penalty. If the offender does not settle, the TCO will issue a demand notice to him/her;
- (b) within 10 days of the demand notice date, the offender is required to settle the demand notice or inform the TCO that he/she wants to dispute;
- (c) if the offender disputes the offence, the TCO will issue a summons demanding the offender to attend a court hearing. If the offender neither settles the demand notice nor disputes, the TCO will apply to a magistrates' court to issue a court order, demanding the offender to pay within 14 days the fixed penalty of \$1,500, an additional penalty of \$1,500 and a court cost of \$300 (i.e. a total of \$3,300); and

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- (d) if the offender does not settle the court order so issued, the court will issue a warrant of non-payment of fine. The offender may be arrested by police officers.

2.36 Under the FPSOO, in addition to TCIs, authorised officers of the Food and Environmental Hygiene Department (FEHD), the Housing Department (HD) and the Leisure and Cultural Services Department (LCSD) are empowered to issue FPNs at statutory NSAs under the management of these government departments (Note 15). These statutory NSAs include, for example, the cooked food centres and markets of the FEHD, the indoor public places and outdoor escalators located in public housing estates of the HD, and the public pleasure grounds (PPGs) of the LCSD. Police officers are also authorised to issue FPNs. They may issue FPNs when they spot people smoking at statutory NSAs in the course of carrying out their duties (e.g. patrol duties). Police officers also play a supporting role in enforcing the smoking ban. For example, they would offer assistance in cases where people found smoking at statutory NSAs refuse to provide their proof of identity to authorised officers of the TCO, the FEHD, the HD and the LCSD.

2.37 The TCO has set up a Fixed Penalty Information System for processing FPNs issued. This system is also used by the other four enforcement departments (i.e. the FEHD, HD, LCSD and Police). Table 9 shows the number of FPNs issued by the enforcement departments in 2013 to 2017.

Note 15: *The FPSOO empowers, besides TCIs of the DH, officers of the FEHD (e.g. Health Inspectors), officers of the HD (e.g. Housing Managers and Housing Officers), officers of the LCSD (e.g. Leisure Services Managers and Managers, Cultural Services), and police officers to issue FPNs under the FPSOO.*

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Table 9

**FPNs issued by enforcement departments
(2013 to 2017)**

Enforcement department	No. of FPNs issued					Total
	2013	2014	2015	2016	2017	
DH (TCO)	8,330	7,834	7,693	8,650	9,711	42,218 (89.8%)
Police	743	556	515	483	325	2,622 (5.6%)
HD	226	310	318	445	410	1,709 (3.6%)
LCSD	34	57	56	60	54	261 (0.6%)
FEHD	36	31	28	33	52	180 (0.4%)
Total	9,369	8,788	8,610	9,671	10,552	46,990 (100.0%)

Source: TCO records

Need to properly handle omissions or errors in FPNs

2.38 FPNs may be withdrawn by the enforcement departments due to various reasons, such as omissions or errors in FPNs, offenders deceased, and infirmities of offenders (Note 16). Table 10 shows an analysis of FPNs withdrawn in 2013 to 2017.

Note 16: *Medical proof is required for withdrawing on the grounds of infirmity.*

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Table 10

Withdrawal of FPNs by enforcement departments (2013 to 2017)

Reason of withdrawal	No. of FPNs withdrawn					Total
	2013	2014	2015	2016	2017	
Omission or error in the FPN	35	19	29	30	26	139 (45%)
Offender deceased/infirmity/ medical reason	12	18	20	25	23	98 (32%)
Insufficient evidence (Note)/ non-statutory NSA	6	23	8	17	1	55 (18%)
Other reasons (e.g. demand notice undelivered)	4	4	2	3	1	14 (5%)
Total	57	64	59	75	51	306 (100%)

Source: *Audit analysis of TCO records*

Note: *Insufficient evidence included, for example, the location of offence in the FPN was unclear.*

2.39 As shown in Table 10, “omission or error in the FPN” accounted for most of the FPNs withdrawn in 2013 to 2017. Audit noted that all these FPNs were issued by enforcement departments other than the TCO. The omissions or errors were mainly those such as missing offence location and missing description of whether the offender was smoking a cigarette, cigar or pipe (which were particulars required to be recorded in an FPN). Audit further noted that, when an omission or error was found in an FPN, instead of withdrawing the FPN, the TCO would decide on a case-by-case basis to issue an amendment notice rectifying the omission or error to the offender.

2.40 Audit considers that the TCO needs to disseminate to other enforcement departments its practice of issuing amendment notices rectifying omissions or errors in FPNs issued to offenders.

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Need to facilitate local and non-local offenders to settle FPNs

2.41 Table 11 shows an analysis of FPNs issued in 2013 to 2017 but remained unsettled as at 31 December 2017.

Table 11

**Unsettlement of FPNs issued in 2013 to 2017
(as at 31 December 2017)**

		Year of issuing FPNs					Overall
		2013	2014	2015	2016	2017	
Local offenders residing in Hong Kong	No. of FPNs issued (a)	9,029	8,452	8,210	9,193	9,933	44,817
	No. of unsettled FPNs (Note) (b)	39	52	58	105	322	576
	Unsettlement rate (c)=(b)÷(a)×100%	0.4%	0.6%	0.7%	1.1%	3.2%	1.3%
Non-local offenders visiting Hong Kong	No. of FPNs issued (d)	340	336	400	478	619	2,173
	No. of unsettled FPNs (Note) (e)	72	76	81	104	135	468
	Unsettlement rate (f)=(e)÷(d)×100%	21.2%	22.6%	20.3%	21.8%	21.8%	21.5%

Source: Audit analysis of TCO records

Note: Court orders had been issued for these unsettled FPNs (see para. 2.35(c)).

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2.42 As shown in Table 11, for the FPNs issued in 2013 to 2017, the unsettlement rate of FPNs of non-local offenders visiting Hong Kong (21.5%) was much higher than that of local offenders residing in Hong Kong (1.3%). Furthermore, the unsettlement rate of FPNs of local offenders rose from 0.4% in 2013 to 3.2% in 2017. Audit noted that at present, FPNs may be settled through automated teller machines, Payment by Phone Service, Internet banking, phone banking, post (payments by cheques, bank drafts or cashier orders) or at Post Office counters. Audit considers that the TCO needs to explore more ways to facilitate offenders, in particular non-local offenders, to settle FPNs. Such ways may include, for example, reminding TCIs to explain to offenders the methods of settling FPNs, and considering the introduction of other methods for offenders to settle FPNs (e.g. in consultation with the Financial Services and the Treasury Bureau, exploring the possibility of introducing other methods for settling FPNs, such as through payments at convenience stores — Note 17).

Audit recommendations

2.43 **Audit has recommended that the Director of Health should:**

- (a) **disseminate to other enforcement departments the TCO's practice of issuing amendment notices rectifying omissions or errors in FPNs issued to offenders; and**
- (b) **explore more ways to facilitate offenders, in particular non-local offenders, to settle FPNs.**

Response from the Government

2.44 The Director of Health agrees with the audit recommendations. She has said that:

- (a) the TCO has been sharing the guidelines and experiences on handling smoking offences with other enforcement departments and will disseminate

Note 17: *This could facilitate not just the settlement of FPNs for smoking offences, but also for other offences (e.g. traffic and littering offences).*

to these departments the practice of handling omissions or errors in FPNs issued to offenders;

- (b) it is an established practice to explain the payment methods to non-local offenders at the scene. The various payment methods are also printed on FPNs; and
- (c) looking forward, the TCO will continue to remind non-local offenders the methods to settle FPNs at the scene and to explore with the relevant stakeholders on the feasibility of additional payment methods.

Enforcement on illegal tobacco advertisements

2.45 Under the SPHO, tobacco advertisements are banned. An advertisement is a tobacco advertisement if it contains implied inducement, suggestion or request to purchase or smoke cigarettes or other tobacco products. Any person who violates the ban on tobacco advertisements is liable on summary conviction to a maximum penalty of \$50,000 and, in the case of a continuing offence, to a further penalty of \$1,500 for each day the offence continues. Upon receiving a complaint about tobacco advertisement, the TCO will conduct investigations and implement enforcement actions if there is sufficient evidence.

Need to address tobacco advertisements at convenience stores and newspaper stands

2.46 In recent years, the TCO had received complaints about tobacco advertisements at convenience stores and newspaper stands (i.e. 8, 8 and 4 complaints in 2015, 2016 and 2017 respectively). Such advertisements were in the form of displaying packets of cigarettes in display units (see Photograph 2 for an example).

Photograph 2

**Displaying packets of cigarettes
in a light box at a convenience store**



Source: TCO records

2.47 In September 2017, after investigation and collection of evidence from a number of convenience stores and newspaper stands, the TCO initiated enforcement actions on the aforesaid form of tobacco advertisements (see para. 2.46). In February 2018, the TCO informed Audit that the enforcement actions were still on-going.

2.48 Given that there are other similar tobacco advertisements at convenience stores and newspaper stands, Audit considers that the TCO needs to:

- (a) enhance the publicity to the trade on the legal requirement of banning tobacco advertisements and the legal definition of such advertisements (see para. 2.45); and
- (b) take enforcement actions against tobacco advertisements where warranted.

Audit recommendations

- 2.49 **Audit has *recommended* that the Director of Health should:**
- (a) **enhance the publicity to the trade on the legal requirement of banning tobacco advertisements and the legal definition of such advertisements; and**
 - (b) **take enforcement actions against tobacco advertisements where warranted.**

Response from the Government

2.50 The Director of Health agrees with the audit recommendations.

Supervisory checks

2.51 The inspection work of the TCO's enforcement teams is subject to supervisory checks by 4 Executive Officers (EOs) of the TCO. According to the TCO, the main purpose of such checks is to discover any inconsistencies and irregularities of the enforcement teams (e.g. absenteeism).

2.52 According to the TCO's Standing Instructions for Tobacco Control Inspectors on Administrative Matters, each of the 4 EOs should conduct at least 1 surprise check (covering one or more inspection points, i.e. venues) per month. During surprise checks, the EOs make reference to the pre-designed inspection routes and visit inspection points at scheduled time slots (see para. 2.4). After the conduct of surprise checks, the EOs will record the check results in the Surprise Check Record Sheets.

Scope for improvement in the conduct of surprise checks

2.53 Audit examined the Surprise Check Record Sheets for the 12-month period from November 2016 to October 2017 and found that:

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- (a) in the period, 51 surprise checks had been conducted. Of these 51 checks, in 20 (39%) checks, the EOs had indicated that they were unable to find the enforcement teams at the inspection points. Of these 20 checks:
 - (i) in 16 (80%) checks, the enforcement teams could not be found because they had not adhered to the scheduled time slots in conducting their inspections (e.g. they had completed their inspections ahead of the scheduled time slots); and
 - (ii) in 4 (20%) checks, owing to the size of the venues, the EOs could not find the enforcement teams (see Case 1 for an example);

Case 1

Enforcement team not found in a surprise check (November 2016)

1. On 9 November 2016, a EO conducted a surprise check at an inspection point which was a shopping mall.
2. The EO arrived at the shopping mall at 2:00 p.m. (10 minutes before the scheduled inspection time of 2:10 p.m.). The EO waited at the mall for 47 minutes but did not find the enforcement team. At 2:47 p.m., the EO left.
3. According to the enforcement team's records, inspection of the shopping mall was conducted during 2:30 p.m. to 2:50 p.m. The records thus showed that both the EO and the enforcement team were in the shopping mall during 2:30 p.m. to 2:47 p.m.
4. The EO stated in the Surprise Check Record Sheet that the shopping mall was too big for him to find the enforcement team.

Source: TCO records

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- (b) 1 (4.8%) of the 21 full-time enforcement teams had not been subjected to surprise checks, while the number of surprise checks conducted on the teams had ranged from 0 to 9 (see Table 12). Upon enquiry in February 2018, the TCO informed Audit that the selection of target teams and the determination of frequency of checks were at the EOs' discretion; and

Table 12

**Surprise checks conducted on 21 enforcement teams
(November 2016 to October 2017)**

No. of surprise checks per team	No. of enforcement teams
0	1
1 to 3	16
4 to 6	3
9	1
Total	21

Source: Audit analysis of TCO records

Remarks: (a) As the part-time TCIs accompanied the full-time enforcement teams in carrying out inspections (see para. 2.2(b)), in conducting surprise checks on the full-time teams, the part-time TCIs had also been covered.

(b) As the special enforcement teams were established in December 2017 (see para. 2.2(c)), no surprise checks had been conducted on these teams in November 2016 to October 2017.

- (c) the Surprise Check Record Sheets also indicated that no surprise checks were conducted before 9:30 a.m. or after 7:30 p.m.. However, the enforcement teams were required to conduct inspections round the clock (see para. 2.3). Accordingly, some inspections had not been subjected to surprise checks.

Audit recommendations

- 2.54 **Audit has *recommended* that the Director of Health should:**
- (a) **take measures to deal with the situations where the enforcement teams could not be found at inspection points (e.g. the EOs could immediately call the teams to locate and follow up with them); and**
 - (b) **lay down guidelines to facilitate EOs to conduct surprise checks, including the need for conducting checks at different inspection time sessions of the TCO's enforcement teams.**

Response from the Government

2.55 The Director of Health agrees with the audit recommendations. She has said that:

- (a) the supervisory check system is a component of quality assurance to monitor onsite enforcement performance and written guidelines are available to guide the checking process; and
- (b) looking forward, the DH will enrich the guidelines and conduct checks at different inspection time sessions.

PART 3: FACILITATING THE WORK OF VENUE MANAGERS

3.1 This PART examines how the TCO could better facilitate the work of venue managers, focusing on the following areas:

- (a) providing support to venue managers (paras. 3.2 to 3.7);
- (b) display of no-smoking signs (paras. 3.8 to 3.20); and
- (c) enforcement work of other government departments (paras. 3.21 to 3.28).

Providing support to venue managers

3.2 The venue manager (see Note 6 to para. 1.9(b)) of a statutory NSA is empowered by the SPHO to take the following steps if he/she finds anyone smoking at the premises:

- (a) requiring the smoker to extinguish the lighted cigarette, cigar or pipe;
- (b) if the smoker is not cooperative, requiring the smoker to provide his name, address and proof of identity, and to leave the premises; and
- (c) if necessary, calling for police assistance.

Furthermore, according to the FPSOO, authorised officers of the FEHD, the HD and the LCSD may also issue FPNs to people found smoking at statutory NSAs under their management.

3.3 Since some ten years ago, the TCO has issued guides for implementing smoke-free measures for the following four types of statutory NSAs:

- (a) amusement game centres;

Facilitating the work of venue managers

- (b) restaurants and premises of the hospitality industry;
- (c) workplaces; and
- (d) schools.

The implementation guides for the first three types of statutory NSAs advise venue managers about the benefits of smoke-free premises (e.g. broadening the customer base), the smoke-free measures (e.g. displaying no-smoking signs) and the support and assistance (e.g. talks on smoking control legislation) available from the TCO. The last implementation guide advises schools about the comprehensive smoking control measures applicable to schools (e.g. educating students about the harmfulness of smoking). These implementation guides can be obtained free of charge from the TCO or downloaded from the TCO's website.

Need to update implementation guides for venue managers

3.4 Audit reviewed the four implementation guides and noted that some useful information has not been updated into the guides:

- (a) ***Smoking of electronic cigarettes and heat-not-burn cigarettes and waterpipe smoking.*** According to the DH, these types of smoking have become more popular in Hong Kong. The potential harmful effects of these products to human health should be included in the guides;
- (b) ***Third-hand smoke.*** Third-hand smoke refers to the chemical residue of tobacco smoke contamination which clings to hair, skin, clothing, furniture, wall, etc. According to the DH, it is a health hazard which affects particularly infants and toddlers;
- (c) ***Fixed penalty system.*** The fixed penalty system for smoking offences (see para. 1.6) has come into effect since 2009; and
- (d) ***Smoking cessation services.*** The lists of smoking cessation services in the guides are incomplete. Services provided by some NGOs (e.g. by the United Christian Nethersole Community Health Service and the Lok Sin

Tong Benevolent Society Kowloon — see Table 3 in para. 1.16) are not included in the lists.

3.5 In addition to the aforesaid four types of statutory NSAs (see para. 3.3), there are other types of statutory NSAs (see Appendix A). The TCO needs to consider preparing implementation guides for other types of statutory NSAs (including some general implementation guides covering a number of types of statutory NSAs).

Audit recommendations

3.6 **Audit has *recommended* that the Director of Health should:**

- (a) **update the guides for implementing smoke-free measures; and**
- (b) **in addition to the existing implementation guides for four types of statutory NSAs, consider preparing implementation guides for other types of statutory NSAs.**

Response from the Government

3.7 The Director of Health agrees with the audit recommendations.

Display of no-smoking signs

3.8 The TCO's implementation guides advise that venue managers should display sufficient no-smoking signs in prominent positions to remind people that smoking is prohibited at statutory NSAs. To this effect, the TCO has prepared no-smoking signs (see Photograph 3 for an example), which can be freely obtained from the TCO by venue managers.

Photograph 3

TCO's no-smoking sign



Source: Photograph taken by Audit in December 2017

3.9 According to a Circular entitled “The Smoke-Free Government” issued in September 2009 by the FHB, concerted efforts are required of government bureaux and departments to promote a smoke-free government. The Circular states that:

- (a) bureaux and departments should post sufficient no-smoking signs, showing the penalty level (i.e. \$1,500 — see para. 1.6), at statutory NSAs under their control and management; and
- (b) venue managers of government places open to the public should post no-smoking signs at all entrances, potential gathering spots of smokers, and partially enclosed indoor areas which may be mistaken as outdoor areas at which smoking is allowed.

3.10 Audit selected four types of statutory NSAs to inspect the display of no-smoking signs by venue managers of public and government places:

- (a) **Enclosed public places.** Some enclosed public places in outdoor areas are regarded as indoor public places as defined under the SPHO, and hence are statutory NSAs. According to the SPHO, “indoor” means:

- (i) having a ceiling or roof, or a cover that functions as a ceiling or roof; and
- (ii) enclosing at least up to 50% of the total areas on all sides, except for any window or door, or any closeable opening that functions as a window or door.

Examples of enclosed public places include enclosed staircases (see Photograph 4 in para. 3.13), enclosed pedestrian pavements (see Photograph 5 in para. 3.13), enclosed footbridges and enclosed tunnels;

- (b) ***Outdoor escalators.*** All escalators (both indoor and outdoor) are designated as statutory NSAs under the SPHO. Outdoor escalators may connect places (e.g. streets and footbridges) at which smoking is allowed;
- (c) ***Public pleasure grounds.*** PPGs are managed by the LCSD and include, for example, parks, gardens and sitting-out areas. The SPHO has designated PPGs as statutory NSAs, apart from the small number of exempted PPGs (Note 18). As at 31 December 2017, there were some 1,500 PPGs designated as statutory NSAs; and
- (d) ***Public transport facilities (PTFs).*** Apart from the 59 indoor PTFs (e.g. those located under building complexes), the SPHO has empowered the Director of Health to designate, by a gazette notice, outdoor PTFs as statutory NSAs. A PTF is defined as any area that consists of the termini of two or more modes of public transport for effecting interchange of passengers, or any bus termini of more than one specified route. As at 31 December 2017, 240 PTFs (both indoor and outdoor) were statutory NSAs.

Audit selected the above four types of statutory NSAs because, in Audit's view, while people are generally aware that smoking is banned at indoor workplaces and public places (e.g. restaurants and bars), they may not know that these four types of statutory NSAs are subjected to the smoking ban under the SPHO.

Note 18: *According to the Public Health and Municipal Services Ordinance (Cap. 132), the Director of Leisure and Cultural Services can designate a PPG or part of it as a smoking area.*

Facilitating the work of venue managers

3.11 To inspect the display of no-smoking signs at the four types of statutory NSAs, Audit visited three districts in the territory (i.e. the Eastern District on Hong Kong Island, the Sham Shui Po District in Kowloon and the Kwai Tsing District in the New Territories — Note 19). Audit found that there was no display of no-smoking signs at some statutory NSAs and there were people smoking at these NSAs. Details of Audit's examination are shown in paragraphs 3.12 to 3.18.

Need to improve the display of no-smoking signs

3.12 *Enclosed public places.* In the Kwai Tsing District, Audit identified 4 enclosed staircases. They connected to a PTF, and each of them had a cover and ran alongside a building structure. In the Eastern District and the Sham Shui Po District, Audit identified 1 and 3 enclosed pedestrian pavements respectively. Each of the 4 pavements had a cover and ran alongside a construction site.

3.13 At the aforesaid enclosed staircases and pedestrian pavements, Audit noted that:

- (a) there was no display of no-smoking signs; and
- (b) there was evidence of smoking as cigarette butts were found on the stairs or ground (see Photographs 4 and 5).

Note 19: *Audit randomly strolled through streets of the three districts to identify enclosed public places and outdoor escalators. For PPGs and PTFs, Audit randomly selected them from maps.*

Photograph 4

An enclosed staircase with cigarette butts



Source: Photograph taken by Audit in January 2018

Photograph 5

An enclosed pedestrian pavement with cigarette butts



Source: Photograph taken by Audit in January 2018

Facilitating the work of venue managers

3.14 *Outdoor escalators.* Audit identified 4 outdoor escalators in the Eastern District and 6 outdoor escalators in the Kwai Tsing District. These 10 outdoor escalators were all located in public housing estates of the districts. As these 10 outdoor escalators were all located in public housing estates (i.e. in domestic areas), Audit also visited Wan Chai where there were outdoor escalators located in proximity to office buildings (i.e. in non-domestic areas). Audit identified 10 outdoor escalators in Wan Chai. In total, 20 outdoor escalators were visited by Audit, each for half an hour.

3.15 Of the 20 outdoor escalators:

- (a) no-smoking signs were displayed at only 5 (25%) outdoor escalators (all in Wan Chai). At the remaining 15 (75%) outdoor escalators (the remaining 5 in Wan Chai and all the 10 in the Eastern District and the Kwai Tsing District), no-smoking signs were not displayed;
- (b) at 5 of the 15 outdoor escalators (2 in Wan Chai, 1 in the Eastern District and 2 in the Kwai Tsing District) at which no-smoking signs were not displayed, Audit spotted 6 persons smoking or carrying a lighted cigarette (see Photograph 6); and
- (c) at all of the 5 outdoor escalators at which no-smoking signs were displayed, Audit did not spot any persons smoking or carrying a lighted cigarette.

Photograph 6

**A person carrying a lighted cigarette
at an outdoor escalator in a public housing estate**



Source: Photograph taken by Audit in December 2017

Remarks: According to the SPHO, any person who smokes or carries a lighted cigarette at a statutory NSA commits an offence (see para. 1.5(a)).

3.16 **Public pleasure grounds.** Audit visited 9 PPGs managed by the LCSD (3 PPGs for each of the three districts — see para. 3.11), each for one hour. Audit’s findings were as follows:

- (a) at all of the 9 PPGs, no-smoking signs (and banners in some PPGs) were displayed. The vast majority of these signs/banners were the LCSD’s own signs/banners, while the remaining few were those of the TCO. Unlike the TCO’s signs/banners (see Photograph 3 in para. 3.8 and Photograph 10 in para. 3.17), the LCSD’s signs/banners only carried a “no smoking” logo and a “no smoking” message (see Photographs 7 and 8). They did not show information on the fixed penalty of \$1,500 for violation and the complaint hotline of either the LCSD or the TCO; and
- (b) at 8 (89%) of the 9 PPGs, Audit spotted 33 persons smoking (see Photograph 8). At all of the 9 PPGs, cigarette butts were found (see Photograph 9).

Photograph 7

LCSD's no-smoking sign displayed at a PPG

Information on the fixed penalty of \$1,500 and the complaint hotline not shown



Source: Photograph taken by Audit in January 2018

Photograph 8

A person spotted smoking at a PPG

Information on the fixed penalty of \$1,500 and the complaint hotline not shown



Source: Photograph taken by Audit in January 2018

Photograph 9

Cigarette butts at a PPG managed by LCSD



Source: Photograph taken by Audit in January 2018

3.17 **Public transport facilities.** The TCO is responsible for displaying no-smoking signs and banners at PTFs. Audit visited 9 PTFs (3 PTFs for each of the three selected districts — see para. 3.11), each for one hour. Audit’s findings were as follows:

- (a) at all of the 9 PTFs, the TCO’s no-smoking signs and banners (see Photograph 10) carrying information such as the fixed penalty for violation and the complaint hotline were displayed; and

Photograph 10

TCO's no-smoking banner



Source: Photograph taken by Audit in December 2017

- (b) at 6 (67%) of the 9 PTFs, Audit spotted 12 persons smoking (see Photograph 11).

Photograph 11

A person spotted smoking at a PTF



Source: Photograph taken by Audit in December 2017

3.18 Proper display of no-smoking signs and/or banners at statutory NSAs (i.e. showing information on the fixed penalty for violation and the complaint hotline) would help alert people to the fact that smoking is prohibited at these areas and subjected to a fine. It would also facilitate authorised officers of government departments (e.g. the HD and the LCSD — see para. 2.36) in taking enforcement actions. For example, in cases where people mitigate against smoking violation by claiming that they are not aware that they are smoking at statutory NSAs, the authorised officers could point them to the no-smoking signs.

Audit recommendations

3.19 **Audit has *recommended* that the Director of Health should:**

- (a) **identify (e.g. during the conduct of enforcement inspections — see para. 2.2) enclosed public places and outdoor escalators at which there are no display of no-smoking signs, and encourage venue managers of these venues (e.g. managers of construction sites in the case of pedestrian pavements and management companies in the case of outdoor escalators) to display no-smoking signs;**
- (b) **advise venue managers to display no-smoking signs (which can be freely obtained from the TCO) containing messages relating to the smoking ban (e.g. the fixed penalty for violation and the TCO’s complaint hotline); and**
- (c) **at statutory NSAs of which the venue managers are government departments, urge the managers to follow the requirements laid down in the FHB Circular (e.g. posting sufficient no-smoking signs showing the penalty level — see para. 3.9(a)) and to include other information such as the complaint hotlines of the TCO and/or departments concerned in their signs and/or banners.**

Response from the Government

3.20 The Director of Health agrees with the audit recommendations. She has said that it is an existing practice of TCIs to provide no-smoking signs and to educate venue managers of statutory NSAs to implement the smoking ban during their enforcement inspections. Looking forward, the DH will strengthen the practice.

Enforcement work of other government departments

3.21 Under the FPSOO, in addition to TCIs, authorised officers of the FEHD, the HD and the LCSD are empowered to issue FPNs at statutory NSAs under these government departments' management. To facilitate the FEHD, the HD and the LCSD in enforcing the smoking ban, the TCO:

- (a) has compiled guidelines on the issue of FPNs for their reference;
- (b) conducts joint operations (e.g. 48 operations in 2017) at the statutory NSAs managed by them so as to provide training to their authorised officers; and
- (c) on a half-yearly basis, provides them with information on recurrent complaints about smoking at the statutory NSAs under their management so as to facilitate them to initiate follow-up actions.

Need to step up enforcement efforts

3.22 As shown in paragraphs 3.14 to 3.16, there were incidents where people were found smoking at statutory NSAs (e.g. outdoor escalators and PPGs) under the management of the government departments. Audit analysed the FPNs issued by the FEHD, the HD and the LCSD in 2013 to 2017 and found that the number of FPNs issued by the FEHD and the LCSD was much lower than that of the TCO and the HD (see Table 13).

Table 13

**FPNs issued at statutory NSAs managed by
the FEHD, the HD and the LCSD
(2013 to 2017)**

Statutory NSAs managed by	FPNs issued by	No. of FPNs issued				
		2013	2014	2015	2016	2017
FEHD	FEHD	36	31	28	33	52
	TCO	555	482	451	466	517
HD	HD	226	310	318	445	410
	TCO	237	186	173	173	150
LCSD	LCSD	34	57	56	60	54
	TCO	461	381	398	445	495

Source: Audit analysis of TCO records

3.23 Audit considers that there is room for the FEHD and the LCSD to step up their enforcement efforts at the statutory NSAs under their management (e.g. by patrolling these areas more frequently and issuing FPNs where warranted). This could help enhance the effectiveness of the smoking ban. To help the government departments initiate their enforcement actions more effectively, Audit also considers that instead of half-yearly (see para. 3.21(c)), the TCO needs to provide them with information on recurrent smoking complaints on a more frequent basis. The TCO also needs to conduct more joint operations (see para. 3.21(b)) at the statutory NSAs managed by the government departments so as to provide more training to their authorised officers, where necessary.

Audit recommendations

3.24 **Audit has recommended that the Director of Health should:**

- (a) **provide the FEHD, the HD and the LCSD with information on recurrent complaints about smoking at the statutory NSAs managed by**

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them on a more frequent basis so as to facilitate them to initiate enforcement actions more effectively; and

- (b) conduct more joint operations at the statutory NSAs managed by the FEHD, the HD and the LCSD so as to provide more training to their authorised officers, where necessary.**

3.25 Audit has also recommended that the Director of Food and Environmental Hygiene and the Director of Leisure and Cultural Services should review the enforcement operations at the statutory NSAs under their management and step up enforcement efforts at these NSAs where warranted.

Response from the Government

3.26 The Director of Health agrees with the audit recommendations in paragraph 3.24. She has added that:

- (a) to facilitate the FEHD and the LCSD to implement the smoking ban in the venues under their management, the DH has been providing a list of venues under LREIs to these departments on a regular basis;
- (b) it is the TCO's practice to encourage and arrange joint inspections with relevant government departments to enhance the deterrent effect of the smoking ban in statutory NSAs under their management. In 2017, over 200 inspections were conducted jointly with relevant government departments; and
- (c) looking forward, the DH will increase the frequency of providing information on recurrent complaints about smoking to the two departments on a bi-monthly basis. The DH will also continue to inform relevant government departments about the complaints of smoking offences related to the venues under their management for parallel actions. Furthermore, the DH will continue to encourage more joint operations in future.

3.27 The Director of Food and Environmental Hygiene agrees with the audit recommendation in paragraph 3.25. She has said that:

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- (a) the FEHD has stepped up the enforcement against smoking offenders in market venues under its management since January 2018; and
- (b) the FEHD will explore with the TCO how best the two departments can mount more joint operations in public market venues to curb the smoking problem there.

3.28 The Director of Leisure and Cultural Services agrees with the audit recommendation in paragraph 3.25. She has said that:

- (a) the LCSD has been actively collaborating with the FHB and the DH for effective implementation of smoking ban at venues under the LCSD's purview. Members of the public have been educated not to smoke in the statutory NSAs through displaying notices and banners at the entrances as well as in prominent locations of LCSD venues;
- (b) not every PPG managed by the LCSD has been provided with on-site staff who are empowered to issue FPNs. Despite this, LCSD security guards who are not vested with the authority to issue FPNs would give verbal advice to smoking offenders whenever they spot offenders smoking inside LCSD venues during their routine patrol. LCSD security guards served over 80,000 verbal advice to smoking offenders every year between 2013 and 2017. Smoking offenders normally took the advice and stopped smoking. LCSD staff who are empowered to take law enforcement action would issue FPNs to smoking offenders during surprise inspections and law enforcement operations, in particular at venues with more smokers found; and
- (c) the LCSD will continue to step up enforcement efforts at venues that it manages.

PART 4: SMOKING CESSATION SERVICES AND OTHER MANAGEMENT MATTERS

4.1 This PART examines the DH's smoking cessation services and other management matters, focusing on the following areas:

- (a) provision of smoking cessation services through subvented organisations and DH clinics (paras. 4.2 to 4.12);
- (b) reporting of the achievement on smoking control (paras. 4.13 to 4.17); and
- (c) initiative for enhancing smoking control (paras. 4.18 to 4.22).

Provision of smoking cessation services through subvented organisations and DH clinics

4.2 As at 31 December 2017, there were seven subvented organisations (i.e. six NGOs and one university — see para. 1.8) (hereinafter referred to as Organisations A to G) providing smoking cessation and related services to the public. The DH has entered into an FSA with each of the organisations. The FSAs defined the services to be provided and the performance targets for the services (see Table 14).

Table 14

**Key services and performance targets of
subvented organisations**

Organisation	Key services	Key performance targets
A and B	Clinical and counselling services for smokers	Number of clients served
C	Counselling services targeting new immigrants and ethnic minorities	Number of smokers attending counselling and number of smokers referred to clinics
D	Counselling services targeting workplaces	Number of smokers attending counselling and number of companies served
E	Health promotion activities targeting primary and secondary schools	Number of schools and number of students served
F	Health promotion activities targeting kindergartens	Number of kindergartens and number of students served
G	A quitline for the youth	Number of callers to the youth quitline

Source: DH records

***Scope for improving the monitoring of
subvented organisations' performance***

4.3 According to the FSAs, subvented organisations were required to submit statistics on their attainment of performance targets. Audit noted that in 2012-13 to 2016-17, for 2 (29%) of the 7 organisations, the key performance targets had not always been attained (see Table 15).

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Table 15

Attainment of key performance targets by two subvented organisations (2012-13 to 2016-17)

Subvented organisation	Performance target	Performance	2012-13	2013-14	2014-15	2015-16	2016-17
A	No. of clients served	Target	3,250	4,000	4,400	4,000	4,000
		Actual	2,497	4,239	3,601	3,760	4,278
		Target attained	×	✓	×	×	✓
B		Target	1,200	1,250	1,300	1,200	1,220
		Actual	1,497	1,140	1,072	1,089	1,271
		Target attained	✓	×	×	×	✓

Source: DH records

4.4 As shown in Table 15, in 3 (60%) of the 5 years 2012-13 to 2016-17, Organisations A and B had not attained their key performance targets. In view of the underperformance of these two organisations, in 2017, the DH had reduced the key performance targets and the annual subventions upon renewal of FSAs with the two organisations. Under the new FSAs (covering 2017-18 and 2018-19), the target number of clients had been reduced from 4,000 to 3,200 for Organisation A and from 1,220 to 1,100 for Organisation B. The annual subvention had been reduced from \$41.5 million to \$34 million for Organisation A and from \$7.6 million to \$7.2 million for Organisation B.

4.5 Audit noted that the DH monitored the performance of the 7 subvented organisations mainly by reviewing the performance reports submitted regularly by them, and by holding meetings with them to discuss their performance. Furthermore, according to the TCO, it had also conducted ad-hoc inspections at the organisations. For example, in 2015 to 2017:

- (a) as part of the international training programmes on smoking control organised by the TCO annually, TCO staff (and training programme

Smoking cessation services and other management matters

participants) paid visits to the smoking cessation clinics operated by Organisations A and B in December 2015, November 2016 and October 2017; and

- (b) TCO staff attended the health promotion activities conducted by Organisation E at a primary school in January 2016 and at another primary school in July 2017, and by Organisation F at a kindergarten in April 2017.

4.6 As provided in the FSAs, the DH may examine in detail the organisations' performance through conducting inspections. Audit considers that the TCO needs to take measures to better plan its inspections at the 7 subvented organisations taking into account the frequency of inspections and the need to conduct surprise inspections. Furthermore, the TCO needs to conduct the inspections in a more comprehensive manner. For example, it needs to ascertain whether DH subventions have been used solely for FSA activities and whether proper systems are in place for reporting performance and controlling the use of DH subventions.

Need to review the way forward of a DH clinic

4.7 Apart from providing smoking cessation services through the subvented organisations, the DH also provides smoking cessation services through 6 DH clinics (see para. 1.8) as part of their clinical services. For 5 of the 6 clinics, smoking cessation services are provided to civil service eligible persons as a condition of service.

4.8 For the remaining clinic, which is a primary care out-patient clinic (hereinafter referred to as the DH Clinic) located in Ngau Tau Kok, smoking cessation services are provided to members of the public. According to the DH, members of the public calling the DH Quitline (see para. 1.8) might be referred to the DH Clinic for smoking cessation services where appropriate. DH records indicated that, in 2009 to 2017, the number of referrals by the DH Quitline to the DH Clinic had decreased from 619 in 2009 by 606 (98%) to 13 in 2017, and the number of new cases had decreased from 354 in 2009 by 348 (98%) to 6 in 2017 (see Table 16).

Table 16

**Numbers of referrals and new cases of the DH Clinic
(2009 to 2017)**

Year	No. of referrals	No. of new cases
2009	619	354
2010	570	291
2011	329	228
2012	39	38
2013	26	24
2014	13	13
2015	11	10
2016	9	11
2017	13	6

Source: DH records

4.9 DH records did not indicate the reasons for the decrease in referrals and new cases over the years. Upon enquiry, the DH informed Audit in December 2017 that members of the public might not prefer the DH Clinic's services because:

- (a) the services were fee charging (Note 20), whereas the smoking cessation services provided by the subvented organisations (i.e. Organisations A to G) were free of charge; and
- (b) the location of the DH Clinic (in Ngau Tau Kok) might not be convenient to some people.

Note 20: *At present, the fee is \$135 for the first attendance, \$80 for each subsequent attendance, and \$15 for each drug item.*

4.10 Given the small number of referrals and new cases of the DH Clinic in recent years and the fact that similar smoking cessation services are being provided by DH subvented organisations, Audit considers that the DH needs to conduct a review on the way forward of the DH Clinic's smoking cessation services.

Audit recommendations

4.11 **Audit has *recommended* that the Director of Health should:**

- (a) **take measures to better plan the TCO's inspections at the organisations subvented by the DH for providing smoking cessation services and conduct more comprehensive inspections; and**
- (b) **review the way forward of the DH Clinic's smoking cessation services.**

Response from the Government

4.12 The Director of Health agrees with the audit recommendations. She has said that the TCO has been conducting irregular onsite inspections on the smoking cessation services provided by DH subvented organisations. Looking forward, the DH will formulate plans for the periodic inspections of the organisations.

Reporting of the achievement on smoking control

4.13 The DH implements its efforts in smoking control under two programmes (i.e. Statutory Functions and Health Promotion). As reported in the DH's Controlling Officer's Report:

- (a) ***Statutory Functions.*** The DH enforces the laws on smoking control (see PARTs 2 and 3); and
- (b) ***Health Promotion.*** The DH subvents COSH in providing promotional initiatives in support of smoking control (see PART 5). It also provides smoking cessation programmes and promotes smoking prevention in collaboration with the subvented organisations (see para. 4.2).

Smoking cessation services and other management matters

In 2012-13 to 2016-17, the DH's expenditure on smoking control had increased by 30% from \$142.2 million to \$184.5 million (see Table 17).

Table 17

**DH's expenditure on smoking control
(2012-13 to 2016-17)**

	2012-13	2013-14	2014-15	2015-16	2016-17
	(\$ million)				
<i>Statutory Functions</i>					
Enforcement of SPHO	39.6	42.7	49.9	51.5	54.5
<i>Health Promotion</i>					
Subventions to COSH, NGOs and university	56.3	72.0	79.4	80.5	83.2
Publicity and health education and smoking cessation	46.3	48.2	45.1	46.7	46.8
Sub-total	102.6	120.2	124.5	127.2	130.0
Total	142.2	162.9	174.4	178.7	184.5

Source: DH records

Scope for setting additional performance indicators

4.14 Audit noted that in the DH's Controlling Officer's Reports for 2013 to 2017, there was only one performance indicator (i.e. the number of publicity or educational activities delivered by COSH) that was relevant to the DH's smoking control efforts. Table 18 shows the number of activities reported under this performance indicator.

Table 18

**Performance indicator relevant to smoking control efforts
(2013 to 2017)**

	2013	2014	2015	2016	2017
Number of publicity or educational activities delivered by COSH (Actual)	420	445	432	423	430

Source: DH records

4.15 The DH had deployed a large amount of resources for implementing its efforts in smoking control (see Table 17). Such efforts included handling of complaints, conduct of inspections, issue of FPNs, and conduct of activities on publicity and health education as well as smoking cessation. In Audit's view, it is undesirable that only one performance indicator had been set and published. Audit considers that the DH needs to set and publish additional performance indicators, which may include, for example, the number of inspections conducted at statutory NSAs and the number of calls received by the Quitline.

Audit recommendation

4.16 **Audit has recommended that the Director of Health should consider setting and publishing additional performance indicators so as to enhance the transparency and accountability of the DH's efforts in smoking control.**

Response from the Government

4.17 The Director of Health agrees with the audit recommendation. She has said that the enforcement figures of smoking offences have been published on the TCO's website. The DH will review and consider the feasibility of publishing more indicators and the applicability of the published information.

Initiative for enhancing smoking control

4.18 As mentioned in paragraph 1.3, the DH is responsible for implementing the Government's efforts in smoking control through a multi-pronged approach, comprising legislation and enforcement, publicity, education and smoking cessation services.

4.19 Over the past decades, Hong Kong's smoking prevalence had decreased from 23.3% in 1982 to 10% in 2017 (see para. 1.17). According to the DH, its vision is to reduce Hong Kong's smoking prevalence to less than 10%. To this end, the DH has considered amending the SPHO in the long run:

- (a) amending the SPHO is to impose legal liability on venue managers for not implementing the smoking ban; and
- (b) in the majority of overseas smoking control legislation, legal liability has been imposed on venue managers. For example:
 - (i) in Singapore, venue managers are legally responsible for preventing smoking offences at statutory NSAs;
 - (ii) in New Zealand, New South Wales of Australia and California of the United States of America, venue managers are legally liable if they allow smoking at statutory NSAs; and
 - (iii) in New York, it is unlawful for venue managers not to comply with the smoking ban.

4.20 In February 2018, the TCO informed Audit that imposing legal liability on venue managers would have a significant impact on various industries, and the industries would have concerns about the resistance of their employees and venue managers, and the effective implementation of the anti-smoking provisions in their premises.

Audit recommendation

4.21 **Audit has *recommended* that the Director of Health should keep under review the need for imposing legal liability on venue managers.**

Response from the Government

4.22 The Director of Health agrees with the audit recommendation. She has said that:

- (a) the DH noted that some overseas jurisdictions have imposed legal liability on venue managers for smoking offences in their venues. It is also noted that when implementing the relevant provisions, all governments have taken into consideration various factors including the reactions of the public and the industries concerned;
- (b) in 2006, when amending the SPHO, the Legislative Council discussed the proposal that venue managers of statutory NSAs should be liable for failure to stop smoking in their premises. There were concerns that the proposal would have a significant impact on various industries, and the industries were also concerned about the resistance of their employees and venue managers as well as about the effective implementation of the anti-smoking provisions in their premises. In order to strike a balance between the stakeholders' concerns and the operational difficulties, the Government eventually did not stipulate in the Amendment Ordinance of the SPHO that venue managers would be legally liable for failure to enforce the smoking ban in their premises; and
- (c) to impose legal liability on venue managers just like some overseas jurisdictions, the Government must study carefully and conduct extensive consultation with different stakeholders to explore whether the implementation of the relevant provisions is feasible.

PART 5: OPERATION OF THE HONG KONG COUNCIL ON SMOKING AND HEALTH

5.1 This PART examines the operation of COSH, focusing on the following issues:

- (a) governance of COSH (paras. 5.2 to 5.22); and
- (b) implementation of programmes by COSH (paras. 5.23 to 5.32).

Governance of COSH

5.2 COSH is a statutory body established in 1987 pursuant to the Hong Kong Council on Smoking and Health Ordinance (see para. 1.12). As at 31 December 2017, COSH consisted of 17 members, including the Chairman, the Vice-Chairman, and 15 other members (including 2 government officials, i.e. the Deputy Director of the DH and the Assistant Director (Publicity and Promotions) of the Information Services Department (ISD)). Members of COSH have been appointed by the Secretary for Food and Health, under delegated authority, for a term of two years (Note 21). Non-official members can be reappointed subject to the Government's six-year rule (i.e. the sum of all terms of a member is limited to six years). The 2 government officials are reappointed every two years.

5.3 Under COSH, five committees have been set up to assist it in carrying out its functions. The five committees are the Executive Committee, the Community Liaison Committee, the Education and Publicity Committee, the Information Research Committee and the Legislation Committee. Members of the committees consist of

Note 21: *According to the Hong Kong Council on Smoking and Health Ordinance, COSH shall consist of:*

- (a) *a Chairman and a Vice-chairman each of whom shall be appointed by the Chief Executive of the Hong Kong Special Administrative Region for a term not exceeding 3 years; and*
- (b) *not less than 13 nor more than 15 other persons each of whom shall be appointed by the Chief Executive for a term not exceeding 3 years.*

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those drawn from the Council and co-opted members. In addition, a Secretariat, which is headed by an Executive Director, has also been established to provide administrative support to the Council and committees. As at 31 December 2017, the Secretariat had a total of 9 staff (including the Executive Director).

5.4 COSH has entered into an FSA with the DH. The FSA has specified the following:

- (a) the scope of subvention (i.e. for implementing health promotion programmes and publicity campaigns and conducting research);
- (b) the basis of subvention (i.e. the discretionary grant basis — see Note 7 to para. 1.14);
- (c) performance standards (i.e. the target number of educational activities, publicity activities and participants — Note 22) and the performance monitoring arrangement (i.e. quarterly submission of performance statistics); and
- (d) financial management matters (e.g. submission of the annual budget, monthly reporting of income and expenditure, and annual auditing and reporting).

5.5 Audit examined the governance of COSH and found that there is scope for improvement as shown in paragraphs 5.6 to 5.18.

Need to enhance attendance rates at meetings

5.6 ***Overall attendance rates at Council/committee meetings.*** Table 19 shows the overall attendance rates (i.e. of all members) at Council/committee meetings in 2013-14 to 2017-18 (up to January 2018).

Note 22: *COSH is required to provide annually at least 340 educational activities and publicity activities (including at least 200 educational activities and 80 publicity activities). The total number of participants of educational activities should be at least 40,000.*

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Table 19

**Overall attendance rates at
Council/committee meetings
(2013-14 to 2017-18)**

Council/ committee	No. of members in each year	No. of meetings in each year	Overall attendance rate				
			2013-14	2014-15	2015-16	2016-17	2017-18 (No. of meetings held up to January 2018)
Council	15 to 17	4	81%	77%	82%	71%	78% (4)
Executive Committee	4	4	94%	100%	100%	100%	100% (3)
Community Liaison Committee	7 to 8	1 to 2	88%	57%	71%	64%	N.A. (0)
Education and Publicity Committee	8 to 11	1 to 3	68%	60%	59%	64%	N.A. (0)
Information Research Committee	5 to 8	2 to 3	63%	55%	63%	50%	71% (2)
Legislation Committee	5 to 6	1	100%	83%	100%	60%	80% (1)

Source: Audit analysis of COSH records

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5.7 As shown in Table 19, in 2013-14 to 2017-18, for meetings of the Council and the Executive Committee, the overall attendance rates were above 70% and 90% respectively. However, for some meetings of the other four committees, the overall attendance rates were below 70%. There is, in general, room for improving the overall attendance rates at committee meetings. Audit considers that COSH needs to monitor the overall attendance rates of members at meetings and take measures to improve the attendance rates where warranted.

5.8 *Attendance rates of individual members.* Table 20 shows individual members' attendance rates at Council/committee meetings in 2013-14 to 2017-18 (up to January 2018).

Table 20

**Individual members' attendance rates at
Council/committee meetings
(2013-14 to 2017-18)**

Attendance rate	No. of members				
	2013-14	2014-15	2015-16	2016-17	2017-18 (up to January 2018)
0%	0	3	0	1	0
1% to below 25%	0	0	0	0	0
25% to below 50%	4	1	4	4	3
50% to below 75%	1	4	5	2	3
75% to 100%	11	12	10	11	13
Total	16	20	19	18	19

Source: Audit analysis of COSH records

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5.9 As shown in Table 20, the attendance rates of some members (e.g. 5 members in 2016-17) were below 50% and, in particular, 1 member did not attend any meetings in 2016-17. Audit considers that COSH needs to take measures to improve the attendance rates of those members with low attendance rates at Council/committee meetings. Such measures may include, for example, issuing reminders to members well in advance to facilitate members to plan ahead their schedules.

Need to address issues relating to the attendance of government officials at meetings

5.10 **The Deputy Director of the DH.** According to the Efficiency Unit (EU)'s good practice guide entitled "Guide to Corporate Governance for Subvented Organisations" (the EU Guide), the role of a government representative appointed to the board of an organisation, apart from his/her legal duties as a board member (Note 23), is mainly to act as a link between the Government and the organisation. However, according to the EU Guide, there may be times when the Government representative should not be present in a board discussion, for fear of breaching the legal duties owed to the organisation, for example, in relation to the organisation's budget or bid for funding from the Government.

5.11 According to the DH, the appointment of the Deputy Director as a member of COSH was to maintain effective communication between the DH and COSH. Audit noted that the Deputy Director had participated in the meetings of the Council and the Executive Committee in which the annual budget and the application for supplementary grant (Note 24) were discussed and approved for submission to the Government. This arrangement did not seem to be in line with the EU Guide.

Note 23: *Legal duties of a board member include, for example, duty of care (e.g. to ensure that an information and reporting system exists) and duty of loyalty (e.g. a board member must cast aside any personal or professional interests and place the interests of the organisation ahead of him/her).*

Note 24: *Every year, in addition to a recurrent subvention, the DH provides a supplementary grant to COSH to conduct more educational and publicity activities. For 2016-17, the total subvention was \$22.9 million (2012-13: \$20.7 million) including the supplementary grant of \$9 million (2012-13: \$9.18 million). For 2016-17, with the provision of the supplementary grant, the target number of educational and publicity activities of COSH had been increased from 340 (see Note 22 to para. 5.4(c)) to 420.*

5.12 In February 2018, the TCO informed Audit that the participation of the Deputy Director in the discussion of COSH's annual budget and application for supplementary grant served the primary objective of acting as a link between the Government and COSH. The Deputy Director offered valuable guidance, comments, views and suggestions to COSH in a holistic manner to ensure that COSH's proposed work plans and programmes were working towards the Government's smoking control policy. The Council/Executive Committee of COSH understood that the programme and budget proposals agreed by the Council/Executive Committee with the Deputy Director's presence in the meetings did not imply that the proposals would invariably be approved by the DH subsequently.

5.13 As the memberships of the Council/Executive Committee may be subject to changes (members are appointed on a term of two years (see para. 5.2) and there may be movement of members between committees), new members may not be familiar with the roles and functions of the Deputy Director in the Council/Executive Committee as well as in taking part in the discussion of COSH's annual budget and application for supplementary grant in Council/Executive Committee meetings. Audit considers that COSH and the DH need to ensure that members of the Council/Executive Committee fully understand such roles and functions of the Deputy Director.

5.14 *The Assistant Director of the ISD.* According to the DH, the appointment of the Assistant Director (Publicity and Promotions) of the ISD as a member of COSH was to provide professional input on promotion activities conducted by COSH. However, Audit noted that in 2013-14 to 2017-18 (up to January 2018), a Principal Information Officer of the ISD represented the Assistant Director to attend all the meetings of the Council and the Education and Publicity Committee. Audit further noted that COSH had not laid down rules for alternate members to attend meetings. Audit considers that COSH and the ISD need to review and revise the arrangement (e.g. laying down rules relating to attendance at meetings by alternate members).

Need to lay down rules on meeting proceedings

5.15 According to the EU Guide, for the effective functioning of a board, rules should be made on meeting proceedings, such as the need to:

- (a) ensure that the quorum is met during meetings; and

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- (b) circulate draft minutes after meetings.

Audit noted that COSH had not set a quorum for the five committees (Note 25). In February 2018, COSH informed Audit that in practice it had adopted a quorum of 50% of the number of committee members for each of the five committees. Audit considers that COSH needs to formally set a quorum for the five committees.

5.16 Audit further noted that while draft minutes had been circulated after meetings, they had not been circulated in a timely manner. It was a practice of COSH that the draft minutes of a Council/committee meeting were circulated one week before the next meeting (the Council/committees held 1 to 4 meetings a year — see Table 19 in para. 5.6). Audit considers that COSH needs to circulate draft minutes to members as soon as possible so as to facilitate them to confirm the matters discussed in meetings.

Need to disclose remunerations of senior staff

5.17 In March 2003, the Director of Administration issued a Circular Memorandum, promulgating a set of guidelines for the control and monitoring of remuneration practices in subvented bodies by the Government. According to the guidelines:

- (a) a subvented body which receives more than 50% of its operating income from the Government should review the number, rank and remunerations of its senior staff, and submit annual reports on the review findings to the relevant Director of Bureau. With justifications, the Director of Bureau may approve the subvented body to submit biennial or triennial reports; and
- (b) to enhance transparency, the Director of Bureau should work out with the subvented body an arrangement for the public disclosure of the review reports.

Note 25: *The quorum for the Council is 8 members, as laid down in the Hong Kong Council on Smoking and Health Ordinance.*

5.18 Currently, on a triennial basis, COSH reviews the number, rank and remunerations of its staff at the top three tiers, and submits the review findings to the DH for consideration by the FHB. The latest review was completed in May 2016. COSH had published on its website a message that the remuneration packages of its staff at the top three tiers had been reviewed and recommended to remain unchanged. COSH, however, did not publish on its website the details of the review report (showing information such as the number, rank and remuneration packages of its staff at the top three tiers). Audit considers that, to enhance transparency, the DH needs to consider requiring COSH to do so.

Audit recommendations

5.19 **Audit has *recommended* that COSH should:**

- (a) **monitor the overall attendance rates of members at Council/committee meetings and take measures to improve the overall attendance rates where warranted;**
- (b) **take measures to improve the attendance rates of members with low attendance rates at Council/committee meetings;**
- (c) **in conjunction with the DH, take measures to ensure that members of the Council/Executive Committee fully understand the roles and functions of the DH's Deputy Director in the Council/Executive Committee as well as in taking part in the discussion of COSH's annual budget and application for supplementary grant in Council/Executive Committee meetings;**
- (d) **in conjunction with the ISD, review and revise the arrangement whereby the ISD's Assistant Director is represented by a Principal Information Officer in all Council/committee meetings;**
- (e) **set a quorum for committee meetings; and**
- (f) **circulate draft minutes of meetings for comments by Council/committee members as soon as possible.**

5.20 Audit has also *recommended* that the Director of Health should consider requiring COSH to publish the details of review reports concerning remunerations of the staff at the top three tiers of COSH.

Response from COSH and the Government

5.21 COSH agrees with the audit recommendations in paragraph 5.19. The Executive Director of COSH has said that COSH will:

- (a) set up a reminder system to remind members to attend meetings;
- (b) review the existing practice and take necessary measures to ensure that members of the Council/Executive Committee fully understand the roles and functions of relevant government officials in the meetings;
- (c) review the delegation arrangement whereby the ISD's Assistant Director is continuously represented by a Principal Information Officer;
- (d) lay down the quorum for committee meetings;
- (e) circulate draft minutes in a timely manner; and
- (f) review the mechanism on publishing the details of review reports concerning remunerations of the staff at the top three tiers of COSH.

5.22 The Director of Health agrees with the audit recommendation in paragraph 5.20.

Implementation of programmes by COSH

5.23 COSH implements the following programmes:

- (a) ***Community education programmes.*** These include, for example, the Health Talk Programme, the Interactive Education Theatre Programme, and the production of announcements in the public interest;
- (b) ***Publicity programmes.*** These include, for example, the World No Tobacco Day, the Smoke-free Teens Programme, the Elderly Smoking Cessation Promotion Project, the “Quit to Win” Smoke-free Community Campaign, and the Smoke-free Leading Company Awards; and
- (c) ***Research and conference programmes.*** These include, for example, the Tobacco Control Policy-related Survey and the Cross-strait Conference on Tobacco Control.

5.24 Audit selected the following two major programmes to examine their implementation and identify areas for improvement:

- (a) ***Interactive Education Theatre Programme.*** In 2016-17, the expenditure of the Programme was \$1.5 million, accounting for 12% of the total expenditure on all programmes (see para. 5.23) of \$12.1 million; and
- (b) ***“Quit to Win” Smoke-free Community Campaign.*** In 2016-17, the expenditure of the Campaign was \$3.2 million, accounting for 26% of the total expenditure on all programmes of \$12.1 million.

Audit findings are shown in paragraphs 5.25 to 5.30.

Interactive Education Theatre Programme

5.25 **Background.** In every school year (Note 26), COSH cooperates with a local professional troupe (selected through restricted tendering — Note 27) to produce a show (which has a particular theme and lasts for about one hour). The troupe stages a show performance at each of the primary schools participating in the Programme, and about 100 show performances are staged reaching more than 20,000 students and teachers. These performances are to inform students of the harmful effects of smoking, and to equip them to promote a smoke-free lifestyle and encourage their family members to quit smoking.

5.26 **The 2016-17 Programme.** A total of 95 performances were staged in the six months between October 2016 and March 2017. Take-home materials were given to attending students to strengthen their smoke-free knowledge and facilitate their discussion with family members. According to surveys conducted at the scene, majority of attending students had enjoyed the performances, and had improved their smoke-free knowledge.

5.27 **Audit findings.** In recruiting schools to participate in the Programme, COSH sent invitations to all primary schools (about 500 in number). Audit noted that, in the five school years 2012/13 to 2016/17, some 230 schools had participated in the Programme, accounting for about 46% of all primary schools. However, about 270 (54%) schools had not participated in the Programme. Audit considers that, in order to expand the outreach of the Programme, COSH needs to enhance its efforts to recruit those schools that have not participated in the Programme.

“Quit to Win” Smoke-free Community Campaign

5.28 **Background.** COSH implements the Campaign as follows:

- (a) it recruits district organisations as district partners to organise smoke-free promotion activities. The purpose is to raise the community’s participation

Note 26: *A school year starts from September of a year to August of the following year.*

Note 27: *In restricted tendering, invitations to tender are sent to a restricted number of suppliers of goods or services.*

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in smoking control and to strive for a smoke-free community. COSH offers financial support to district partners (e.g. \$30,000 for each district in the 7th Campaign in 2016-17) to organise smoke-free promotion activities;

- (b) it commissions a university in Hong Kong to organise smoking cessation training for staff and volunteers of district partners and for university students to equip them to carry out smoking cessation promotion and counselling (e.g. in recruiting participants for the “Quit to Win” Contest — see (c) below); and
- (c) it organises sessions (e.g. 68 sessions in the 7th Campaign), covering the whole territory, to recruit smokers to participate in the “Quit to Win” Contest, which aims to encourage smokers to quit smoking through a contest. For participating smokers, smoking cessation counsellors of the university follow up these smokers (by giving advice and assistance through telephone interviews) for six months. Participants who quit the habit after three months can join a lucky draw to win prizes.

5.29 ***The 7th “Quit to Win” Smoke-free Community Campaign.*** The major activities of the Campaign were organised in the four months between June and September 2016, during which:

- (a) 21 district organisations were recruited. They organised 37 smoke-free promotion activities, including health talks, street promotions, carnivals, drawing and photography competitions, etc. These activities reached more than 18,000 members of the public; and
- (b) more than 1,300 smokers were recruited to join the Contest. After three months of counselling services provided by the university, the self-reported quit rate was 12.5%, while the university’s validated quit rate was 6.2%.

5.30 ***Audit findings.*** In recruiting district organisations, COSH approached the 18 District Councils in the territory for their assistance. If there were no nominations from the District Councils, COSH would attempt to recruit district organisations through its own network. Nevertheless, Audit noted that, no district organisations had been recruited for a number of districts in recent years. For example, no district organisations had been recruited for the 5 Campaigns since 2012-13 for 3 districts, and for the 4 Campaigns since 2013-14 for 1 district. Audit considers that, to expand

the outreach of the Campaign, COSH needs to enhance its efforts to recruit district organisations from those districts where no organisations have been recruited in recent years.

Audit recommendations

5.31 **Audit has *recommended* that COSH should enhance the efforts to recruit:**

- (a) **schools that have not participated in the Interactive Education Theatre Programme to join the Programme; and**
- (b) **district organisations from those districts where no organisations have been recruited in recent years to participate in the “Quit to Win” Smoke-free Community Campaign.**

Response from COSH

5.32 **COSH agrees with the audit recommendations. The Executive Director of COSH has said that COSH will:**

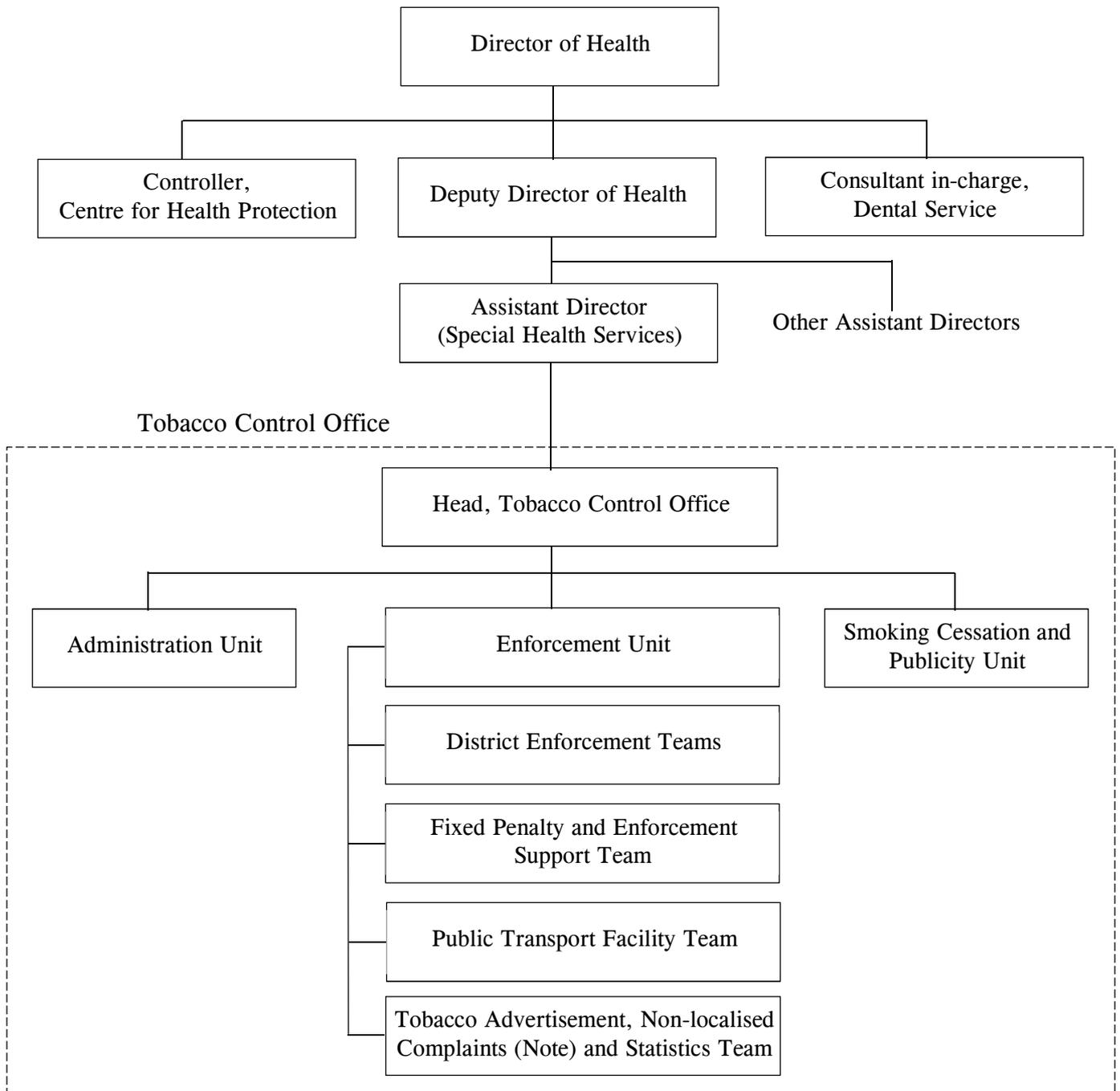
- (a) **review the invitation mechanism in order to encourage the participation from schools in the Interactive Education Theatre Programme; and**
- (b) **review the criteria and/or procedures in order to encourage the participation in the “Quit to Win” Smoke-free Community Campaign.**

**Statutory no smoking areas under the
 Smoking (Public Health) Ordinance**

Indoor statutory NSAs	Indoor and outdoor statutory NSAs	Other statutory NSAs
<p>Indoor workplaces and offices</p> <p>Indoor public places (e.g. lift lobbies and back stairs)</p> <p>Footbridges</p> <p>Shops, department stores, shopping malls, publicly or privately operated markets and supermarkets</p> <p>Banks</p> <p>Restaurants</p> <p>Bars, nightclubs, mahjong-tin kau premises, bathhouses and massage establishments</p> <p>Residential care homes and treatment centres</p>	<p>Public lifts and escalators</p> <p>Cinemas, theatres, concert halls and amusement game centres</p> <p>Child care centres, schools, universities and tertiary institutes</p> <p>Hospitals</p> <p>Hong Kong Wetland Park</p> <p>Public pleasure grounds</p> <p>Public swimming pools and bathing beaches managed by the Leisure and Cultural Services Department</p> <p>Hong Kong Stadium and Mongkok Stadium</p> <p>Approved institutions where probationers are placed, reformatory schools and places of refuge</p>	<p>Public transport carriers</p> <p>Public transport facilities</p> <p>8 bus interchanges (the Cross-Harbour Tunnel, the Eastern Harbour Crossing, the Lion Rock Tunnel, the Shing Mun Tunnels, the Tai Lam Tunnel, the Tate's Cairn Tunnel, the Tsing Sha Highway and the Western Harbour Crossing)</p>

Source: TCO records

**Tobacco Control Office:
Organisation chart
(31 December 2017)**



Source: DH records

Note: “Non-localised complaints” is a term used by the TCO. According to the TCO, these are complaints about matters not relating to particular physical locations but relating to, for example, tobacco advertisements on publications and the Internet.

Acronyms and abbreviations

Audit	Audit Commission
COSH	Hong Kong Council on Smoking and Health
DH	Department of Health
EOs	Executive Officers
EU	Efficiency Unit
FEHD	Food and Environmental Hygiene Department
FHB	Food and Health Bureau
FPN	Fixed penalty notice
FPSOO	Fixed Penalty (Smoking Offences) Ordinance
FSA	Funding and Service Agreement
HD	Housing Department
ISD	Information Services Department
LCSD	Leisure and Cultural Services Department
LREIs	Locations requiring enhanced inspections
NGOs	Non-governmental organisations
NSAs	No smoking areas
PPGs	Public pleasure grounds
PTFs	Public transport facilities
SPHO	Smoking (Public Health) Ordinance
TCIs	Tobacco Control Inspectors
TCO	Tobacco Control Office
WHO	World Health Organization

CHAPTER 6

Innovation and Technology Bureau Office of the Government Chief Information Officer

**OGCIO's programmes and projects in
promoting the wider use of
IT in the community**

**Audit Commission
Hong Kong
3 April 2018**

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. 70 of the Director of Audit contains 8 Chapters which are available on our website at <http://www.aud.gov.hk>

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OGCIO'S PROGRAMMES AND PROJECTS IN PROMOTING THE WIDER USE OF IT IN THE COMMUNITY

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OGCIO'S PROGRAMMES AND PROJECTS IN PROMOTING THE WIDER USE OF IT IN THE COMMUNITY

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1. The Government defines information and communications technology (ICT) as all technologies and applications that involve information processing and/or exchange over communication network(s), including the Internet. ICT is often used as an extended synonym for information technology (IT). The Office of the Government Chief Information Officer (OGCIO) promotes and facilitates the wider use of IT in the business sector and the community, and contributes to building a digitally inclusive society under one of its programme areas, namely "IT in the Community". In 2016-17, the total expenditure for the initiatives of the OGCIO to promote the wider use of IT in the community was \$117.6 million. The expenditure comprised expenditure of \$98.7 million under the programme area "IT in the Community", and \$18.9 million for the provision of free public Wi-Fi services funded by the Capital Works Reserve Fund. The Government's strategy on promoting the wider use of IT in the community evolves over time. It was first promulgated in the Digital 21 Strategy document in 1998 and updated in 2001, 2004 and 2008 respectively. The Audit Commission (Audit) has recently conducted a review of the OGCIO's programmes and projects in promoting the wider use of IT in the community.

Digital inclusion initiatives

2. *Low take-up rate and utilisation rate of the Internet Learning Support Programme (ILSP).* In May 2010, the Finance Committee (FC) of the Legislative Council approved a funding of \$220 million for the implementation of the ILSP for five years to help needy students and parents from low-income families to gain access to the Internet for learning. The ILSP was launched in July 2011 and will end in August 2018. Audit noted that the annual take-up rate (i.e. the percentage of eligible families served) for the school years from 2011/12 to 2016/17 was generally low, ranging from 4% to 14%. The take-up rate of the ILSP services for the six-year period was 18%. Moreover, the utilisation rate (i.e. the percentage of enrolled families served) for each year from 2011/12 to 2016/17 was low, ranging

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from 12% to 24%. The utilisation rate for the 6.5-year period from the launch of the ILSP in 2011/12 to December 2017 was 47% (paras. 2.4, 2.5, 2.10, 2.11 and 2.14).

3. ***Lukewarm response from target organisations and small number of downloads for some mobile applications (mobile apps).*** The OGCI0 has launched three rounds of Funding Scheme for Digital Inclusion Mobile Apps since 2012 to provide funding support for non-profit-making social service organisations to develop mobile apps that cater for the needs of underprivileged groups for free use. Up to December 2017, 17 mobile apps with a total funding of \$6 million had been developed and launched. Audit noted that: (a) the number of proposals received in each round of invitation decreased from 45 in 2012 to 15 in 2015. Moreover, the number of organisations which had submitted proposals decreased from 40 (9% of 445 invitations) in 2012 to 14 (3% of 522 invitations) in 2015; and (b) the OGCI0 requires the grantees to set and meet target number of downloads within the first 12 months after the launch of the digital inclusion mobile apps. Audit examination of the number of downloads of the 12 digital inclusion mobile apps funded by the OGCI0 in the first and second rounds revealed that 8 (67%) of them failed to achieve the target number of downloads within the first 12 months after the launch of the mobile apps (paras. 2.29 to 2.31).

4. ***Need to improve government mobile app accessibility and lukewarm response to Web Accessibility Recognition Scheme.*** The OGCI0 launched the Web/Mobile App Accessibility Campaign in October 2011 to promote the adoption of accessible design in websites and mobile apps. Audit noted that: (a) all government mobile apps developed on or after 1 December 2014 should be made accessible for all users, including persons with disabilities, and conform to all the baseline accessibility criteria, e.g. providing text resize function and sufficient colour contrast. According to the survey conducted by the OGCI0 in October 2017, one (4%) of the 23 mobile apps developed on or after 1 December 2014 and 58 (65%) of the 89 mobile apps developed before 1 December 2014 did not conform to the baseline accessibility criteria; and (b) Audit analysed the response rates of local enterprises/organisations for submission of applications in each round of the Web Accessibility Recognition Scheme held in the period 2013 to 2016 and noted that the response rates ranged from 7.8% to 13% (paras. 2.35, 2.37 and 2.40).

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Free public Wi-Fi services

5. *Need to improve Government Wi-Fi (GovWiFi) services.* Since 2007, the GovWiFi services have provided the public with free Wi-Fi services on selected government premises. The FC approved \$217.6 million in 2007 and a supplementary provision of \$68 million in 2011 for the provision of the GovWiFi services for a total of 10 years from December 2007 to December 2017 (under two 5-year outsourcing contracts). In November 2017, the Government awarded the third contract for a contract sum of \$119.8 million. Audit noted that: (a) in the 2016 Policy Address, the Government pledged to progressively double the existing speed of GovWiFi connection to 3 Megabits per second (Mbps) to 4 Mbps per user. Based on the results of the OGCIO's annual service check in 2017, the download speed of 1,171 (38%) of the 3,087 hotspots was lower than 3 Mbps, and no Wi-Fi connection could be established at 10 (0.3%) hotspots; (b) as at 31 December 2017, there were 616 GovWiFi venues. Audit examined the OGCIO's record on the usage of the GovWiFi services at the 616 venues in the period from 2014 to 2017. The usage at some venues was low. For 196 (32%) of the 616 venues, the average daily number of users was less than 15; (c) amongst the 20 GovWiFi venues visited by Audit in the period from January to March 2018 to ascertain whether GovWiFi signages were put up, at 6 (30%) venues, no signages were put up at any of the hotspots and at 13 (65%) venues, signages were only put up at some hotspots; and (d) the use of encrypted channel cannot provide sufficient network security protection to users against hacking as it cannot protect the data during its transmission across the Internet. However, in the security tips and the usage guide provided on the thematic website on the GovWiFi services, users were not explicitly alerted to the limitation of encrypted channel (paras. 3.2, 3.5, 3.7, 3.10, 3.13 and 3.17).

6. *Need to improve the Wi-Fi.HK brand.* Wi-Fi.HK is the common branding launched in August 2014 through collaboration of the Government with a number of public and private organisations for providing free Wi-Fi services in Hong Kong. Information on location of the venues offering the Wi-Fi.HK services are available at the Wi-Fi.HK website and the Wi-Fi.HK mobile app. Audit noted that the percentage of Wi-Fi.HK venues where Wi-Fi connections could not be established increased from 5% (9 of 165 venues checked) in 2015 to 13% (37 of 284 venues checked) in 2017. The Government pledged to progressively expand the number of Wi-Fi.HK hotspots from 17,000 to 34,000 by 2019. However, the progress of expanding the coverage of the Wi-Fi.HK services was slow. As at 31 December 2017, the number of Wi-Fi.HK hotspots had increased only by 3,339, from 17,000 to 20,339. Up to 28 February 2018, the response from the private organisations to join the Wi-Fi.HK

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brand had been lukewarm. Only 19 private organisations had joined the Wi-Fi.HK brand since May 2016. Furthermore, according to the Thematic Household Survey conducted by the Census and Statistics Department in 2016, 55% of the respondents who had used public Wi-Fi services during the 12 months before the survey were not aware of the Wi-Fi.HK brand. While the OGCIO intended to enhance the security measures for the Wi-Fi.HK services by adopting digital server certificate, in the Wi-Fi.HK sample service check conducted in 2017, digital server certificate was not found at 82 (33%) of the 247 Wi-Fi.HK venues checked (paras. 3.20, 3.22 to 3.24, 3.26 and 3.27).

7. *Slow progress of providing Wi-Fi services under public-private collaboration (PPC).* On 20 December 2016, the Government entered into licence agreements with four service providers to provide Wi-Fi services for a service period of five years at 185 government venues across 18 districts in Hong Kong with high patronage such as parks, sitting-out areas, promenades, tourist spots and public transport interchanges. According to the agreements, the service providers would be allowed to provide their commercial mobile and Wi-Fi services and other information services at these venues, and should commence the provision of the Wi-Fi services within 12 months (i.e. by 19 December 2017). The progress of the implementation of the PPC pilot project by the service providers was slow. Free Wi-Fi services had been launched at only 12 (6%) of the 185 venues by the deadline. As at the deadline of 19 December 2017, a service provider (i.e. Service Provider D) had commenced the Wi-Fi services at all of its seven allocated venues. The other three service providers (i.e. Service Providers A, B and C) had not commenced the Wi-Fi services at some or all of the allocated venues due to commercial considerations, unavailability of the venues for installation work or technical difficulties encountered. Audit noted that: (a) on 9 October 2017, Service Provider A informed the OGCIO that it could only deliver Wi-Fi services at 4 of its 160 allocated venues by the deadline and sought advice from the OGCIO on the arrangements for the remaining 156 venues. On 14 December 2017, the OGCIO accepted Service Provider A's request to extend the deadline for commencing the provision of Wi-Fi services at the four allocated venues to 15 March 2018. The OGCIO had not sought legal advice on protecting the interests of the Government in varying the agreement and extending the deadline; (b) on 14 December 2017, the OGCIO accepted the Service Provider B's request to extend the deadline for commencing the provision of Wi-Fi services at 6 of its 11 allocated venues to 30 June 2018; and (c) the agreement signed by the Service Provider C included a term that for all venues, mobile services must be activated at the same time with free Wi-Fi services. However, as the mobile services at these venues had not yet been activated, free Wi-Fi services at these venues were not launched before the

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deadline of 19 December 2017. Subsequently, on 23 February 2018, free Wi-Fi services were launched at six of the seven venues (paras. 3.31 to 3.34).

8. *Delays in providing free public Wi-Fi services in study rooms and youth service centres.* The Government aims to offer free Wi-Fi services at all study rooms and youth service centres run by the Government and non-profit-making non-governmental organisations to help students study after school with the use of Internet resources. The OGCIO estimated that the subsidy would cover about 350 study rooms and youth service centres run by the non-governmental organisations, involving around 500 hotspots for a period of 5 years. The maximum annual subsidy for each venue would be set at \$12,000 on a reimbursable basis. According to the requirements of the subsidy scheme for providing free public Wi-Fi services in study rooms and youth service centres, grantee non-governmental organisations should provide Wi-Fi services to the public in their venues within three months after accepting the offer. As at 31 December 2017, of the 177 venues approved under the subsidy scheme, Wi-Fi services were launched at 99 (56%) venues. Of the 99 venues, the Wi-Fi services at 41 (41%) venues were launched after the deadline. Of the 73 venues where Wi-Fi services had not been launched, the provision of Wi-Fi services at 52 (71%) venues was overdue. Five venues were withdrawn from the scheme (paras. 3.38 and 3.40).

Other initiatives in promoting the wider use of IT

9. *Delay in the sale of two high-tier data centre sites.* In 2012, the Chief Executive in Council approved the disposal of three dedicated sites of about one hectare each at Tseung Kwan O Town Lots Nos. 122, 123 and 127 (Sites 1, 2 and 3) for high-tier data centres. Site 1 was sold through open tender on 4 October 2013. However, due to a number of issues, such as the termination of existing Short Term Tenancy (STT), closing down of public metered carpark, and arrangement for possible site decontamination works and accessibility, Sites 2 and 3 were not yet available for sale up to January 2018. Site 2 had been occupied by ten recycling operators under STTs granted since 11 January 1999. Site 3 was not put on sale as the OGCIO planned to dispose of Site 2 and Site 3 together. In July 2017, the Lands Department (LandsD) issued letters to the recycling operators notifying them that the STTs would be terminated on 3 October 2017. In August 2017, the recycling operators requested to have the STT termination date postponed to 31 March 2018. In September 2017, as agreed by the OGCIO and the departments concerned, the LandsD extended the termination date of the STTs to 31 March 2018. In

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February 2018, the termination date of the STTs was further extended to 30 June 2018 upon the request of the recycling operators (paras. 4.7 to 4.10).

10. ***Small number of data centre waiver applications.*** To encourage existing industrial buildings to change their use to data centres, the fees for issuing waivers for using industrial buildings aged 15 years or more for data centres were waived. From 25 June 2012 to 30 November 2017, only 32 waiver applications under this concessionary scheme were received. The number of waiver applications had increased from 4 in 2012-13 to 14 in 2015-16 and decreased drastically to 1 in 2016-17. In 2017-18, 2 applications were received up to 30 November 2017 (para. 4.12).

11. ***Need to promote lease modifications of industrial lots for data centre use.*** One of the measures to facilitate the development of data centres is to accept lease modification (including land exchange) tailor-made for development of high-tier data centres on existing industrial lots for the part of the development proposed for data centre use. In the period from 25 June 2012 to 31 December 2017, the LandsD received only four applications. The first application was received in April 2013 and the modification letter was executed in January 2015. The second application was withdrawn. As at 31 December 2017, the third and fourth applications were under processing. The small number of applications received indicates that the OGCIO needs to review the attractiveness of the measures in facilitating the development of data centres (paras. 4.14 to 4.16).

12. ***Need to encourage more bureaux/departments and organisations to open up their data.*** In an effort to support Hong Kong's development as a knowledge-based economy, in March 2011, the Government launched a pilot scheme to facilitate value-added re-use of Public Sector Information (PSI). In March 2015, the OGCIO launched the revamped PSI portal entitled "data.gov.hk" to facilitate the dissemination of datasets provided by government bureaux/departments and organisations. The OGCIO had approached a number of public and private organisations to encourage them to open up their data to the PSI portal. However, up to 31 December 2017, Audit noted that: (a) only 47 (66%) of the 71 government bureaux/departments released their data to the PSI portal; (b) only 8 public and private organisations released their data to the PSI portal; and (c) only two (50%) of the four major transport operators had released some static information to the PSI portal (paras. 4.20 to 4.23).

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13. *Need to strengthen the monitoring of the contractor and the Leading Organisers of the Hong Kong ICT Awards.* The “Hong Kong ICT Awards” Programme was established in 2006 with the collaborative efforts of the industry, academia and the Government. The Programme is steered by the OGCIO and organised by ICT industry associations and professional bodies (i.e. Leading Organisers). Each year, the OGCIO appoints a contractor to provide the secretariat service and logistics support for the Hong Kong ICT Awards. The contractor is required to ensure that personnel engaged in the secretariat service should not be involved in adjudication and assessment work of the Hong Kong ICT Awards except for administrative work. Audit noted that an assessor and a member of the judging panel of an award category from 2013 to 2017 were members of the project team of the organisation for providing the secretariat service. On the other hand, for each award category, a Leading Organiser, who is often an industry-related organisation, is appointed for planning, organising, managing and running the award category. According to the Judging Manual, Leading Organisers should check the eligibility requirements of the award entrants. In 2016, there were media reports claiming that a company, which won an award, did not meet the entry requirement. In February 2017, the OGCIO concluded that the claim made by the media report was valid and disqualified the company. The incident indicated that there was room to strengthen the monitoring of the Leading Organisers’ performance of the responsibilities stipulated in the Judging Manual (paras. 4.28, 4.30 to 4.36).

Way forward

14. *Need to update the strategies on promoting the wider use of IT in the community.* The Government’s strategy on promoting the wider use of IT in the community was first promulgated in the Digital 21 Strategy published in November 1998 and had been updated in 2001, 2004 and 2008 respectively. However, up to 31 January 2018, the OGCIO had not updated the Digital 21 Strategy, nor has it promulgated any new strategy to replace the Digital 21 Strategy. The 2008 Digital 21 Strategy was published on the Digital 21 Strategy website of the OGCIO as the latest strategy. In December 2017, the Government released the Smart City Blueprint for Hong Kong. Audit noted that only three (i.e. Wi-Fi Connected City Programme, PSI portal and technology start-ups supporting initiatives) of the ten key initiatives in promoting the wider use of IT in the community were mentioned briefly in the Smart City Blueprint for Hong Kong. The initiatives were only featured briefly in the Blueprint without details of their strategy and programme of work. The Innovation and Technology Bureau (ITB) and the OGCIO need to update regularly their strategies and work programmes on promoting the wider use of IT in the

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community, taking into account the Smart City Blueprint for Hong Kong and other policy directives and strategies on innovation and technology promulgated by the ITB (paras. 5.2, 5.3, 5.5 to 5.7).

Audit recommendations

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

Digital inclusion initiatives

- (a) **carry out a post-implementation review to evaluate the extent to which the ILSP had enhanced digital inclusion and draw lessons from its implementation (para. 2.21(c));**
- (b) **ascertain the reasons for the low response rates of organisations for submission of proposals for Funding Scheme for Digital Inclusion Mobile Apps and the low number of downloads of some mobile apps (para. 2.33(a));**
- (c) **draw lessons from the implementation of the Funding Scheme for Digital Inclusion Mobile Apps for similar schemes launched in the future (para. 2.33(b));**
- (d) **ascertain the difficulties for government bureaux/departments to conform to the baseline accessibility criteria and take further measures to encourage and facilitate them to conform to the criteria (para. 2.42(a));**
- (e) **ascertain the reasons for the low response rates of the Web Accessibility Recognition Scheme (para. 2.42(b));**

Free public Wi-Fi services

- (f) **monitor the performance and connection speed of the GovWiFi services and take measures to improve the connectivity and connection speed at**

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GovWiFi venues with connection problem and slow connection speed (para. 3.18(a));

- (g) monitor the usage at each venue from time to time and consider relocating Wi-Fi hotspots when necessary (para. 3.18(d));**
- (h) ensure that signages indicating the availability of the GovWiFi services are properly put up (para. 3.18(e));**
- (i) explicitly alert users of the GovWiFi services to the limitation of encrypted channel, and encourage them to use more secured means of communication to transmit sensitive information, such as virtual private network and secure sockets layer, if necessary (para. 3.18(g));**
- (j) take measures to ensure that the information on venue locations provided by the Wi-Fi.HK participating organisations is correct and the Wi-Fi.HK services are available at all Wi-Fi.HK venues (para. 3.28(a));**
- (k) take action to expedite the progress of expanding the coverage of the Wi-Fi.HK services, taking into account the public preference on the locations of accessing free Wi-Fi services as far as possible (para. 3.28(b));**
- (l) review the slow progress in the implementation of the PPC pilot project and take measures to expedite the provision of Wi-Fi services (para. 3.36(a));**
- (m) critically review the target number of free Wi-Fi hotspots to be provided in the full-scale roll-out of the PPC model (para. 3.36(b));**
- (n) review whether the interests of the Government have been adequately protected in respect of the variation of the agreement and/or the extension of deadline made with Service Providers A and B (para. 3.36(c));**

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- (o) **take measures to address the slow progress of the provision of free Wi-Fi services by the non-governmental organisations at the approved venues under the subsidy scheme for providing free public Wi-Fi services in study rooms and youth service centres, and facilitate them to speed up the progress (para. 3.42);**

Other initiatives in promoting the wider use of IT

- (p) **endeavour to expedite the disposal of the two dedicated sites for data centre development (para. 4.17(a));**
- (q) **review the effectiveness of the concessionary measure on exempting the waiver fees for change of use in parts of industrial buildings (para. 4.17(b));**
- (r) **review the effectiveness of the concessionary measure on lease modification tailor-made for data centre use, and step up effort in promoting this measure to the industry (para. 4.17(d));**
- (s) **encourage more government bureaux/departments, and public and private organisations to open up more data for free public re-use via the PSI portal (para. 4.26(a));**
- (t) **ensure that the personnel engaged in the secretariat service are not involved in the adjudication and assessment work of the Hong Kong ICT Awards (para. 4.42(a));**
- (u) **establish a mechanism to strengthen the monitoring of the Leading Organisers' performance of the responsibilities stipulated in the Judging Manual (para. 4.42(c)); and**

Way forward

- (v) **update the Digital 21 Strategy website regularly to reflect the latest developments (para. 5.9).**

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16. Audit has also *recommended* that the Secretary for Innovation and Technology and the Government Chief Information Officer should update regularly their strategies and work programmes on promoting the wider use of IT in the community, taking into account the Smart City Blueprint for Hong Kong and other policy directives and strategies on innovation and technology promulgated by the ITB (para. 5.8).

Response from the Government

17. The Government Chief Information Officer and the Secretary for Innovation and Technology agree with the audit recommendations.

PART 1: INTRODUCTION

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

Background

1.2 The Government defines information and communications technology (ICT) as all technologies and applications that involve information processing and/or exchange over communication network(s), including the Internet. ICT is often used as an extended synonym for information technology (IT). The Office of the Government Chief Information Officer (OGCIO) under the Innovation and Technology Bureau (ITB) promotes and facilitates the wider use of IT in the business sector and the community, and contributes to building a digitally inclusive society under one of its programme areas, namely “IT in the Community” (Note 1). Recognising that there is a digital divide between those who have access to computers and the Internet and those who do not, the OGCIO promotes digital inclusion to enable all members of the community to have an equal opportunity to benefit from ICT developments. Digital inclusion encompasses the ability of individuals and groups to access and use ICT, which more specifically include access to the Internet, availability of hardware and software, relevant content and services, and training for digital literacy skills. Since 1998-99, “IT in the Community” has been one of the programme areas of the then Information Technology Services Department (Note 2).

Note 1: *There are three programme areas under the OGCIO, namely: (a) Use of IT in Government; (b) IT Infrastructure and Standards; and (c) IT in the Community.*

Note 2: *In July 2004, the Information Technology Services Department merged with the IT-related divisions of the then Commerce, Industry and Technology Bureau to form the OGCIO to take up IT-related policies and operational matters, including the programme area “IT in the Community”.*

Introduction

1.3 The OGCIIO is headed by the Government Chief Information Officer. As at 31 December 2017, the OGCIIO had 76 staff who were responsible for the operation of various programmes and projects under the programme area “IT in the Community”. An extract of the organisation chart of the OGCIIO is shown at Appendix A. In 2016-17, the total expenditure for the initiatives of the OGCIIO to promote the wider use of IT in the community was \$117.6 million. The expenditure comprised expenditure of \$98.7 million under the programme area “IT in the Community”, and \$18.9 million for the provision of free public Wi-Fi services funded by the Capital Works Reserve Fund. According to the OGCIIO, the total expenditure for individual programmes and projects was \$58.2 million (see Table 1) (Note 3).

Table 1

Expenditure of programmes and projects relating to OGCIIO’s initiatives in promoting the wider use of IT in the community (2016-17)

Programme/project	Expenditure (\$ million)
Internet Learning Support Programme	25.8
Free public Wi-Fi services	18.9
Hong Kong ICT Awards, International IT Fest and Internet Economy Summit	7.9
Public Sector Information Portal	3.7
Web/Mobile App Accessibility Campaign	0.7
Funding Scheme for Digital Inclusion Mobile Apps	0.5
ICT Outreach Programme for Elderly	0.4
Supporting Technology Start-ups	0.2
Data Centre	0.1
Total	58.2

Source: OGCIIO records

Note 3: *The balance of \$59.4 million (\$117.6 million – \$58.2 million) was mainly staff-related expenditure and general departmental expenses.*

Government's strategy on promoting the wider use of IT in the community

1.4 The Government's strategy on promoting the wider use of IT in the community evolves over time. It was first promulgated in the Digital 21 Strategy document in 1998 and updated in 2001, 2004 and 2008 respectively:

- (a) ***1998 Digital 21 Strategy.*** The 1998 Strategy stated that the objective of "IT in the Community" was to raise the awareness, confidence and familiarity of the community in the use of ICT in all spheres of their lives;
- (b) ***2001 Digital 21 Strategy.*** A focused area identified by the 2001 Strategy was to strengthen the Hong Kong community for digital exploitation to ensure that the entire community would benefit from the developments of IT in enhancing the quality of life;
- (c) ***2004 Digital 21 Strategy.*** The 2004 Strategy named "bridging the digital divide" as one of its focused areas. The OGCIO has since revised its policy objective under the programme area "IT in the Community" to aiming at building a digitally inclusive society in Hong Kong, such that the entire community would benefit from ICT development in enhancing the quality of life; and
- (d) ***2008 Digital 21 Strategy.*** The 2008 Digital 21 Strategy was the latest Government's IT strategy shown on the OGCIO's Digital 21 Strategy website. The 2008 Strategy identified two action areas for promoting the wider use of IT in the community:
 - (i) ***Developing Hong Kong as a hub for technological cooperation and trade.*** The business establishments located in Hong Kong should play a significant role in the local, Mainland and global markets for ICT and digital content services, and that collaboration with Mainland and international entities should be a major factor in successfully serving these markets. The progress expected under this action area included the completion of a study on land and other policy issues relating to the establishment of data centres in Hong Kong in late 2007 or 2008; and

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- (ii) *Building an inclusive, knowledge-based society.* Residents, businesses and voluntary organisations in Hong Kong were all able to create, access, utilise and share information and knowledge, so that they could achieve their full potential in promoting sustainable development and improving the quality of life. There should also be a culture of healthy and ethical use of ICT, promoted and protected by knowledgeable users and the legal system. The progress expected under this action area included installing wireless hotspots at major government premises with high public patronage from 2007, and establishing a digital inclusion task force in 2008 to formulate strategies and initiatives to bridge digital divide (Note 4).

Digital 21 Strategy Advisory Committee

1.5 The Digital 21 Strategy Advisory Committee was established in October 2004 to replace the then Information Infrastructure Advisory Committee (Note 5) as the advisory body on IT matters, including those for promoting the wider use of IT in the community. Its terms of reference is to advise the Government on the following aspects under the Digital 21 Strategy:

- (a) goals and objectives;
- (b) areas requiring further actions;
- (c) desired outcomes;
- (d) strategies and programmes facilitating the delivery of the desired outcomes;
and
- (e) blueprint for ICT development in Hong Kong.

Note 4: *The Organisation for Economic Cooperation & Development defines “digital divide” as “the gap between individuals, households, businesses and geographic areas at different social-economic levels with regard both to their opportunities to access ICT and to their use of the Internet for a wide variety of activities”.*

Note 5: *The Information Infrastructure Advisory Committee was set up in August 1998 to advise the Government on the steps to take to facilitate the development of the information infrastructure in Hong Kong.*

1.6 Four Task Forces have been formed under the Digital 21 Strategy Advisory Committee (Note 6). Of the four Task Forces, the following two are pertinent to the promotion of the wider use of IT in the community:

- (a) ***Task Force on Digital Inclusion.*** The objective of the Task Force on Digital Inclusion is to formulate strategies and initiatives for addressing digital inclusion issues in Hong Kong in a holistic manner with an aim to enabling all members of the community to have equal opportunity to benefit from ICT development; and
- (b) ***Task Force on Industry Facilitation.*** The objective of the Task Force on Industry Facilitation is to advise on strategies and initiatives to facilitate the development of Hong Kong as a Hub for Innovation, Cooperation and Trade in ICT.

Key initiatives in promoting the wider use of IT in the community

1.7 The following are the key initiatives of the OGCIO in promoting the wider use of IT in the community under OGCIO's programme area "IT in the Community":

Digital inclusion initiatives

- (a) ***Internet Learning Support Programme (ILSP).*** In order to mitigate the impact of digital divide on the quality of learning and drive wider adoption of Internet learning in a safe and healthy manner, the Finance Committee (FC) of the Legislative Council (LegCo) approved a funding of \$220 million in May 2010 for implementation of the ILSP (also known as "i Learn at Home") for five years. The ILSP aims at helping students from low-income families acquire computer equipment and Internet access services at affordable prices, and providing them and their parents with user and social support to enable their effective use of the subsidy and proper use of the associated educational opportunity. In 2016, the ILSP was extended for

Note 6: *The Four Task Forces are: (a) Task Force on Digital Inclusion; (b) Task Force on Industry Facilitation; (c) Task Force on E-government Service Delivery; and (d) Task Force on ICT Professional Development and Recognition.*

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two years up to the school year (Note 7) 2017/18 (i.e. up to August 2018). From the launch of the ILSP in July 2011 to December 2017, the programme delivered various types of services to 67,045 eligible families, including the acquisition of 12,414 units of computer equipment and 23,664 Internet packages, and provision of 405,274 training and support services. From the launch of the programme in 2011-12 to 2017-18 (up to September 2017), the total expenditure for the ILSP was \$158.8 million;

- (b) ***ICT Outreach Programme for Elderly.*** The programme was launched in 2013, aiming at arousing the elderly's awareness of and interest in using ICT. It was expected that such programme would enable them to experience how ICT could spice up their life so as to facilitate an active and healthy ageing. The target groups were those institutionalised elderly and hidden elderly, and those elderly receiving home care and day care services. Under the current round of the programme which commenced in November 2017, three non-profit-making non-governmental organisations (NGOs) were provided with a total of \$1.5 million;
- (c) ***Digital inclusion mobile applications (mobile apps).*** Since 2012, the OGCIIO has provided funding support to NGOs for developing free of charge mobile apps for persons with special needs (e.g. persons with disabilities, ethnic minorities, elderly, and children with special learning difficulties). Up to 31 December 2017, 17 apps with total funding of \$6 million had been developed and launched;
- (d) ***Web/Mobile App Accessibility Campaign.*** To facilitate access to online information and services by everyone including persons with disabilities, the OGCIIO has implemented a Web/Mobile App Accessibility Campaign since 2011 to drive the adoption of accessible design in websites and mobile apps. From the launch of the Campaign in 2011-12 to 2017-18 (up to September 2017), the total expenditure incurred was \$11 million;

Note 7: *School year refers to the period which starts on 1 September of a year and ends on 31 August of the following year.*

Free public Wi-Fi services

- (e) ***Wi-Fi Connected City Programme.*** Government Wi-Fi Programme (GovWiFi) provides free wireless Internet access services in Hong Kong's government premises. Under this initiative, Wi-Fi facilities have been installed at around 610 government premises in all 18 districts since 2008. In August 2014, the OGCIO launched the "Wi-Fi.HK" brand in collaboration with public and private organisations to provide free or time limited Wi-Fi services to the public. In May 2016, the FC approved \$500 million for implementing the Wi-Fi Connected City Programme by:
- (i) funding free Wi-Fi services at government venues;
 - (ii) developing and promoting the Wi-Fi.HK brand;
 - (iii) opening up government venues for provision of free public Wi-Fi services under a public-private collaboration (PPC) model; and
 - (iv) subsidising non-profit-making NGOs to provide free Wi-Fi services at youth service centres and study rooms.

The OGCIO reported to LegCo in May 2016 that the number of Wi-Fi hotspots would reach 34,000 by 2019. From the launch of free public Wi-Fi services in 2008-09 to 2017-18 (up to September 2017), the total expenditure was \$281 million;

Other initiatives in promoting the wider use of IT

- (f) ***Data centre development facilitation initiative.*** To compete against Asian countries which are keen in attracting businesses to set up data centres within their territories, the OGCIO has implemented the following measures to facilitate data centre development in Hong Kong:
- (i) setting up a Data Centre Facilitation Unit and a thematic information portal to provide coordinated services to developers and investors on matters related to setting up of data centres;

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- (ii) stepping up promotion to position Hong Kong as a prime location for data centres in the Asia Pacific region;
 - (iii) promoting the incentive measures that optimise the use of industrial buildings for developing data centres; and
 - (iv) identifying sites for development of high-tier data centres and appropriate land disposal arrangements;
- (g) ***Hong Kong ICT Awards, International IT Fest and Internet Economy Summit.*** In 2016, the expenditure incurred for the Hong Kong ICT Awards, the International IT Fest and the Internet Economy Summit was \$5.9 million, \$1.1 million and \$0.9 million respectively;
- (h) ***Public Sector Information (PSI) portal.*** PSI refers to the variety of information collected, produced and possessed by the Government and public bodies as part of their day-to-day operations. The OGCIO launched the government PSI portal in 2011 to make available PSI in digital format for commercial or non-commercial use free of charge. The PSI portal was revamped in March 2015. As at December 2017, the portal provided 3,101 distinct datasets (Note 8) under 18 broad categories and around 1,000 app programming interfaces (Note 9). From the launch of the revamped portal in 2014-15 to 2017-18 (up to September 2017), the total expenditure incurred was \$8.7 million;
- (i) ***Promoting ICT adoption among small and medium enterprises.*** From 2004 to 2016, the OGCIO implemented a sector-specific programme to encourage small and medium enterprises to adopt ICT to enhance their operational efficiency and business opportunities. The OGCIO has launched 19 projects for 13 sectors, namely travel industry, medical and health, drugstores, logistics, accounting, beauty service, watches and

Note 8: *A dataset is a collection of related sets of information that is composed of separate elements but can be manipulated as a unit by a computer.*

Note 9: *An application programming interface is a code that allows two software programs to communicate with each other. The OGCIO developed the application programming interface to provide software and application developers with different perspectives and means of using the datasets provided by the PSI portal.*

clocks, trade, social service, supply chain, security, wholesale/retail, and land transport. The total sponsorship provided for the 19 projects was \$14.6 million. The OGCIO decided in February 2018 to cease the sector-specific programme, given a wider support by the formal programme under the Technology Voucher Programme (Note 10); and

- (j) *Technology start-ups supporting initiatives.* The initiatives aim to strengthen support for technology start-ups through enhanced start-up programmes and services provided by Cyberport. The OGCIO has also launched a one-stop portal known as iStartup@HK to provide comprehensive practical information and serve as a virtual networking and pitching platform for technology start-ups to showcase their products online and reach out to potential investors. From the launch of the initiatives in 2013-14 to 2017-18 (up to September 2017), the total expenditure incurred for the portal was \$3 million.

Audit review

1.8 In March 2013, the Audit Commission (Audit) completed an audit review of the provision of the GovWiFi services. The results were reported in Chapter 8 of the Director of Audit's Report No. 60 of March 2013.

1.9 In October 2017, Audit commenced a review of the OGCIO's programmes and projects in promoting the wider use of IT in the community. The audit has focused on the following areas:

- (a) digital inclusion initiatives (PART 2);
- (b) free public Wi-Fi services (PART 3);

Note 10: *The Technology Voucher Programme under the Innovation and Technology Fund was launched by the ITB in November 2016 on a pilot basis to subsidise local small and medium enterprises in using technological services and solutions to improve productivity, and to upgrade or transform their business processes.*

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- (c) other initiatives in promoting the wider use of IT (PART 4); and
- (d) way forward (PART 5).

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

Acknowledgement

1.10 Audit would like to acknowledge with gratitude the full cooperation of the staff of the ITB and the OGCIO during the course of the audit review.

PART 2: DIGITAL INCLUSION INITIATIVES

2.1 This PART examines the implementation of digital inclusion initiatives, focusing on the following areas:

- (a) ILSP (paras. 2.3 to 2.22);
- (b) ICT adoption by the elderly (paras. 2.23 to 2.28);
- (c) Digital inclusion mobile apps (paras. 2.29 to 2.34); and
- (d) Web/Mobile App Accessibility Campaign (paras. 2.35 to 2.43).

2.2 People of all walks of life should have equal opportunity to use ICT and acquire digital literacy skills, so as to fully integrate with the digital society. However, following the rapid development of technology, some people, especially the elderly, students of low-income families, and persons with disabilities, are vulnerable to digital exclusion. The OGCIO promotes digital inclusion to enable all members of the community to have equal opportunity to benefit from ICT developments.

ILSP

2.3 In the 2009-10 Policy Address, the Chief Executive of the Hong Kong Special Administrative Region announced that the Government would examine options to provide convenient and suitable Internet learning opportunities for students in need.

Digital inclusion initiatives

2.4 In May 2010, the FC of LegCo approved a funding of \$220 million for the implementation of the ILSP for five years to help needy students and parents from low-income families to gain access to the Internet for learning. In the FC paper submitted in May 2010, the OGCIO applied for funding of \$220 million, detailed as follows:

- (a) \$84 million for facilitating the acquisition of computers at affordable prices;
- (b) \$36 million for facilitating the provision of low-cost Internet access;
- (c) \$65 million for training and technical support to target beneficiaries;
- (d) \$12.5 million for the supporting cost of the ILSP (e.g. cost for promoting ILSP services and conducting mid-term review); and
- (e) \$22.5 million for general administration cost.

The OGCIO estimated that some 522,000 students would benefit from the ILSP, comprising 410,000 students from 300,000 low-income families in the first year and an additional 112,000 students from low-income families that would become eligible for the services in the following four years.

2.5 The ILSP was launched in July 2011, with an aim of increasing the take-up of e-learning at home by students from low-income families by helping these families acquire suitable and affordable computers and economical Internet access. The ILSP also aimed to provide the necessary training and technical support to target students and their parents to enhance their technology know-how and knowledge about safe and healthy use of the Internet. Families with full-time students receiving education at primary and secondary levels or pursuing Project Yi Jin programmes or relevant courses of the Vocational Training Council are eligible for receiving services of the ILSP if:

- (a) the families are receiving the flat-rate grant for School-related Expenses under the Comprehensive Social Security Assistance Scheme; or
- (b) the families pass the means test for receiving financial assistance under the Working Family and Student Financial Assistance Agency.

2.6 The OGCIO engaged two non-profit-making organisations to implement the programme in the Eastern and Western parts of Hong Kong respectively. The two implementers set up 35 service centres across the territory to deliver the following services:

- (a) computer equipment at affordable prices suitable for learning purpose with flexible payment options;
- (b) Internet packages at concessionary subscription fee;
- (c) free training to students on proper and safe use of the Internet for learning purpose and free training to help parents provide guidance and support to their children on web-based learning;
- (d) free technical and user support on using computer equipment and the Internet; and
- (e) free social support on proper and safe use of the Internet.

2.7 According to the OGCIO, with a view to encouraging participation, the OGCIO and the implementers conducted various promotional activities, including:

- (a) direct mail of programme leaflets and application forms to eligible families through the Working Family and Student Financial Assistance Agency and dissemination of programme information by the Social Welfare Department;
- (b) publicity at public housing estates, public libraries, government venues, youth service centres and study rooms;
- (c) briefings for schools and District Councils;
- (d) offering seasonal discounts and value-added products and services, e.g. free computer check-ups;
- (e) computer donation programmes and mentorship programmes; and

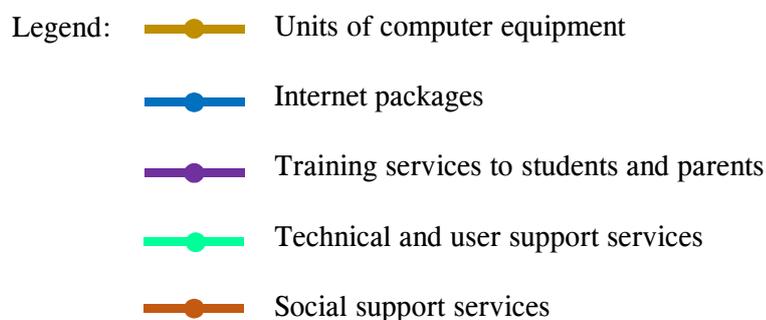
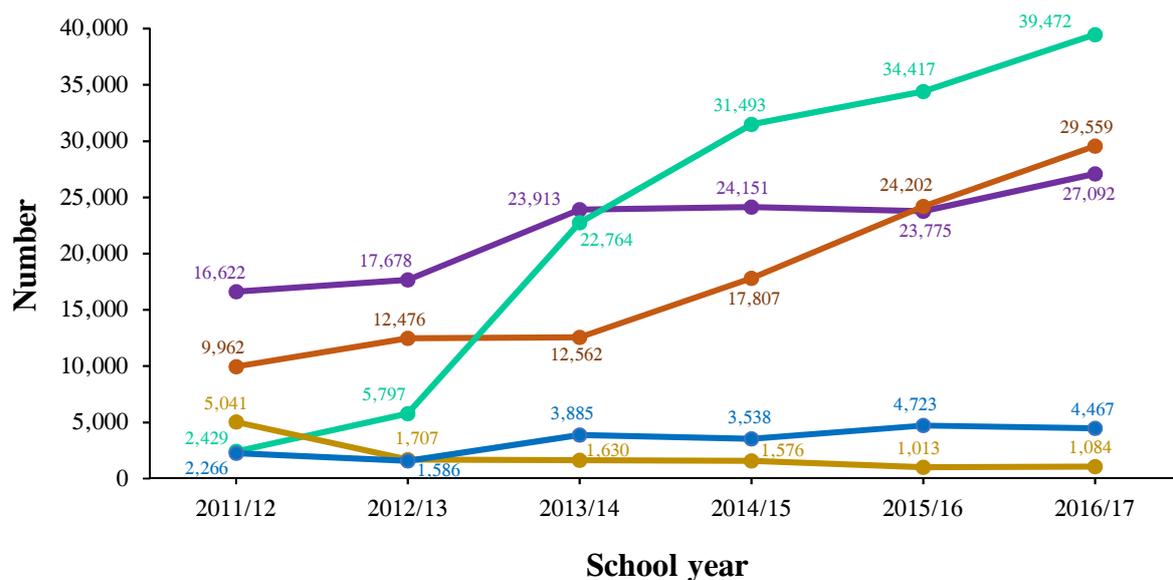
Digital inclusion initiatives

- (f) other general publicity through Announcements in the Public Interest, online channels, etc.

2.8 The number of services provided for four of the five types of services under the ILSP increased during the school years 2011/12 to 2016/17 (see Figure 1). From the launch of the programme in July 2011 to December 2017, the two implementers had facilitated eligible families to obtain 12,414 units of computer equipment and 23,664 Internet packages at concessionary subscription fee, and provided 405,274 training and support services.

Figure 1

Number of services provided under the ILSP
(School years 2011/12 to 2016/17)



Source: *Audit analysis of OGCI0 records*

2.9 Since the implementation of ILSP in July 2011, two reviews on the programme have been conducted in 2013 (2013 Mid-term Review) and 2015 (2015 Review). Having regard to the findings of the 2015 Review and the amount of residual funding of \$83 million after the completion of the initial five-year period (July 2011 to August 2016) of the ILSP, the OGCIO obtained support from the Panel on Information Technology and Broadcasting of LegCo in February 2016 to extend the ILSP for a period of two years up to school year 2017/18 (i.e. up to August 2018) with largely the same implementation arrangements.

2.10 Up to December 2017, the ILSP had been implemented for about six and a half years from its launch in July 2011. The ILSP will end in August 2018. Audit reviewed the implementation of the ILSP and found that some lessons could be learnt.

Low take-up rate of the ILSP services

2.11 According to the FC paper seeking funding for the ILSP in May 2010, the funding commitment of \$220 million for the ILSP was estimated based on the assumption that around 410,000 students from 300,000 low-income families could benefit from the ILSP in the first year and an additional 112,000 students from low-income families would become eligible in the following four years (see para. 2.4). The OGCIO defines the take-up rate of the ILSP as the percentage of eligible families served. The annual take-up rate for the school years from 2011/12 to 2016/17 was generally low, ranging from 4% to 14% (see Table 2). In the school years 2011/12 to 2016/17, 63,495 of the 351,000 eligible families (Note 11) was served. The take-up rate of the ILSP services for the six-year period was 18%.

Note 11: *The OGCIO did not have information on the number of eligible families for ILSP. The OGCIO used the number of families receiving subsidy from the Subsidy Scheme for Internet Access Charges to calculate the take-up rate of the ILSP. The Subsidy Scheme for Internet Access Charges was a scheme operated by the Social Welfare Department for students on Comprehensive Social Security Assistance, and the Working Family and Student Financial Assistance Agency for students receiving financial assistance.*

Table 2

**Take-up rates of the ILSP services
(School years 2011/12 to 2016/17)**

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Number of eligible families (a)	246,987	228,425	216,027	202,920	192,952	175,665
Number of eligible families served (b)	11,254	8,211	21,959	18,300	25,541	24,960
Percentage of eligible families served (c) = (b) ÷ (a) × 100%	5%	4%	10%	9%	13%	14%

Source: Audit analysis of OGCIO records

2.12 In the 2013 Mid-term Review and the 2015 Review, the OGCIO had identified the following reasons for the low take-up rate of the ILSP services:

- (a) the prices for Internet access services and computers available under the ILSP were not attractive. The low take-up rate of sale of computer equipment remained as the low demand from service recipients and the lack of quantity commitment made it difficult to bargain for a greater bulk purchase discount from suppliers. Service recipients opted to purchase computer equipment from seasonal sales or outdated models at very substantial discounts instead of buying them via the ILSP;
- (b) owing to personal data privacy concerns, the Working Family and Student Financial Assistance Agency, the Social Welfare Department and the schools could not provide information of the eligible students directly to the implementers, hence making it difficult for the implementers to identify the eligible students;

- (c) students considered that the training offered under the ILSP overlapped with school education and parents did not consider such training useful. They also felt that the timing and locations of such training services were inconvenient;
- (d) secondary school students did not consider the technical and user support services useful and they preferred to seek assistance from peers; and
- (e) students did not consider the counselling service useful. Parents and schools considered that the counselling service overlapped with school social service.

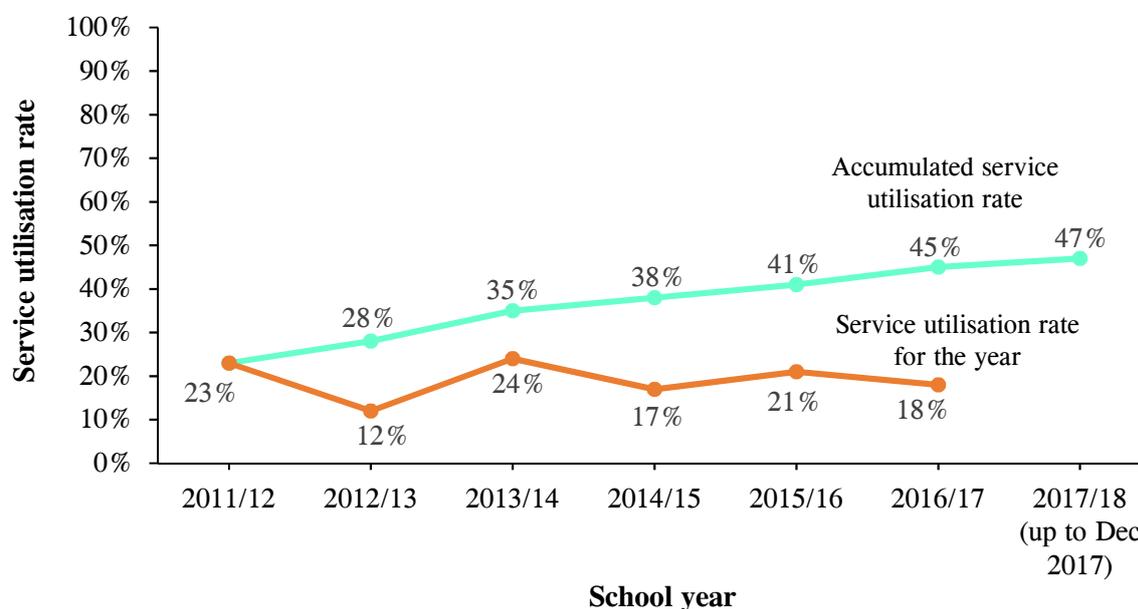
2.13 In the light of the findings of the 2015 Review, the OGCIIO allowed the implementers to source donated or recycled computers for the eligible families for free in addition to facilitating them to acquire new computer equipment. The Working Family and Student Financial Assistance Agency started to seek the eligible families' consent for providing personal data to the implementers starting from school year 2015/16. Up to December 2017, the Social Welfare Department did not provide information of the eligible families receiving the grant under the Comprehensive Social Security Assistance Scheme to the implementers. Despite follow-up action taken after the reviews, the take-up rate of ILSP services in 2016/17 was still low at 14%.

Low utilisation rate of the ILSP services

2.14 Before the eligible families can use the ILSP services, they have to enrol with one of the implementers. Audit noted that not all enrolled families used the services. The OGCIIO defines the utilisation rate as the percentage of enrolled families served. The utilisation rate for each year from 2011/12 to 2016/17 ranged from 12% to 24%. The OGCIIO calculated the utilisation rate of ILSP services by dividing the accumulated number of families served since the launch of the service by the accumulated number of enrolled families. The utilisation rate for the 6.5-year period from the launch of the ILSP in 2011/12 to December 2017 was 47% (see Figure 2).

Figure 2

**ILSP service utilisation rates
(School years 2011/12 to 2017/18)**



Source: *Audit analysis of OGCIIO records*

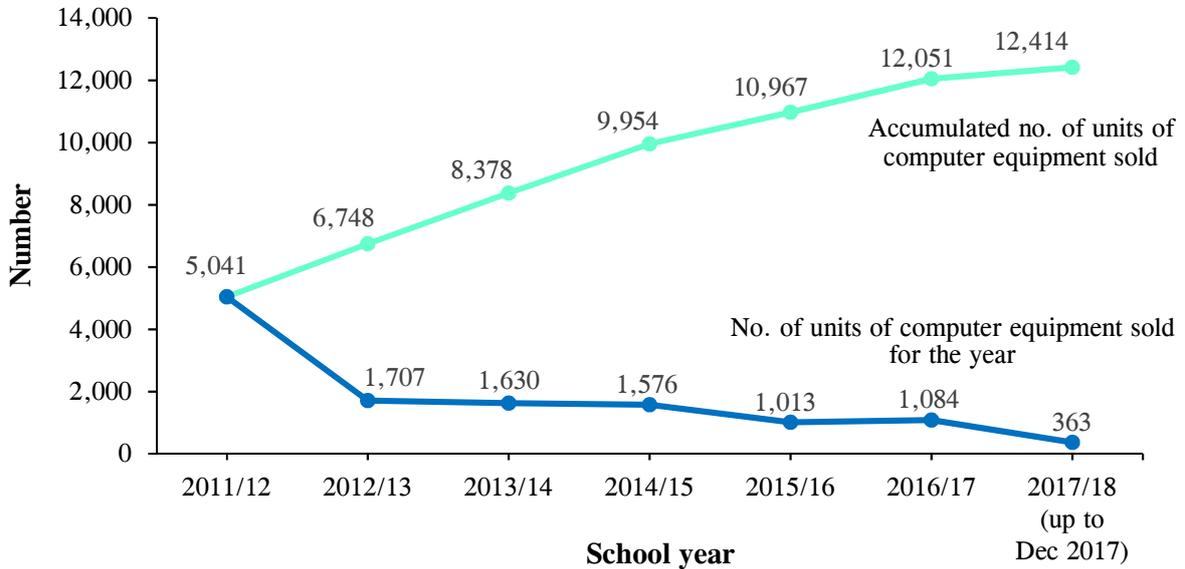
Remarks: *The OGCIIO calculated the utilisation rate for the year by dividing the number of families served in the year by the number of enrolled families as at year end.*

Small number of students acquired computer equipment and Internet service via ILSP

2.15 Of the \$220 million ILSP budget, \$120 million (i.e. \$84 million + \$36 million) was for the cost of facilitating low-income families to acquire computer equipment and Internet access services at affordable prices. The OGCIIO estimated that 522,000 students would use the computer equipment purchase service. However, it turned out that the number of students who utilised these services was much lower than the expectation (see Figures 3 and 4 and explanation in para. 2.12).

Figure 3

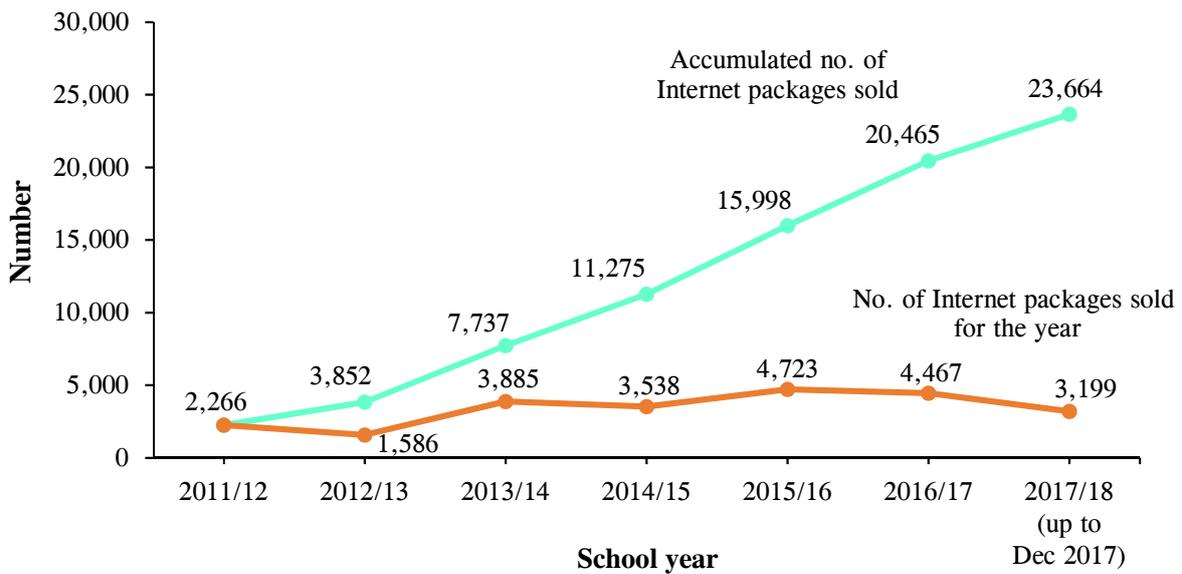
**Number of units of computer equipment sold
(School years 2011/12 to 2017/18)**



Source: Audit analysis of OGCIO records

Figure 4

**Number of Internet packages sold
(School years 2011/12 to 2017/18)**



Source: Audit analysis of OGCIO records

High cost of sourcing computer equipment

2.16 In the 2015 Review, the OGCIO examined the unit cost for individual type of services for the period 2011-12 to 2014-15 and found that:

- (a) except for the sale of computer equipment service, the average costs per service unit of the other four services decreased gradually. The decrease was attributed to the high initial set up costs of operations, the efficiency gains from economy of scale with increasing service adoption and the efforts of the implementers in streamlining their service delivery;
- (b) with the number of units of computer equipment sold decreased from 5,041 in 2011/12 to 1,576 in 2014/15, the average unit cost for providing computer equipment increased by 43% from \$1,164 in 2011-12 to \$1,670 in 2014-15 (see Table 3). The unit cost for providing computer equipment was the cost incurred by the service provider in facilitating the service recipient to buy computer equipment at a lower price;
- (c) the high unit cost for providing computer equipment was due to the high facilitation cost associated with the sourcing of computer equipment. The high facilitation cost covered pre-sale arrangement, order processing, delivery co-ordination, payment handling (including instalment payment for hire-purchase cases), follow-up on delinquent payments in case of doubtful and bad debts, supplier liaison, etc; and
- (d) in 2014-15, the average saving to service recipients from product discounts was \$470 (Note 12). Comparing the facilitation cost of \$1,670 per unit of computer equipment purchased with the average saving of \$470 to service recipients from the product discounts, the facilitation cost appeared high.

Note 12: *This was the average saving from product discounts of desktop computer (\$853), notebook computer (\$441), tablet computer (\$610), monitor (\$197) and printer (\$255).*

Table 3

Average costs per service unit
(2011-12 to 2014-15)

Service category	Average cost				Change from 2011-12 to 2014-15 (\$)
	2011-12 (\$)	2012-13 (\$)	2013-14 (\$)	2014-15 (\$)	
Computer equipment	1,164	1,634	1,890	1,670	+506 (+43%)
Internet service	1,829	2,314	1,230	774	-1,055 (-58%)
Training services to students and parents	766	505	498	287	-479 (-63%)
Technical and user support services	2,343	1,631	402	253	-2,090 (-89%)
Social support services	715	375	210	256	-459 (-64%)
Overall	1,071	684	500	323	-748 (-70%)

Source: *Audit analysis of OGCIIO records*

2.17 After the 2015 Review, the OGCIIO allowed the implementers to source donated or recycled computers for the eligible families for free in addition to facilitating them to acquire new computer equipment. The number of units of computer equipment sold further dropped from 1,576 in 2014/15 to 1,084 in 2016/17.

Targets not set for evaluating the achievements of some programme objectives

2.18 In seeking funding for the ILSP in May 2010, the OGCIIO informed the FC that, apart from the cost of Internet access and computers, the limited knowledge of parents from low-income families about the Internet and the lack of technical support for them also inhibited their children’s learning through the Internet. The parents were also concerned about the possible negative effects of the Internet such as Internet addiction. Suitable guidance should be provided to them and their children on the

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safe and healthy use of the Internet. Therefore, apart from helping these families to acquire suitable computers at affordable prices and economical Internet access, the ILSP also provided training and technical support to students and their parents with an aim to enhance their technical know-how and knowledge about the safe and healthy use of the Internet.

2.19 Audit noted that, apart from the performance target on access to Internet at home among students from low-income families, the OGCIO did not set any performance targets for measuring the effectiveness of the ILSP on enhancing the technical know-how of parents and students from low-income families and their knowledge about the safe and healthy use of the Internet. Without setting such target, the OGCIO could not measure whether and to what extent the objectives on enhancing the technical know-how of parents and students from low-income families and their knowledge about the safe and healthy use of the Internet had been achieved.

Need to draw lessons from the implementation of ILSP

2.20 The ILSP has been implemented for about six and a half years since its launch in July 2011. It was stipulated in the best practice guide entitled “*A User Guide to Post Implementation Reviews*” published by the Efficiency Unit in February 2009 that a post-implementation review would help bureaux/departments 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. In view of the audit observations in paragraphs 2.11 to 2.19, Audit considers that the OGCIO needs to carry out a post-implementation review to evaluate the extent to which the ILSP has enhanced digital inclusion and draw lessons from its implementation.

Audit recommendations

2.21 **Audit has recommended that the Government Chief Information Officer should:**

- (a) **for similar support programmes in the future, regularly monitor the unit cost for the services provided and ensure that the services are delivered in a cost-effective manner;**

- (b) **for similar support programmes in the future, set targets for evaluating the achievements of programme objectives and regularly evaluate the achievements against the targets set; and**
- (c) **carry out a post-implementation review to evaluate the extent to which the ILSP had enhanced digital inclusion and draw lessons from its implementation.**

Response from the Government

2.22 The Government Chief Information Officer agrees with the audit recommendations. He has said that the OGCIIO will carry out a post-implementation review of the ILSP. For similar support programmes in future, the OGCIIO will regularly monitor the unit cost for the services, set suitable targets and evaluate achievements against the targets.

ICT adoption by the elderly

2.23 To encourage the elderly to use ICT more actively in their daily life with a view to expanding their social horizon, integrating with the society and enhancing their quality of life, the OGCIIO implemented the following initiatives:

- (a) engaging an NGO to develop a thematic portal, “eElderly”, in June 2010 to provide the elderly with one-stop access to information surrounding their needs and interests (Note 13);
- (b) providing funding support of \$834,000 to three social service organisations in 2012 to implement projects to improve elder’s access, knowledge and receptiveness on the use of ICT; and
- (c) organising three rounds of ICT Outreach Programmes for Elderly through NGOs in 2013-14, 2015-16 and 2017-18 totalling \$3.44 million to serve as a platform to let various elderly groups appreciate how ICT could enhance

Note 13: *The NGO has maintained the operation of the portal on a self-financing basis since May 2013.*

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their quality of life. The first and second rounds of programmes were completed in December 2014 and August 2016 respectively. The third round of programmes commenced in November 2017 with an implementation period of 12 months.

Need to monitor the ICT adoption by the elderly

2.24 In May 2012, the OGCI0 reported to the LegCo Panel on Information Technology and Broadcasting that the OGCI0 aimed to increase elderly's computer usage rate to 25% and Internet usage rate to 23% by 2014. Based on the Thematic Household Surveys conducted by the Census and Statistics Department, in 2014, the elderly's Internet usage rate was 24%, which exceeded the target of 23%. However, the elderly's computer usage rate was only 19.8%, which fell short of the target of 25%. In 2015, both targets were achieved (see Table 4).

Table 4

**Internet usage rates and computer usage rates of elderly
(2014 and 2015)**

Year	Internet usage rate		Computer usage rate	
	Target (%)	Actual (Note 1) (%)	Target (%)	Actual (Note 2) (%)
2014	23% by 2014	24.0%	25% by 2014	19.8%
2015		35.9%		25.8%

Source: LegCo papers and Thematic Household Surveys conducted by the Census and Statistics Department

Note 1: The Internet usage rates of 24.0% and 35.9% in 2014 and 2015 were the percentage of persons aged 65 or above having used the Internet in the 12 months before the time of surveys conducted by the Census and Statistics Department during June to August 2014 and May to August 2015 respectively.

Note 2: The computer usage rates of 19.8% and 25.8% in 2014 and 2015 were the percentage of persons aged 65 or above having used the computer in the 12 months before the time of surveys conducted by the Census and Statistics Department during June to August 2014 and May to August 2015 respectively.

2.25 In the meeting of LegCo Panel on Information Technology and Broadcasting held in May 2014, the Government Chief Information Officer said that the target was that 50% of the elderly should have used the Internet, smartphones or tablet computers in three years' time. Audit analysed the percentage of the elderly who had used the Internet, smartphone or computer for the period June 2012 to September 2017 and noted that in 2017, the elderly's Internet usage rate and rate of having smartphone were 51.2% and 52.1% respectively. However, the elderly's computer usage rate was 31.1%, which was below 50% (see Table 5).

Table 5

**ICT adoption by the elderly
(June 2012 to September 2017)**

Survey period	Internet usage rate (Note 1)	Having smartphone rate (Note 2)	Computer usage rate (Note 3)
June to August 2012	13.1%	6.9%	13.7%
January to April 2013	18.0%	10.2%	18.4%
June to August 2014	24.0%	24.3%	19.8%
May to August 2015	35.9%	35.4%	25.8%
April to July 2016	44.0%	42.9%	31.8%
June to September 2017	51.2%	52.1%	31.1%

Source: Thematic Household Surveys conducted by the Census and Statistics Department

Note 1: Internet usage rate was the percentage of persons aged 65 or above having used the Internet in the 12 months before the time of survey.

Note 2: For survey period in 2012, 2013, 2016 and 2017, having smartphone rate represented the percentage of persons aged 65 or above who had smartphone at the time of survey. For survey period in 2014 and 2015, having smartphone rate represented the percentage of persons aged 65 or above who had smartphone in the 12 months before the time of survey.

Note 3: Computer usage rate was the percentage of persons aged 65 or above having used the computer in the 12 months before the time of survey.

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2.26 With the improving education level of the elderly, the OGCIO needs to review the 50% target and consider setting a more appropriate and challenging longer-term target.

Audit recommendations

2.27 **Audit has recommended that the Government Chief Information Officer should:**

- (a) **take measures to monitor the ICT adoption by the elderly; and**
- (b) **review the 50% target and consider setting a more appropriate and challenging longer-term target.**

Response from the Government

2.28 The Government Chief Information Officer agrees with the audit recommendations. He has said that the OGCIO will:

- (a) monitor the progress of ICT adoption by the elderly; and
- (b) review if the target adoption rate of 50% can be set higher.

Digital inclusion mobile apps

2.29 To harness Hong Kong's strength in mobile technologies to achieve social inclusion, the OGCIO has launched three rounds of Funding Scheme for Digital Inclusion Mobile Apps since 2012. The objective of the Scheme is to provide funding support for non-profit-making social service organisations to develop mobile apps that cater for the needs of underprivileged groups for free use. These mobile apps aim to enhance the quality of life of the underprivileged groups and help them integrate into the community. Up to December 2017, 17 mobile apps which catered for the special needs of different target groups (such as persons with visual or hearing impairment, the elderly, children with learning difficulties or Down Syndrome, and ethnic minorities) had been developed and launched. The total funding for the development

of these 17 mobile apps amounted to \$6 million (ranging from about \$174,000 to \$482,000 each).

Lukewarm response from target organisations

2.30 For each round of the Funding Scheme for Digital Inclusion Mobile Apps (launched in October 2012, January 2014 and November 2015), all non-profit-making social service organisations, non-profit-making IT professional bodies and trade associations incorporated or registered under the laws of Hong Kong are eligible to submit proposals. In each round, the OGCIIO organised a briefing session, released details through press release and the OGCIIO website, and sent letters to these organisations to invite them to submit proposals. Audit analysed the number of proposals received in each round of invitation (see Table 6) and noted that the number of proposals received decreased from 45 in 2012 to 15 in 2015. Moreover, the number of organisations which had submitted proposals decreased from 40 (9% of 445 invitations) in 2012 to 14 (3% of 522 invitations) in 2015.

Table 6**Response rates for three rounds of
Funding Scheme for Digital Inclusion Mobile Apps
(October 2012 to December 2015)**

Round	No. of organisations invited (a)	No. of organisations with proposals submitted (b)	No. of proposals received (c)	Response rate (d) = (b) ÷ (a) × 100%
First (October to December 2012)	445	40	45	9%
Second (January to March 2014)	504	37	41	7%
Third (November to December 2015)	522	14	15	3%

Source: Audit analysis of OGCIO records

Remarks: Each organisation may submit more than one proposal. Therefore, the number of organisations with proposals submitted was smaller than the number of proposals received.

Small number of downloads for some mobile apps

2.31 The OGCIO requires the grantees to set and meet target number of downloads within the first 12 months after the launch of the digital inclusion mobile apps. Audit examination of the number of downloads of the 12 digital inclusion mobile apps funded by the OGCIO in the first and second rounds (Note 14) revealed

Note 14: *All the five mobile apps developed under the third round were launched in 2017. Up to 31 December 2017, they had been launched for a period of less than 12 months.*

that 8 (67%) of them failed to achieve the target number of downloads within the first 12 months after the launch of the mobile apps (see Table 7).

Table 7

Digital inclusion mobile apps that failed to achieve the target number of downloads within the first 12 months after their launch (First and second rounds)

Mobile apps	Amount of funding (a) (\$)	Target no. of downloads (b)	Actual no. of downloads in the first 12 months (c)	Actual no. of downloads in the first 12 months as percentage of target (d) = (c) ÷ (b) × 100% (%)	Time taken to reach the target (months)
A	178,000	3,000	1,712	57%	21
B	393,000	1,000	819	82%	13
C	285,000	5,000	2,235	45%	Not reached (Note)
D	377,000	8,000	4,339	54%	24
E	338,000	2,000	1,277	64%	14
F	433,000	1,000	898	90%	16
G	367,000	10,000	7,613	76%	20
H	461,000	2,000	1,788	89%	14

Source: Audit analysis of OGCI records

Note: This mobile app was taken off-shelf in August 2016. From the date of its launch to August 2016, the total number of downloads was 4,043, which had not reached the target of 5,000 downloads.

Need to draw lessons from the implementation of the Funding Scheme

2.32 In May 2017, the ITB launched the Innovation and Technology Fund for Better Living to finance projects that make use of innovation and technology to improve people's daily lives. The deliverables of the projects can be in the form of mobile app, product, tool, service, software or any other forms. The Funding Scheme for Digital Inclusion Mobile Apps was subsumed under the Fund which would continue to support the development of digital inclusion mobile apps. Notwithstanding this, Audit considers that the OGCIO needs to ascertain the reasons for the low response rates of organisations for submission of proposals for the Funding Scheme for Digital Inclusion Mobile Apps and the low number of downloads of some mobile apps with a view to drawing lessons from the implementation of the Scheme for similar schemes launched in the future.

Audit recommendations

2.33 **Audit has recommended that the Government Chief Information Officer should:**

- (a) **ascertain the reasons for the low response rates of organisations for submission of proposals for Funding Scheme for Digital Inclusion Mobile Apps and the low number of downloads of some mobile apps; and**
- (b) **draw lessons from the implementation of the Funding Scheme for Digital Inclusion Mobile Apps for similar schemes launched in the future.**

Response from the Government

2.34 The Government Chief Information Officer agrees with the audit recommendations. He has said that the OGCIO will conduct a post-implementation review of the Funding Scheme for Digital Inclusion Mobile Apps and draw lessons for similar schemes in future.

Web/Mobile App Accessibility Campaign

2.35 Web/mobile app accessibility is to enhance the availability of the contents of websites and mobile apps for all, including not only persons with disabilities but also persons with specific difficulties such as the elderly and persons beset by colour-blindness, cognitive and physical issues such as dyslexia, epilepsy, etc. The main accessible features for people with different disabilities include sufficient contrast for foreground and background colours, and captions or transcript for audio/video contents. An accessible website or mobile app not only helps deliver messages wider across, but also improves the general usability for all users. It also helps build a caring and inclusive society. The OGCIO launched the Web/Mobile App Accessibility Campaign in October 2011 to promote the adoption of accessible design in websites and mobile apps.

2.36 In response to Audit's enquiry, the OGCIO informed Audit in February 2018 that it had taken measures to promote the Web/Mobile App Accessibility Campaign, including:

- (a) organising seminars and workshops to foster the awareness on web/mobile app accessibility;
- (b) establishing a thematic portal to provide resources on web/mobile app accessibility such as guidelines, technical references and best practices;
- (c) publicising the benefits of web/mobile app accessibility to tertiary education institutions; and
- (d) organising the Web Accessibility Recognition Scheme to encourage local public and private organisations to adopt web/mobile app accessibility designs.

Need to improve government mobile app accessibility

2.37 According to the OGCI0, all government websites have adopted the Level AA standard of the Web Content Accessibility Guidelines Version 2.0 (Note 15). In 2014, in view of the growing popularity of mobile apps, the OGCI0 compiled a handbook on mobile app accessibility for reference by application developers. One of the strategies adopted by the OGCI0 to drive the adoption of web accessibility designs in public and private websites is through government leadership. The OGCI0 formulated a set of Baseline Accessibility Criteria for Government Mobile App for government bureaux/departments to comply with. All government mobile apps developed on or after 1 December 2014 should be made accessible and conform to all the baseline accessibility criteria, e.g. providing text resize function and sufficient colour contrast. According to the survey conducted by the OGCI0 in October 2017:

- (a) one (4%) of the 23 mobile apps developed on or after 1 December 2014 did not conform to the baseline accessibility criteria; and
- (b) 58 (65%) of the 89 mobile apps developed before 1 December 2014 did not conform to the baseline accessibility criteria.

2.38 Audit considers that the OGCI0 needs to ascertain the difficulties for government bureaux/departments to conform to the baseline accessibility criteria and take further measures to encourage and facilitate government bureaux/departments to conform to the criteria.

Lukewarm response to Web Accessibility Recognition Scheme

2.39 To encourage and incentivise the wider adoption of web/mobile app accessibility in non-government websites/mobile apps, the OGCI0 and the Equal Opportunities Commission have jointly organised four rounds of Web Accessibility Recognition Scheme since 2013. The Scheme aims to show appreciation to local enterprises and organisations which have made their websites and mobile apps

Note 15: *Web Content Accessibility Guidelines Version 2.0 is a set of international guidelines which defines how to make web content more accessible to persons with disability. Under the Guidelines, three levels of conformance are defined: A (lowest), AA and AAA (highest).*

accessible to everyone, particularly persons with disabilities. Under the Scheme, free assessment and advisory services are provided to participating organisations to help them enhance their websites and mobile apps up to the required accessibility standards.

2.40 In each round of the Scheme, the OGCIO invited local enterprises and organisations to submit applications. Audit analysed the response rates of local enterprises/organisations for submission of applications in each round of the Scheme held in the period 2013 to 2016 and noted that the response rates ranged from 7.8% to 13% (see Table 8).

Table 8

Response rates of local enterprises/organisations for submission of applications for four rounds of Web Accessibility Recognition Scheme (2013 to 2016)

Round	Year	No. of local enterprises/organisations		Response rate (c) = (b) ÷ (a) × 100%
		Invited (a)	Submitted applications (b)	
First	2013	854	97	11.4%
Second	2014	1,167	140	12.0%
Third	2015	1,317	171 (Note 1)	13.0%
Fourth (Note 2)	2016	2,373	186	7.8%

Source: Audit analysis of OGCIO records

Note 1: Seven applications were received from local enterprises/organisations not invited.

Note 2: In the fourth round, the OGCIO invited primary schools and secondary schools to submit applications. Among the 2,373 local enterprises/organisations invited, 939 were primary schools and secondary schools. Nine of the 186 applications were received from them.

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2.41 In the four rounds of the Scheme, 62 to 168 local enterprises/organisations and 70 to 239 websites were awarded in the Web Accessibility Recognition Scheme (see Table 9). The low response rate might reflect the fact that only a small number of local enterprises/organisations had adopted web/mobile apps accessibility designs. In February 2016, members of the LegCo Panel on Information Technology and Broadcasting expressed disappointment on the limited number of websites adopting web accessibility designs. The OGCIO needs to ascertain the reasons for the low response rates of the Scheme and take measures to further encourage more local enterprises/organisations to adopt web/mobile apps accessibility designs.

Table 9

Number of local enterprises/organisations, websites and mobile apps awarded in the four rounds of Web Accessibility Recognition Scheme (2013 to 2016)

Round	Year	No. of local enterprises/organisations awarded	No. of websites awarded	No. of mobile apps awarded
First	2013	62	70	N.A. (Note)
Second	2014	110	136	31
Third	2015	146	199	45
Fourth	2016	168	239	57

Source: OGCIO records

Note: The first round did not include the assessment of mobile apps.

Remarks: Each local enterprise/organisation may submit more than one website/mobile app for assessment. Therefore, the number of local enterprises/organisations awarded was smaller than the sum of the number of websites awarded and the number of mobile apps awarded.

Audit recommendations

2.42 **Audit has *recommended* that the Government Chief Information Officer should:**

- (a) **ascertain the difficulties for government bureaux/departments to conform to the baseline accessibility criteria and take further measures to encourage and facilitate them to conform to the criteria;**
- (b) **ascertain the reasons for the low response rates of the Web Accessibility Recognition Scheme; and**
- (c) **take measures to further encourage more local enterprises/organisations to adopt web/mobile apps accessibility designs.**

Response from the Government

2.43 The Government Chief Information Officer agrees with the audit recommendations. He has said that the OGCIO will strengthen the promotion and adoption of web accessibility, and issue a circular to require government bureaux/departments to conform to the baseline accessibility criteria for all government mobile apps.

PART 3: FREE PUBLIC WI-FI SERVICES

3.1 This PART examines the provision of free public Wi-Fi services, focusing on the following areas:

- (a) GovWiFi services (paras. 3.2 to 3.19);
- (b) Wi-Fi.HK brand (paras. 3.20 to 3.29);
- (c) Wi-Fi services under PPC (paras. 3.30 to 3.37); and
- (d) subsidy scheme for providing free public Wi-Fi services in study rooms and youth service centres (paras. 3.38 to 3.43).

GovWiFi services

3.2 Before 2007, there was no free public Wi-Fi services provided by the Government. The FC approved \$217.6 million in 2007 and a supplementary provision of \$68 million in 2011 for the provision of the GovWiFi services for a total of 10 years from December 2007 to December 2017 (under two 5-year outsourcing contracts). The objective was to develop Hong Kong into a digital society with ubiquitous access to information, applications and services on the Internet. The GovWiFi services provided the public with free Wi-Fi services on selected government premises. In December 2007, the Government awarded through open tender a 5-year contract for the installation of Wi-Fi facilities, provision of Wi-Fi services and the ongoing operations at a contract sum of \$110.7 million. In March 2012, the Government and the contractor signed a service contract in the sum of \$97.7 million for the provision of Wi-Fi services for another 5 years.

3.3 In January 2013, the OGCIO established the Maintenance Board of the Government Wi-Fi Programme (GovWiFi Maintenance Board) to monitor free Wi-Fi service quality, the performance of the contractor, and the cost effectiveness of the GovWiFi services. The terms of reference of the GovWiFi Maintenance Board is at Appendix B. The Board is chaired by an Assistant Government Chief Information Officer, with members from the OGCIO, the Office of the Communications Authority

and the government bureaux/departments with ten or more GovWiFi venues (Note 16).

3.4 In March 2013, Audit completed a review of the provision of the GovWiFi services (2013 Audit review). The results were included in Chapter 8 of the Director of Audit's Report No. 60 of March 2013. In the 2013 Audit review, Audit identified room for improvement in the monitoring of GovWiFi contracts, and the quality, security and promotion of the GovWiFi services.

3.5 In May 2016, the OGCIO reported to the FC that for government venues (such as public libraries, community centres, government clinics and country park visitor centres) that were of low commercial value for the commercial service providers to provide free Wi-Fi services but with keen public demand for free Wi-Fi services, the Government would continue to fund the provision of free Wi-Fi services at these venues. In November 2017, through an open tender exercise, the Government awarded the third contract to the same contractor of the first two contracts for a contract sum of \$119.8 million.

Slow connection speed at some GovWiFi venues

3.6 According to the service contract signed in March 2012, the bandwidth requirement for each venue would be set by the OGCIO with an aim of supporting an average bandwidth of at least 2 Megabits per second (Mbps) downstream and 1 Mbps upstream per user. As a follow-up action for the 2013 Audit review, the OGCIO informed Audit in January 2014 that it completed a full round of sample checks in all 400 GovWiFi venues from July to August 2013 as a one-off exercise to ensure the service level of all the venues. Since 2014, the OGCIO has conducted annual service checks covering all venues with the GovWiFi services launched for over one year.

Note 16: *As at 31 December 2017, there were eight bureaux/departments which had ten or more GovWiFi venues, namely the Leisure and Cultural Services Department, Food and Environmental Hygiene Department, Home Affairs Department, Immigration Department, Labour Department, Government Property Agency, Judiciary and Department of Health.*

Free public Wi-Fi services

3.7 In the 2016 Policy Address, the Government pledged to progressively double the existing speed of GovWiFi connection to 3 Mbps to 4 Mbps per user. In January 2016, the OGCIO agreed with the contractor to raise the per-user bandwidth limit with a view that the actual usage could achieve a connection speed of 3 Mbps to 4 Mbps. In 2017, the OGCIO conducted annual service check of the GovWiFi services covering 3,087 hotspots at 605 venues. Based on the results of the OGCIO's annual service check in 2017, Audit noted that the download speed of 1,171 hotspots at 366 venues was lower than 3 Mbps, and no Wi-Fi connection could be established at 10 hotspots at 7 venues (see Table 10).

Table 10

**Results of annual service check of GovWiFi services
(2017)**

Download speed	No. of hotspots	No. of venues involved
No Wi-Fi connection	10 (0.3%)	7
< 3 Mbps	1,171 (38.0%)	366
3 Mbps to < 4 Mbps	862 (27.9%)	366
≥ 4 Mbps	1,044 (33.8%)	213
Total	3,087 (100.0%)	605 (Note)

Source: Audit analysis of OGCIO records

Note: The numbers of venues involved do not add up because each GovWiFi venue had more than one hotspot, and different download speeds were recorded at different hotspots of the same venue.

3.8 Audit noted that, of the 1,171 hotspots at 366 venues where download speed was lower than 3 Mbps:

- (a) 14 venues (involving 21 hotspots) were public libraries, which were popular GovWiFi venues; and

- (b) 9 venues (e.g. Hong Kong Park, Victoria Park and Statue Square Gardens — Note 17) (involving 106 hotspots) were popular tourist spots or parks with relatively high usage of the GovWiFi services (more than 100 users a day).

Audit also noted that of the 366 venues, 23 were venues with bandwidth limitation where fibre link upgrade was not feasible (e.g. sites on outlying islands or with geographic issue). At the GovWiFi Maintenance Board meeting held in February 2017, the contractor advised the Board that the installation of 4G mobile router could be a technical solution to solve the problem of bandwidth limitation. However, the OGCIO has not followed up the suggestion.

Low usage of GovWiFi services at some venues

3.9 The OGCIO adopted the following criteria in selecting premises for the GovWiFi services:

- (a) indoor venues with at least 300 daily visitors;
- (b) joint-user buildings with at least 1,000 daily visitors;
- (c) outdoor venues with at least 5,000 daily visitors;
- (d) major parks (e.g. Kowloon Park and Shatin Park); and
- (e) other considerations including promoting Hong Kong's image, or facilitating access to e-government content and services.

In estimating the usage of the GovWiFi services, the OGCIO assumed that on a daily basis, 5% of the visitors to indoor venues and 3% of the visitors to joint-user buildings and outdoor venues would use the GovWiFi services.

Note 17: *The other six venues were: Repulse Bay Beach, Quarry Bay Park, Hong Kong Cultural Centre Piazza cum Tsim Sha Tsui Promenade, Lai Chi Kok Park, Kowloon Park and City Art Square.*

Free public Wi-Fi services

3.10 As at 31 December 2017, there were 616 GovWiFi venues. Audit examined the OGCI0's record on the usage of the GovWiFi services at the 616 venues in the period from 2014 to 2017 (Note 18) and noted that the usage at some venues was low (see Table 11). For 196 (32%) of the 616 venues, the average daily number of users was less than 15 (i.e. 300 daily visitors \times 5%). From September 2012 to December 2017, the number of GovWiFi venues had increased from 395 to 616. The percentage of GovWiFi venues with average daily number of users below 15 also increased from 27% (108 of 395 venues) for the period from September 2009 to September 2012 (reported in the 2013 Audit review) to 32% for the period from 2014 to 2017.

Table 11

**Average daily number of users of GovWiFi services
at government venues
(2014 to 2017)**

Average daily number of users	No. of venues
0 to < 15	196 (32%)
15 to < 50	194 (31%)
50 to < 100	124 (20%)
100 to < 500	96 (16%)
500 and above	6 (1%)
Total	616 (100%)

Source: Audit analysis of OGCI0 records

Of the 23 venues with bandwidth limitation (see para. 3.8), 16 were venues with average daily number of users below 15. According to the OGCI0, continuing the GovWiFi services may be justified for some venues where the average number of users was not high. For example, for community halls, there was high demand when the hall was rented out, while usage was low on other days. The OGCI0 needs to take measures to boost the usage of the GovWiFi services including promoting the availability of the services and improving the services. The OGCI0 should also

Note 18: *For venues where the GovWiFi services were launched after 1 January 2014, Audit examined the usage of the GovWiFi services from the service launch dates to 31 December 2017.*

consider discontinuing the GovWiFi services at some of the venues with low usage, especially the 16 venues with bandwidth limitation.

Need to improve the display of GovWiFi signages on government venues

3.11 To indicate the availability of the GovWiFi services, the OGCIO issued guidelines to the departments who manage the venues and requested them to post GovWiFi signages (see Figure 5) near hotspots at the venues and to periodically visit the venues to ensure that signages are properly displayed.

Figure 5

GovWiFi signage



Source: OGCIO records

3.12 According to the procedures for the annual service check promulgated by the OGCIO, the locations of the signages of the GovWiFi services should be recorded in the annual service check. Audit examined the record of the annual service check conducted in 2017 and found that locations of the signages were not recorded as required.

3.13 From January to March 2018, Audit visited 20 GovWiFi venues to ascertain whether signages were put up. Audit found that at 19 of the 20 venues, the display of signage needed improvement:

- (a) at 6 (30%) venues, no signages were put up at any of the hotspots; and

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- (b) at 13 (65%) venues, signages were only put up at some hotspots.

3.14 The OGCIO needs to ensure that signages indicating the availability of the GovWiFi services are put up at all hotspots. The OGCIO also needs to take measures to ensure that the locations of the signages are recorded during annual service checks.

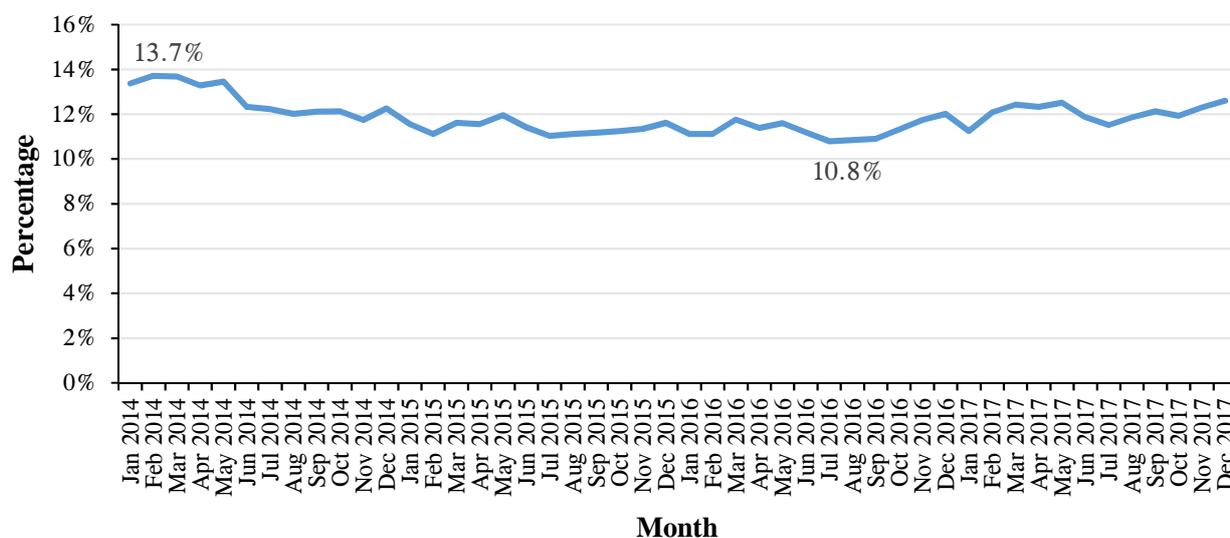
Need to explicitly alert users to the limitation of encrypted channel

3.15 According to the service contract for the provision of the GovWiFi services, the contractor is required to provide both encrypted and unencrypted services. When users use the unencrypted channel, their personal information can be hijacked without the users' knowledge. Therefore, the OGCIO advises users of the GovWiFi services to use encrypted channel whenever possible for security and privacy protection reasons.

3.16 Audit examination of the GovWiFi service monthly usage statistics in the period from 2014 to 2017 revealed that the usage of encrypted channel ranged from 10.8% to 13.7% of the total number of connections (see Figure 6).

Figure 6

**Monthly usage statistics of encrypted channel
(2014 to 2017)**



Source: Audit analysis of OGCIO records

3.17 According to the OGCIIO, the encrypted channel can provide encryption between the computer/mobile device and the hotspot. However, the data are still unencrypted when transmitted over the Internet and the personal information of the users can be hijacked without their knowledge. The use of encrypted channel cannot provide sufficient network security protection to users against hacking as it cannot protect the data during transmission across the Internet. Users are encouraged to use more secured means of communication, such as virtual private network and secure sockets layer. However, Audit noted that in the security tips and the usage guide provided on the thematic website on the GovWiFi services, users were not explicitly alerted to the limitation of encrypted channel. The security tips of the OGCIIO reads, *“When using public Wi-Fi networks to access the Internet, you should always be aware of the security implications.”* The usage guide reads, *“For security and privacy protection, you are advised to use the encrypted channel whenever possible if your mobile device is not equipped with the required encrypted function, you can use the unencrypted channel. But, in such a case, you are advised to transmit non-sensitive information or perform web browsing only as transmission in this mode is unencrypted and therefore unprotected.”*

Audit recommendations

3.18 **Audit has recommended that the Government Chief Information Officer should:**

- (a) **monitor the performance and connection speed of the GovWiFi services and take measures to improve the connectivity and connection speed at GovWiFi venues with connection problem and slow connection speed;**
- (b) **consider increasing the Wi-Fi capacity at popular tourist spots or parks with relatively high usage of the GovWiFi services;**
- (c) **adopt alternative technical solutions to enhance the connection speed at GovWiFi venues with geographic constraints for bandwidth upgrade;**
- (d) **monitor the usage at each venue from time to time and consider relocating Wi-Fi hotspots when necessary;**
- (e) **ensure that signages indicating the availability of the GovWiFi services are properly put up;**

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- (f) **take measures to ensure that the locations of signages are recorded during annual service checks; and**
- (g) **explicitly alert users of the GovWiFi services to the limitation of encrypted channel, and encourage them to use more secured means of communication to transmit sensitive information, such as virtual private network and secure sockets layer, if necessary.**

Response from the Government

3.19 The Government Chief Information Officer agrees with the audit recommendations. He has said that:

- (a) the OGCIO will progressively increase the Wi-Fi capacity at tourist spots and venues with relatively high usage; and
- (b) regarding the use of 4.5G mobile service to support Wi-Fi services at outdoor venues as an alternative mode of service delivery, a trial is being conducted at three sites, i.e. Tung Chung North Park, Jordan Valley Park and Central Kwai Chung Park.

Wi-Fi.HK brand

3.20 Wi-Fi.HK (see Figure 7) is the common branding launched in August 2014 through collaboration of the Government with a number of public and private organisations for providing free Wi-Fi services in Hong Kong. Information on location of the venues offering the Wi-Fi.HK services are available at the Wi-Fi.HK website and the Wi-Fi.HK mobile app. Participating organisations are required to meet a set of eligibility criteria, such as provision of a minimum of 3 Mbps Internet bandwidth, provision of a minimum of 30-minute free service usage per day during venue opening hours, no requirement for registration to use the free service, and provision of service support via hotline or email.

Figure 7

Logo of Wi-Fi.HK



Source: OGCIO records

Information on the location of Wi-Fi.HK venues not always accurate and no Wi-Fi connections at some Wi-Fi.HK venues

3.21 Since 2015, the OGCIO has commissioned a consultant to conduct sample service checks at Wi-Fi.HK venues. Service checks were conducted annually in 2015 and 2016, and quarterly in 2017 (up to June). The sample service checks included the correctness of the venue locations provided by the Wi-Fi.HK participating organisations and the connection status of the Wi-Fi.HK services.

3.22 Audit examined the results of the sample service checks conducted in the period from 2015 to 2017 (up to June). Audit noted that Wi-Fi connections could not be established at some Wi-Fi.HK venues (see Table 12). The percentage of Wi-Fi.HK venues where Wi-Fi connections could not be established increased from 5% (9 of 165 venues checked) in 2015 to 13% (37 of 284 venues checked) in 2017 (up to June). Reasons for the failure to establish Wi-Fi connections included:

- (a) the venues were found to have closed down or could not be located;
- (b) the venues could be located but the Wi-Fi.HK services could not be detected;
and
- (c) the Wi-Fi.HK services could be detected but Wi-Fi connections could not be established.

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The OGCIO needs to take measures to ensure that the information on venue locations provided by the Wi-Fi.HK participating organisations is correct and the Wi-Fi.HK services are available at all Wi-Fi.HK venues.

Table 12

**Results of Wi-Fi.HK service checks
(2015 to 2017)**

Wi-Fi connections of the venues checked	No. of venues checked		
	2015	2016	2017 (up to June)
Successfully established	156 (95%)	112 (94%)	247 (87%)
Could not be established (Note)	9 (5%)	7 (6%)	37 (13%)
Total	165 (100%)	119 (100%)	284 (100%)

Source: Audit analysis of OGCIO records

Note: The consultant carrying out the service checks was unable to locate the correct venue in 1 of the 9 cases in 2015, and in 10 of the 37 cases in 2017.

Slow progress in expanding the coverage of Wi-Fi.HK services

3.23 In the 2016 Policy Address, the Government pledged to progressively expand the coverage of free Wi-Fi services by doubling the number of Wi-Fi.HK hotspots from 17,000 to 34,000 within three years (i.e. adding 17,000 new hotspots by 2019) to provide such services at all public rental housing estates and public hospitals, markets, parks, sitting-out areas, promenades, tourist spots, public transport interchanges and land boundary control points.

3.24 The progress of expanding the coverage of the Wi-Fi.HK services was slow. As at 31 December 2017:

- (a) the number of Wi-Fi.HK hotspots had increased only by 3,339, from 17,000 to 20,339 (i.e. 20% of the target of 17,000 new hotspots);
- (b) the Wi-Fi.HK services were not yet available at any of the 179 public rental housing estates; and
- (c) the Wi-Fi.HK services were available at only 12 (29%) of the 42 public hospitals.

3.25 Audit also noted that the distribution of Wi-Fi.HK hotspots did not match the preference of the users. According to the Thematic Household Survey conducted by the Census and Statistics Department in 2016, the top 2 most preferred locations for having free public Wi-Fi services were food and beverage venues and store/shopping malls, with 61% and 57% of the respondents selecting them as the most preferred locations respectively. However, as at 31 December 2017, of the 20,339 hotspots where the Wi-Fi.HK services were provided, 10,663 (52%) were located at universities and tertiary institutions. Only 861 (4%) were located at food and beverage venues and 1,071 (5%) were located at stores/shopping malls (see Table 13). According to the OGCIO, some 300 hotspots had been implemented in January and February 2018 in the store/shopping mall category. The number of hotspots of this category increased from 1,071 (5.27% of 20,339 hotspots) as at end of 2017 to 1,387 (6.66% of 20,835 hotspots) in mid-February 2018.

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Table 13

**Wi-Fi.HK hotspots analysed by venue type
(31 December 2017)**

Venue type	No. of organisations	No. of hotspots	No. of venues
University & Tertiary Institution	14	10,663 (52.43%)	91 (2.67%)
Sports, Cultural & Recreational Venue	6	1,688 (8.30%)	366 (10.74%)
Entertainment & Leisure	5	1,157 (5.69%)	172 (5.05%)
Store/Shopping Mall	7	1,071 (5.27%)	435 (12.77%)
Government Building & Office	13 (Note 1)	1,006 (4.95%)	178 (5.23%)
Telephone Booth	1	932 (4.58%)	932 (27.36%)
Food & Beverage	6	861 (4.23%)	272 (7.99%)
Hospital & Clinic	5	676 (3.32%)	149 (4.37%)
Public Transportation	5	548 (2.69%)	20 (0.59%)
Bank	2	414 (2.04%)	128 (3.76%)
Study Room & Youth Service Centre	26	373 (1.83%)	107 (3.14%)
Convenience Store	2	363 (1.79%)	363 (10.66%)
Industrial/Commercial Building	4	316 (1.55%)	43 (1.26%)
Accommodation (Note 2)	1	127 (0.62%)	127 (3.73%)
Government Related Organisation	7	75 (0.37%)	15 (0.44%)
School & Learning Centre	1	62 (0.31%)	5 (0.15%)
Others	2	7 (0.03%)	3 (0.09%)
Overall	78 (Note 3)	20,339 (100.00%)	3,406 (100.00%)

Source: *Audit analysis of OGCI records*

Note 1: *The 13 organisations comprised 11 government departments, 1 commercial organisation and the GovWiFi programme. The OGCI counted the GovWiFi programme as one organisation.*

Note 2: *The accommodation referred to a hotel. The 127 hotspots were located at 127 rooms of the hotel.*

Note 3: *The numbers of organisations do not add up because some organisations (e.g. major Wi-Fi service providers) provide the Wi-Fi.HK services at more than one type of venues.*

Need to step up promotion of Wi-Fi.HK

3.26 According to the funding paper for the Wi-Fi Connected City Programme submitted by the OGCIo to the FC in May 2016, the OGCIo would continue to develop and promote the Wi-Fi.HK brand as a quality public Wi-Fi service. The OGCIo expected more private hospitals, shopping malls and public transport operators would join the Wi-Fi.HK brand in offering free Wi-Fi services. Audit noted that, up to 28 February 2018, the response from the private organisations to join the Wi-Fi.HK brand had been lukewarm. Only 19 private organisations had joined the Wi-Fi.HK brand since May 2016. Furthermore, according to the Thematic Household Survey conducted by the Census and Statistics Department in 2016, 55% of the respondents who had used public Wi-Fi services during the 12 months before the survey were not aware of the Wi-Fi.HK brand. The OGCIo needs to step up its promotion efforts to encourage more private organisations to join the Wi-Fi.HK brand and raise the public awareness of the Wi-Fi.HK brand.

Need to enhance the security of Wi-Fi.HK services

3.27 In the 2016 Policy Address, the Government pledged to enhance the security of the Wi-Fi services provided at government venues. Audit noted that there is room for improvement in the security of the Wi-Fi.HK services. In January 2016, the OGCIo informed the LegCo Panel on Information Technology and Broadcasting that it would enhance the security measures for the Wi-Fi.HK services, by adopting digital server certificate to facilitate Wi-Fi users in verifying the identity of the service providers so as to reduce the risk of connecting to fake Wi-Fi.HK hotspots. According to the OGCIo, the installation of digital server certificate has become a mandatory requirement for joining the Wi-Fi.HK brand since mid-2017. For organisations that joined before mid-2017, the OGCIo had issued letters to them and recommended them to install the certificate. Audit noted that in the Wi-Fi.HK sample service check conducted in 2017, digital server certificate was not found at 82 (33%) of the 247 Wi-Fi.HK venues checked. The OGCIo needs to take measures to encourage participating organisations to install digital server certificates at their Wi-Fi.HK venues as far as possible.

Audit recommendations

3.28 **Audit has recommended that the Government Chief Information Officer should:**

- (a) **take measures to ensure that the information on venue locations provided by the Wi-Fi.HK participating organisations is correct and the Wi-Fi.HK services are available at all Wi-Fi.HK venues;**
- (b) **take action to expedite the progress of expanding the coverage of the Wi-Fi.HK services, taking into account the public preference on the locations of accessing free Wi-Fi services as far as possible;**
- (c) **step up the promotion efforts to encourage more private organisations to join the Wi-Fi.HK brand and raise the public awareness of the Wi-Fi.HK brand; and**
- (d) **take measures to encourage participating organisations that joined the Wi-Fi.HK brand before mid-2017 to install digital server certificates at their Wi-Fi.HK venues as far as possible.**

Response from the Government

3.29 The Government Chief Information Officer agrees with the audit recommendations. He has said that:

- (a) the OGCIO has been soliciting participation of shopping malls and chain restaurants. The coverage of Wi-Fi.HK has also been expanded to new venue types such as banks, hotels and themed-buses;
- (b) the OGCIO has been working with the Hong Kong Wireless Technology Industry Association to promote the Wi-Fi.HK brand. Trademark registration has been obtained from the Intellectual Property Department to enhance the brand value of Wi-Fi.HK; and
- (c) the OGCIO has been taking measures to encourage participating organisations to install digital server certificates.

Wi-Fi services under PPC

3.30 In March 2015, the Government commissioned a consultant to conduct a strategic review of the GovWiFi services and propose the way forward on a sustainable model in the long term. In March 2016, the consultant recommended the Government to open up government venues for the provision of free Wi-Fi services through PPC.

3.31 In May 2016, when seeking funding approval from the FC for the Wi-Fi Connected City Programme, the OGCIO informed the FC that:

- (a) the Government would open up government venues for the private sector to install their equipment and provide free public Wi-Fi services at their own cost through a PPC model;
- (b) the Government planned to fund the one-off setup cost of the basic infrastructure at these locations and would bear the electricity charges (Note 19) for the operation of the Wi-Fi services. The private sector would be allowed to provide their commercial mobile and Wi-Fi services and other information services (Note 20) at these venues;
- (c) a PPC pilot project was planned to provide free Wi-Fi services at over 100 venues across 18 districts in Hong Kong with high patronage such as parks, sitting-out areas, promenades, tourist spots and public transport interchanges. Based on the experience of the pilot project, the OGCIO would formulate the long-term collaboration model and the details for the next implementation stage, including the types and number of government venues to be opened up, geographical distribution of the venues as well as service to be provided. It would also provide opportunities for the private sector to explore the best business arrangements to make the services sustainable. Upon completion of the pilot project, the Government would review the results in six months;

Note 19: *According to the OGCIO, the average annual electricity charge per Wi-Fi hotspot is about \$100.*

Note 20: *Other information services include soft advertisement services and big data analytics services.*

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- (d) it was expected that the mass roll-out of the PPC arrangement would begin from mid-2017, and there would be 7,000 new Wi-Fi.HK hotspots at government venues through PPC within three years; and
- (e) it was estimated that by installing 7,000 hotspots through the PPC model instead of the conventional government-funded model, a saving of \$232 million could be achieved by 2022.

Slow progress in providing Wi-Fi services under the PPC pilot project

3.32 On 20 December 2016, the Government entered into licence agreements with four service providers to provide Wi-Fi services for a service period of five years at 185 government venues. According to the agreements:

- (a) the service providers should install the equipment for provision of Wi-Fi services and permitted value-added services (including soft advertisement services, commercial Wi-Fi services, big data analytics services and mobile services) at the allocated venues within a lead time of three to seven months from the date of the agreements;
- (b) the service providers should commence the provision of the Wi-Fi services within 12 months (i.e. by 19 December 2017), or a period to be agreed by the Government, from the date of the agreements;
- (c) the service providers should deposit \$25,000 per allocated venue with the Government as security for due performance of their obligations under the agreements;
- (d) the deposit shall be forfeited in case of default on the part of the service providers in the performance of any of their obligations under the agreements;
- (e) any forfeiture of the deposit shall be without prejudice to the Government's right to claim any further remedies which it has sustained or may sustain by reason of such default; and

- (f) the Government may terminate the agreements if the service providers fail to duly and punctually perform or comply with any provision of the agreements.

3.33 The progress of the implementation of the PPC pilot project by the service providers was slow. Free Wi-Fi services had been launched at only 12 (6%) of the 185 venues by 19 December 2017 (i.e. the deadline stipulated in the agreements) (see Table 14). Three of the four service providers had not commenced the Wi-Fi services for some or all of the allocated venues by the deadline.

Table 14

**Implementation of free Wi-Fi services
under the PPC pilot project
(19 December 2017)**

Service provider	No. of venues allocated	No. of venues with free Wi-Fi services launched
A	160	0
B	11	5
C	7	0 (Note)
D	7	7
Total	185	12

Source: OGCIO records

Note: For six of the seven venues, free Wi-Fi services were launched on 23 February 2018.

3.34 Audit noted that:

- (a) **Service Provider A.** On 9 October 2017, Service Provider A informed the OGCIO that it could only deliver Wi-Fi services at 4 of its 160 allocated venues by the deadline stipulated in the agreement due to its commercial considerations, and sought advice from the OGCIO on the arrangements for the remaining 156 venues. On 10 October 2017, the OGCIO informed

the Department of Justice that Service Provider A had failed to complete the installation of Wi-Fi equipment at all of its 160 allocated venues within the lead time stipulated in the agreement (i.e. by 19 June 2017), and that the OGCI0 was prepared to allow Service Provider A to provide Wi-Fi services only in respect of 4 of the 160 allocated venues and to withdraw the remaining 156 venues from the agreement by variation of agreement. On 4 December 2017, the OGCI0 wrote to Service Provider A setting out the terms and conditions for varying the agreement to retain 4 of the 160 allocated venues under the original agreement. On 11 December 2017, Service Provider A requested the OGCI0 to extend the deadline for commencing the provision of Wi-Fi services at the 4 allocated venues from 19 December 2017 to 15 March 2018 because extra time was needed for underground cable installation work. On 14 December 2017, the OGCI0 accepted the request to extend the deadline and reminded Service Provider A that no further extension would be given and the Government would proceed to terminate the agreement if Wi-Fi services could not be commenced by 15 March 2018. On 6 January 2018, Service Provider A accepted such variation of agreement. In response to Audit's enquiry, the OGCI0 informed Audit in January 2018 that it would refund the original deposit for the 160 venues to Service Provider A once it had received the new deposit for the 4 venues from Service Provider A. There was no documentary evidence to indicate that the OGCI0 had sought legal advice on protecting the interests of the Government in varying the agreement and extending the deadline;

- (b) ***Service Provider B.*** On 8 December 2017, Service Provider B wrote to the OGCI0 requesting extension of the deadline for commencing the provision of Wi-Fi services at 6 of its 11 allocated venues. On 14 December 2017, the OGCI0 accepted the request to extend the deadline to 30 June 2018. According to the OGCI0, the delay of the implementation was due to unavailability of two venues for installation work and technical difficulties encountered at four venues;
- (c) ***Service Provider C.*** In its proposal for the PPC pilot project submitted to the OGCI0, Service Provider C stated that provision of mobile services would be of the most crucial priority in sustaining the business model of providing free Wi-Fi services at the selected venues. The agreement signed by the service provider included a term that for all venues, mobile services (as one of the value-added services selected by the service provider) must be activated at the same time with free Wi-Fi services. The service provider

had completed the installation of Wi-Fi equipment at all of its seven allocated venues by October 2017. However, as the mobile services at these venues had not yet been activated, free Wi-Fi services at these venues were not launched before the deadline of 19 December 2017. Subsequently, on 23 February 2018, free Wi-Fi services were launched at six of the seven venues. The OGCIO needs to liaise with Service Provider C to expedite the provision of Wi-Fi services for the remaining venue. Audit noted that for all the seven venues allocated to Service Provider C, other service providers had indicated interest in providing Wi-Fi services at the venues without proposing such term on mobile services. No documentary evidence was available showing the reason why the OGCIO allocated these venues to Service Provider C with such a term instead of considering other interested service providers; and

- (d) ***Service Provider D.*** As at the deadline of 19 December 2017, Service Provider D had commenced the Wi-Fi services at all of its seven allocated venues.

3.35 Audit considers that the OGCIO needs to review the slow progress in the implementation of the PPC pilot project and take measures to expedite the provision of Wi-Fi services for the venues allocated to service providers. In view of the results of the pilot project, the OGCIO needs to critically review the target number of free Wi-Fi hotspots to be provided in the full-scale roll-out of the PPC model. For future PPC projects, the OGCIO also needs to critically review the implications of the terms proposed by the service providers before accepting such terms in the agreements.

Audit recommendations

3.36 **Audit has recommended that the Government Chief Information Officer should:**

- (a) **review the slow progress in the implementation of the PPC pilot project and take measures to expedite the provision of Wi-Fi services for the venues allocated to service providers;**
- (b) **critically review the target number of free Wi-Fi hotspots to be provided in the full-scale roll-out of the PPC model;**

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- (c) **review whether the interests of the Government have been adequately protected in respect of the variation of the agreement and/or the extension of deadline made with Service Providers A and B;**
- (d) **seek legal advice on the possible legal actions against Service Providers A and B;**
- (e) **liaise with Service Provider C to expedite the launch of Wi-Fi services for the remaining one of the seven venues allocated;**
- (f) **for future PPC projects, critically review the implications of the terms proposed by the service providers before accepting them; and**
- (g) **draw lessons from the PPC pilot project for reference in the full-scale PPC roll-out.**

Response from the Government

3.37 The Government Chief Information Officer agrees with the audit recommendations. He has said that the OGCIIO has conducted a review of the PPC pilot project to identify the major problems in the implementation and devise measures to improve the process for rolling out the full-scale PPC.

Subsidy scheme for providing free public Wi-Fi services in study rooms and youth service centres

3.38 In the 2016 Policy Address, the Government stated that it would offer free Wi-Fi services at all study rooms and youth service centres run by the Government and non-profit-making NGOs to help students study after school with the use of Internet resources. In the funding paper submitted to the FC in May 2016, the OGCIIO informed the FC that it would draw up an application system for subsidising NGOs currently operating study rooms and youth service centres with regular funding support from the Education Bureau and the Social Welfare Department in the provision of free public Wi-Fi services in these venues. The OGCIIO estimated that the subsidy would cover about 350 study rooms and youth service centres run by the NGOs, involving around 500 hotspots, for a period of 5 years. The maximum annual subsidy for each venue would be set at \$12,000 on a reimbursable basis.

3.39 In 2017, the OGCI0 sent invitations to 67 eligible NGOs operating 217 study rooms and youth service centres for their application. As at 31 December 2017, of the 67 eligible NGOs, 51 (76%) had applied for the subsidy scheme for 177 of their 194 venues. In other words, 16 (24%) of the 67 NGOs, operating 23 (11%) of the 217 venues, had not applied for the subsidy scheme. According to the OGCI0, 15 of the 16 NGOs were already providing free public Wi-Fi services.

Need to monitor the progress of the provision of Wi-Fi services under the subsidy scheme

3.40 According to the Technical and Service Standard Requirements laid down by the OGCI0, grantee NGOs should provide Wi-Fi services to the public in their venues within three months after accepting the offer. As at 31 December 2017, of the 51 NGOs approved for the subsidy scheme involving 177 venues, only 35 (69%) NGOs launched Wi-Fi services at 99 (56%) venues. Audit examination of the progress of the provision of Wi-Fi services at the approved venues revealed that:

- (a) 5 venues were withdrawn from the subsidy scheme;
- (b) of the 99 venues where Wi-Fi services had been launched, the Wi-Fi services at 41 (41%) venues were launched after the deadline, with delays ranging from 1 to 62 days (averaging 35 days); and
- (c) of the remaining 73 venues (i.e. 177 – 5 – 99) where Wi-Fi services had not been launched, the provision of Wi-Fi services at 52 (71%) venues was overdue. Of the 52 venues, the provision of Wi-Fi services at 29 (56%) venues had been overdue for more than 30 days.

3.41 The OGCI0 needs to ascertain the reasons for the slow progress of the provision of free Wi-Fi services by the NGOs at the approved venues under the subsidy scheme and take measures to facilitate them to speed up the progress.

Audit recommendation

3.42 **Audit has *recommended* that the Government Chief Information Officer should take measures to address the slow progress of the provision of free Wi-Fi services by the NGOs at the approved venues under the subsidy scheme for providing free public Wi-Fi services in study rooms and youth service centres, and facilitate them to speed up the progress.**

Response from the Government

3.43 The Government Chief Information Officer agrees with the audit recommendation. He has said that the OGCIO is liaising with the NGOs to help them overcome the practical issues encountered such as facilitating the cabling works, resolving technical problems and seeking internal approval of tender, etc.

PART 4: OTHER INITIATIVES IN PROMOTING THE WIDER USE OF IT

4.1 This PART examines the implementation of other initiatives in promoting the wider use of IT, focusing on the following areas:

- (a) development of data centres (paras. 4.2 to 4.18);
- (b) PSI portal (paras. 4.19 to 4.27); and
- (c) Hong Kong ICT Awards (paras. 4.28 to 4.43).

Development of data centres

4.2 A data centre is a facility for housing computer systems and associated components, such as telecommunications and storage systems. It generally includes backup power supplies, backup data communication connections, environmental controls (e.g. air-conditioning and fire suppression) and security devices. According to the OGCIO:

- (a) data centres are critical technology infrastructure to facilitate digital development of various industries and technology areas, including cloud computing, big data, artificial intelligence and FinTech; and
- (b) these digital developments in turn promote the growth of high-value added economic activities in Hong Kong, such as finance, trade, logistics and e-commerce.

4.3 In 2010, the OGCIO commissioned a study on the wider economic impacts attributed to the data centre sector. The study found that in 2009:

- (a) the data centre sector contributed an economic value added of \$3.4 billion, representing 0.21% of the Gross Domestic Product (GDP) of \$1,622 billion;

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- (b) the estimated total job opportunities attributed to the data centre sector was around 4,800; and
- (c) the value added per data centre employee was about \$727,300 (the overall average across all sectors was \$466,200).

4.4 On 22 March 2011, the OGCIO advised the Digital 21 Strategy Advisory Committee that:

- (a) while the quantifiable GDP contribution of data centre was not particularly high, there were unquantifiable benefits attributable to the data centre sector. For instance, data centre was an essential infrastructure to support other economic sectors, such as financial services and logistics; and
- (b) to sustain Hong Kong's competitiveness in the region, Hong Kong should attract more data centres to Hong Kong, to support and serve both international and Mainland users in addition to meeting local demand.

4.5 Subsequent to the conclusion of the OGCIO's study, the Financial Secretary announced in his 2011-12 Budget the policy to facilitate the development of high-tier data centres. Since then, the OGCIO has implemented the following measures:

- (a) launching a one-stop portal (www.datacentre.gov.hk) to provide information on policy and technical issues relating to data centre development in Hong Kong;
- (b) establishing a Data Centre Facilitation Unit to offer proactive and one-stop advice to parties seeking information on data centre development in Hong Kong; and
- (c) in collaboration with other departments, such as the Transport Department and the Buildings Department, identifying scope for streamlining, fine-tuning the regulatory regime to better serve the legitimate needs of data centres (e.g. fewer lorry parking lots requirement, higher headroom for accommodating servers above raised floor, extra floor area for fall-back plant rooms and supporting facilities), and expediting the vetting processes.

4.6 On 10 January 2012, the Chief Executive in Council approved that a time-limited scheme to facilitate the development of data centres should be introduced from a date to be specified in 2012-13 till 31 March 2016. The Government announced the introduction of the scheme with effect from 25 June 2012, comprising the following:

- (a) exemption of waiver fees for issuing waivers for applications made to the Lands Department (LandsD) for change of use in parts of industrial buildings aged 15 years or above in “Industrial”, or “Other Specified Uses” annotated “Business” or “Commercial” zones to data centres of all tiers for the lifetime of the existing building, or until the expiry or determination of the current lease, whichever is the earlier;
- (b) accepting lease modification (including land exchange) tailor-made for development of high-tier data centres (Note 21), wholly or in conjunction with other uses, on existing industrial lots for the part of the development proposed for data centre use instead of requiring modification up to the optimal uses and intensity that could possibly be allowed for the site. The premium charged for that part of the land would be based on the specific high-tier data centre use instead of an optimal development; and
- (c) for the disposal of suitable government sites for data centre use, tailor-made Conditions of Sale for sites dedicated for high-tier data centre (and other non-data centre permitted uses, if considered appropriate) and assessment of tender reserve price on the basis of the gross floor area for high-tier data centre use and the gross floor area for other non-data centre permitted uses, if any.

The Chief Executive in Council approved on 22 March 2016 that the existing time-limited concessionary scheme should be extended beyond 31 March 2016 pending further review.

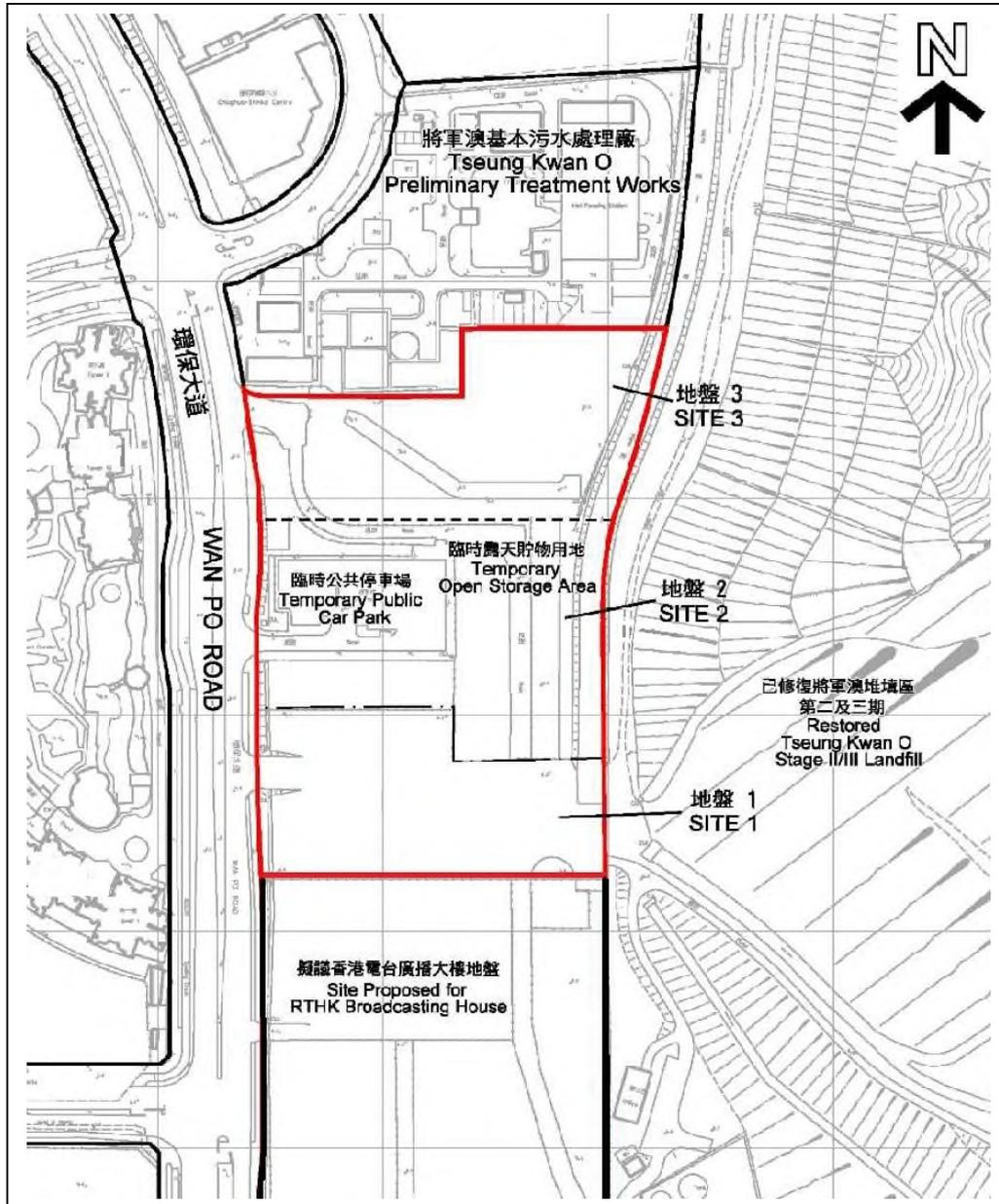
Note 21: *Data centres are classified into four tiers according to serviceability levels and building requirements. Tier 1 data centre has the lowest availability of 99.67% with basic site infrastructure while Tier 4 data centre has the highest availability of 99.99% with fault-tolerant site infrastructure. Tier 3 and Tier 4 data centres are also known as high-tier data centres.*

Delay in the sale of two high-tier data centre sites

4.7 In 2012, the Chief Executive in Council approved the disposal of three dedicated sites of about one hectare each at Tseung Kwan O Town Lots Nos. 122, 123 and 127 (Sites 1, 2 and 3) for high-tier data centres (see Figure 8). Site 1 was sold through open tender on 4 October 2013 at a price of \$428 million and provided about 44,000 square metre (m²) of Gross Floor Area for data centre use in October 2017. The OGCIO originally planned to dispose of Sites 2 and 3 after the sale of Site 1. However, due to a number of issues, such as the termination of existing Short Term Tenancy (STT), closing down of public metered carpark, and arrangement for possible site decontamination works and accessibility, the two sites were not yet available for sale up to January 2018.

Figure 8

Location of Sites 1 to 3



Source: OGCI records

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4.8 Site 2 has been occupied by ten recycling operators under STTs granted since 11 January 1999. According to the STT agreements, the STTs could be terminated by the Government by giving the operators a one-month notice, and the operators would not be entitled to reprovisioning of any site. Given the Government's policy to support the development of recycling industry, the Environmental Protection Department (EPD) considered that replacement sites should be identified to replenish the overall pool of STT sites in order to maintain a stable supply of STT sites for recycling purposes. However, no suitable sites were identified. The termination of the STTs was therefore pending.

4.9 Since 2002, part of Site 3 has been used by the Drainage Services Department (DSD) for sewage treatment works. In October 2013, the DSD informed the LandsD that their allocated part of Site 3 was ready to be surrendered to the LandsD and that no decontamination would be required. The OGCI0 then planned to put up Site 3 for sale by mid-2015 after the completion of the rezoning of the site to data centre use. The rezoning of Site 3 to data centre use was completed by December 2015. However, Site 3 was not put on sale after the rezoning as the OGCI0 planned to dispose of Site 2 and Site 3 together, because:

- (a) the industry, in particular the big multinational enterprises, preferred a larger site for setting up their corporate data centres; and
- (b) Site 2 and Site 3 shared a common access road. It might cause management, operation and security problems if the two sites were separately disposed of.

4.10 In January 2017, the OGCI0 wrote to the EPD and LandsD that Sites 2 and 3 should be disposed of for data centres without any further delays. In the same month, the proposed disposal of the combined Site 2 and 3 was circulated for departmental comment by the LandsD. In February 2017, the EPD replied that it maintained the view that it had no objection to the termination of the STTs at Site 2. In May 2017, the disposal of the combined Site 2 and 3 was approved by the Sai Kung District Lands Conference. In July 2017, the LandsD issued letters to the recycling operators notifying them that the STTs would be terminated on 3 October 2017. In August 2017, the recycling operators advised the LandsD that the proposed termination date was not acceptable, and requested to have the termination date postponed to 31 March 2018 as more time was required to vacate their sites and to liaise with EPD for reprovisioning. In September 2017, as agreed by the OGCI0 and the departments concerned, the LandsD extended the termination date of the STTs to 31 March 2018. In

February 2018, the termination date of the STTs was further extended to 30 June 2018 upon the request of the recycling operators.

4.11 According to the OGCIO, a number of international and local companies have expressed interest in investing in data centres in Hong Kong and there was keen demand of lands for data centre in the past few years. Audit considers that it is not satisfactory that the disposal of Sites 2 and 3 have been significantly delayed. The OGCIO needs to endeavour to expedite the disposal of Sites 2 and 3.

Small number of data centre waiver applications

4.12 Before 25 June 2012, owners of existing industrial buildings applying for changing their use to data centres were required to pay a fee to the LandsD for the issuance of waiver. The waiver fee was assessed based on the Internal Floor Area and the location of the buildings concerned. To encourage existing industrial buildings to change their use to data centres, the fees for issuing waivers for using industrial buildings aged 15 years or more for data centres were waived. However, the number of applications received for the concessionary scheme was small. From 25 June 2012 to 30 November 2017, only 32 waiver applications under this concessionary scheme were received (see Table 15). The number of waiver applications had increased from 4 in 2012-13 to 14 in 2015-16 and decreased drastically to 1 in 2016-17. In 2017-18, 2 applications were received up to 30 November 2017. The OGCIO needs to ascertain the reasons for the small number of data centre waiver applications received under the concessionary scheme and take measures to encourage more applications.

Table 15

**Waiver applications received under the concessionary scheme
(25 June 2012 to 30 November 2017)**

Year	No. of waiver applications
2012-13 (from 25 June 2012)	4
2013-14	4
2014-15	7
2015-16	14
2016-17	1
2017-18 (up to 30 November 2017)	2
Total	32

Source: Audit analysis of LandsD records

Remarks: One application received in 2014-15 and another two in 2015-16 were subsequently withdrawn.

Need to be kept informed of progress of processing data centre waiver applications

4.13 Before 1 April 2017, waiver applications were processed by the Redevelopment and Conversion of Industrial Buildings (RCIB) Team of the LandsD. The Data Centre Facilitation Unit of the OGCIO regularly collected updated information on status of data centre waiver applications under processing, including the copy of the waiver letters issued and the execution/registration status of the waiver. In March 2017, the LandsD dissolved the RCIB Team. With effect from 1 April 2017, waiver applications have been processed by District Lands Offices. Since then, the OGCIO has to approach individual District Lands Offices separately for information on the status of the waiver applications under processing and other related information. To facilitate the OGCIO's implementation of incentive measures to encourage the change of use of industrial buildings to data centres, the OGCIO needs to establish an information exchange mechanism with the District Lands Offices of the LandsD so as to ensure that related up-to-date information is regularly received from the LandsD.

Need to promote lease modifications of industrial lots for data centre use

4.14 One of the measures to facilitate the development of data centres is to accept lease modification (including land exchange) tailor-made for development of high-tier data centres on existing industrial lots for the part of the development proposed for data centre use, instead of requiring modification up to the optimal uses and intensity that could possibly be allowed for the site. The premium for the part of the land to be used as data centre will be assessed on the specific high-tier data centre use instead of an optimal development. To facilitate the approval by the LandsD, the OGCIO will assess whether the lease modification applications meet the requirements of the intended use as data centre and provide policy support on the application.

4.15 In the period from 25 June 2012 to 31 December 2017, the LandsD received only four applications for lease modification for the redevelopment of industrial lots for high-tier data centre use:

- (a) the first application was received in April 2013 and obtained support by the OGCIO in June 2013. The modification letter was executed in January 2015 and the premium for the lease modification was \$51.4 million;
- (b) the second application was withdrawn;
- (c) the third application was received in November 2016 and obtained support by the OGCIO in April 2017. As at 31 December 2017, the application was under processing; and
- (d) the fourth application was received in October 2017 and obtained support by the OGCIO in December 2017. As at 31 December 2017, the application was under processing.

4.16 The small number of applications received indicates that the OGCIO needs to review the attractiveness of the measures in facilitating the development of data centres, and take appropriate follow-up action (e.g. stepping up the effort in promoting this facilitation measure to the industry).

Audit recommendations

4.17 **Audit has *recommended* that the Government Chief Information Officer should:**

- (a) **endeavour to expedite the disposal of the two dedicated sites for data centre development;**
- (b) **review the effectiveness of the concessionary measure on exempting the waiver fees for change of use in parts of industrial buildings;**
- (c) **in collaboration with the LandsD, establish a formal information exchange mechanism to keep the OGCIO informed of the progress of processing the data centre waiver applications; and**
- (d) **review the effectiveness of the concessionary measure on lease modification tailor-made for data centre use, and step up effort in promoting this measure to the industry.**

Response from the Government

4.18 The Government Chief Information Officer agrees with the audit recommendations. He has said that:

- (a) the OGCIO will continue to work with relevant departments actively to expedite the disposal of Site 2 and Site 3; and
- (b) the Government is preparing to make Site 2 and Site 3 available for open tender in the second half of 2018 subject to the progress of the site clearance.

PSI portal

4.19 PSI refers to the information collected, produced, disseminated and possessed by the Government and public bodies as a part of their day-to-day operations. The information includes demographic, socio-economic, geographical, meteorological and municipal management data. With the advancement of ICT, there can be active and creative value-added re-use of PSI by the community. For instance, the information may be used for developing applications which use, mesh up or integrate raw PSI data to bring convenience to the public, promote innovation and create business opportunities (Note 22).

4.20 In March 2011, the Government launched a pilot scheme to facilitate value-added re-use of PSI. Under the scheme, geo-referenced public facilities data and real-time traffic data were made available for free download and value-added re-use by the public via the portal “Data.One”. In September 2013, the Government published a public consultation document. In the document, the Government proposed to make all government information released for public consumption machine-readable by default, and to encourage public organisations (e.g. public utilities and transport operators) to release their data in machine-readable format. The Financial Secretary announced in the 2015-16 Budget that from 2015 onwards, free online government information would be released in digital formats.

4.21 In March 2015, the OGCI launched the revamped PSI portal entitled “data.gov.hk” to facilitate the dissemination of datasets provided by government bureaux/departments and organisations. The “data.gov.hk” portal collects and releases PSI from different departments in real time. The datasets are all available in digital formats. Some datasets were also released with application programming interfaces to facilitate downloading, processing, meshing and use. As at 31 December 2017, the PSI portal provided 3,101 distinct datasets under 18 broad categories from 55 government bureaux/departments and public and private organisations with around 1,000 application programming interfaces.

Note 22: *A number of applications have been developed by the community to bring convenience to the public, e.g. a mobile app that integrates real-time traffic and other essential information (such as carparks, fuel stations and automobile services) for easy access by drivers, and an application that uses monthly statistics on land transactions to provide comprehensive and up-to-date property information search for home buyers, sellers, renters and real-estate professionals.*

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Need to encourage more bureaux/departments and organisations to open up their data

4.22 PSI portal is coordinated by the OGCIIO with the participation of different government bureaux/departments and public and private organisations to disseminate various types of PSI for free re-use. According to the OGCIIO:

- (a) the wider the dissemination of PSI, and the more flexibility there is in the way it is used, the greater the extent to which the benefits can be realised. This will be conducive to Hong Kong's development as a knowledge-based economy;
- (b) therefore, the OGCIIO endeavours to work with different government bureaux/departments and public and private organisations to make available more datasets on the PSI portal; and
- (c) the OGCIIO had approached a number of public and private organisations, such as major transport operators, major carpark operators and public utilities companies, to encourage them to open up their data to the PSI portal.

4.23 Audit noted that, up to 31 December 2017, only:

- (a) 47 (66%) of the 71 government bureaux/departments released their data to the PSI portal;
- (b) 8 public and private organisations released their data to the PSI portal. They provided 92 (3%) of the 3,101 distinct datasets; and
- (c) two (50%) of the four major transport operators had released some static information, such as information on routes, fares and facilities, to the PSI portal.

Need to compile dataset inventory

4.24 In May 2015 and June 2017, the OGCIIO requested government bureaux/departments to review potential data which could be released as PSI and provide the OGCIIO their PSI release plans in the following 12 months in order to keep

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up their momentum of releasing more PSI. However, less than 50% of the bureaux/departments provided the OGCIO their plans (see Table 16). Audit noted that:

- (a) the number of government bureaux/departments which did not have any PSI release plans in the following 12 months increased from 11 (19%) as at May 2015 to 38 (53%) as at June 2017; and
- (b) the number of government bureaux/departments that had plans to release PSI in the following 12 months decreased from 27 (47%) as at May 2015 to 21 (30%) as at June 2017.

Table 16

**Government bureaux/departments' plan on PSI release
(May 2015 and June 2017)**

PSI release plan	May 2015 (No.)	June 2017 (No.)
Had plan	27 (47%)	21 (30%)
No plan	11 (19%)	38 (53%)
Not known (No response to OGCIO)	20 (34%)	12 (17%)
Total	58 (100%)	71 (100%)

Source: Audit analysis of OGCIO records

4.25 In the consultancy study report on Smart City Blueprint for Hong Kong released in June 2017, the consultant recommended the Government to compile an inventory of existing datasets and develop a methodology to assess which datasets to be released and in what priorities. Audit noted that while the OGCIO provided advice to government bureaux/departments in their identification of datasets which could be opened up for the benefits of the community, it did not compile an inventory of existing datasets to follow up the progress of releasing PSI information of government bureaux/departments. Audit considers that the OGCIO needs to develop a mechanism to assess which existing datasets can be released as PSI and the priorities for releasing such datasets. The OGCIO also needs to collect information from government bureaux/departments to compile an inventory of existing datasets which the bureaux/departments can release as PSI.

Audit recommendations

4.26 **Audit has *recommended* that the Government Chief Information Officer should:**

- (a) **encourage more government bureaux/departments, and public and private organisations to open up more data for free public re-use via the PSI portal;**
- (b) **develop a mechanism to assess which existing datasets can be released as PSI and the priorities for releasing such datasets; and**
- (c) **collect information from government bureaux/departments to compile an inventory of existing datasets which the bureaux/departments can release as PSI.**

Response from the Government

4.27 The Government Chief Information Officer agrees with the audit recommendations. He has said that the OGCIO will develop a more robust policy on opening up government data.

Hong Kong ICT Awards

4.28 The “Hong Kong ICT Awards” Programme was established in 2006 with the collaborative efforts of the industry, academia and the Government. The Programme is steered by the OGCIO and organised by ICT industry associations and professional bodies (i.e. Leading Organisers). It aims at:

- (a) recognising and promoting outstanding ICT inventions and applications, thereby encouraging innovation and excellence among Hong Kong’s ICT talents and enterprises in their pursuit of creative and better solutions to meet business and social needs; and
- (b) building a locally espoused and internationally acclaimed brand of ICT awards.

4.29 The Programme comprises a number of categories. For each category, there are different streams. Three winners (i.e. Gold, Silver and Bronze) are selected for each award stream. A Grand Award winner will be selected for each category from all Gold winners of the same category. Each year, an “Award of the Year” will be selected from all Grand Award winners. The Awards do not carry any monetary prizes. For the Hong Kong ICT Awards 2017, there were a total of 25 award streams under 8 categories, and the total expenditure was \$7.1 million.

Staff engaged in secretariat service involved in adjudication and assessment work

4.30 Each year, the OGCIO appoints a contractor to provide the secretariat service and logistics support for the Hong Kong ICT Awards, including:

- (a) providing secretariat support to the Steering Committee, the Standards Assurance Sub-Committee and the Grand Judging Panel;
- (b) providing support on entries enrolment and adjudication matters;
- (c) production of publicity materials; and
- (d) activities support (including venue arrangement and logistics for various events and activities).

4.31 The contractor is required to ensure that personnel engaged in the secretariat service should not be involved in adjudication and assessment work of the Hong Kong ICT Awards except for administrative work.

4.32 Audit examined the records of Hong Kong ICT Awards 2013 to 2017 and noted that:

- (a) an organisation was appointed as the contractor for providing secretariat service for the Hong Kong ICT Awards 2013 to 2017; and

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- (b) an assessor and a member of the judging panel of an award category from 2013 to 2017 were members of the project team of the organisation for providing the secretariat service for the Hong Kong ICT Awards.

Need to strengthen performance of Leading Organisers

4.33 For each award category, a Leading Organiser, who is often an industry-related organisation, is appointed for planning, organising, managing and running the award category. The Leading Organisers are required to comply with the Judging Manual issued by the OGCIO. According to the Judging Manual, Leading Organisers should check the eligibility requirements of the award entrants.

4.34 In 2016, there were media reports claiming that a company (Company A), which won the Bronze Award of Best ICT Startup (Hardware and Devices) Award of the year, did not meet the entry requirement that the product offered by the company must have been launched or in operation for at least three months.

4.35 Audit examination of the OGCIO records revealed that the OGCIO had followed up the case in August 2016. The responsible Leading Organiser was asked to reassess the case. In December 2016 and February 2017, the Leading Organiser submitted its reassessment report and related information to the OGCIO. In February 2017, the OGCIO concluded that the claim made by the media report was valid and disqualified Company A.

4.36 The incident indicated that there was room to strengthen the monitoring of the Leading Organisers' performance of the responsibilities stipulated in the Judging Manual. Audit considers that the OGCIO needs to establish a mechanism, e.g. conducting sample checks to monitor the performance of Leading Organisers.

Small number of proposals to be Leading Organisers

4.37 Invitations for proposals to be Leading Organisers of the Hong Kong ICT Awards are issued to ICT industry associations and professional bodies in August every year. For each category of awards, one Leading Organiser is required. Each industry association/professional body cannot submit more than one proposal. Audit noted that

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only a few proposals were received for undertaking as Leading Organisers for the years from 2013 to 2017 (see Table 17). Each year, the number of proposals received was only slightly greater than the number of award categories. There were not many choices for the OGCIO to select among the proposals.

Table 17

**Number of invitations sent and proposals received
(2013 to 2017)**

Year	No. of categories (a)	No. of invitations (b)	No. of proposals (c)	Response rate (d) = (c) ÷ (b) × 100%
2013	10	98	11	11%
2014	10	109	11	10%
2015	10	118	10	8%
2016	8	126	12	10%
2017	8	133	11	8%

Source: OGCIO records

Remarks: Each industry association/professional body can only submit one proposal on one of the categories, otherwise all the proposals would be disqualified.

4.38 For Hong Kong ICT Awards 2013 to 2017, total proposals received represented only a small percentage (8% to 11%) of total invitations sent. Audit considers that the OGCIO needs to ascertain the reasons for the small number of proposals submitted for undertaking as Leading Organisers and take measures to encourage more organisations to submit proposals for undertaking as Leading Organisers.

Need to periodically review the award categories

4.39 Audit examined the number of entries received for each award category from 2013 to 2017 and noted that, for three award categories, the number of entries received was decreasing over the past years (see Table 18).

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Table 18

**Three award categories with decreasing number of entries
(2013 to 2017)**

Award Category	Number of entries				
	2013	2014	2015	2016	2017
Best Business Solution Award (Note 1)	85	57	66	56	53
Best Lifestyle Award	94	64	58	56	46
Best Mobile Apps Award	69	82	56	56	45
Other awards (Note 2)	362	947	792	1,004	976
Total	610	1,150	972	1,172	1,120

Source: OGCIO records

Note 1: “Best SME ICT Award” has been combined with the “Best Business Solution Award” since Hong Kong ICT Awards 2016. The number of entries for 2013 to 2015 was the sum of the number of entries of both awards.

Note 2: The number of other award categories were 6, 6, 6, 5 and 5 for 2013, 2014, 2015, 2016 and 2017 respectively. The average number of entries for the other award categories were 60, 158, 132, 201 and 195 for 2013, 2014, 2015, 2016 and 2017 respectively.

4.40 Audit noted that a review on the award categories was conducted in 2013. As a result of the review, two award categories of the lowest average number of entries over the years 2011 to 2013 were discontinued. In Audit’s view, the OGCIO needs to conduct periodic review on the award categories for the Hong Kong ICT Awards, taking into account the number of entries of individual award categories, with a view to taking action to boost the number of entries or discontinuing those award categories which become less popular.

Need to take follow-up actions on auditors’ comments

4.41 In accordance with the OGCIO’s Guide to Application for OGCIO Sponsorship, a Leading Organiser is required to submit the independent auditor reports of the Hong Kong ICT Award Project to the OGCIO not later than two months after

completion of the project. Audit reviewed the auditor reports for the years 2014 to 2016 and noted that in two reports, namely the Hong Kong ICT Awards 2014 (Best Innovation Award Category) and the Hong Kong ICT Awards 2015 (Best Business Solutions Award Category), the auditors had expressed qualified opinions as follows:

- (a) ***Hong Kong ICT Awards 2014 (Best Innovation Award Category).*** The auditor stated that “*the applicant is unable to provide with us sufficient relevant evidence that it has adhered to the procurement procedures in respect of the Assessment/Judging Manpower Expenses*”; and
- (b) ***Hong Kong ICT Awards 2015 (Best Business Solutions Award Category).*** The auditor stated that “*we noted that the Society had not followed the procurement procedures as specified in clause 3.6 of the Guide to Application for OGCIO Sponsorship in procuring services for the Project*”.

No documentary evidence was available showing that the OGCIO had taken follow-up action on the auditors’ qualified comments. Audit considers that the OGCIO needs to review all cases where qualified opinion was expressed by independent auditors and take appropriate follow-up action.

Audit recommendations

4.42 **Audit has recommended that the Government Chief Information Officer should:**

- (a) **ensure that the personnel engaged in the secretariat service are not involved in the adjudication and assessment work of the Hong Kong ICT Awards;**
- (b) **document the justification for allowing the personnel engaged in the secretariat service to act as assessor or judge for the Hong Kong ICT Awards;**
- (c) **establish a mechanism to strengthen the monitoring of the Leading Organisers’ performance of the responsibilities stipulated in the Judging Manual;**

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- (d) **ascertain the reasons for the small number of proposals submitted for undertaking as Leading Organisers and take measures to encourage more organisations to submit proposals for undertaking as Leading Organisers;**
- (e) **conduct periodic review on the award categories for the Hong Kong ICT Awards, taking into account the number of entries of individual award categories; and**
- (f) **ensure that follow-up actions are taken on the exceptions identified by the independent auditors.**

Response from the Government

4.43 The Government Chief Information Officer agrees with the audit recommendations. He has said that the OGCIO will continue to review the entire process with Leading Organisers before and after each year's Hong Kong ICT Awards.

PART 5: WAY FORWARD

5.1 This PART examines the way forward on promoting the wider use of IT in the community, focusing on the following areas:

- (a) strategy on promoting the wider use of IT in the community (paras. 5.2 to 5.10); and
- (b) initiatives in promoting the wider use of IT in the community (paras. 5.11 to 5.22).

Strategy on promoting the wider use of IT in the community

5.2 The Government's strategy on promoting the wider use of IT in the community was first promulgated in the Digital 21 Strategy published in November 1998. To take into account technological advancement and changing needs of the society, the Digital 21 Strategy had been updated in 2001, 2004 and 2008 respectively.

5.3 In 2013, the Government commissioned a consultancy study to review Hong Kong's achievements under the Digital 21 Strategy and make recommendations on a new blueprint to steer Hong Kong's ICT development in the next few years. In September 2013, the Government launched public consultation on a new strategy, with "Smarter Hong Kong, Smarter Living" as the theme of the new strategy. In December 2013, the Government sought comments from members of LegCo Panel on Information Technology and Broadcasting. The Government advised the Panel that the new strategy would be promulgated in early 2014. However, up to 31 January 2018, the OGCIO had not updated the Digital 21 Strategy, nor had it promulgated any new strategy to replace the Digital 21 Strategy. The 2008 Digital 21 Strategy was published on the Digital 21 Strategy website of the OGCIO as the latest strategy.

5.4 The Digital 21 Strategy Advisory Committee was established on 1 October 2004 to advise the Government on the goals and objectives, areas requiring further actions, desired outcomes, and strategies and programmes facilitating the

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delivery of the desired outcomes under the Digital 21 Strategy, the blueprint for ICT development in Hong Kong. Under the Committee, two Task Forces (i.e. Task Force on Digital Inclusion and Task Force on Industry Facilitation) are pertinent to the implementation of the ICT in the community (see para. 1.6). In the years 2013, 2014 and 2016, two meetings of the Committee were held each year. No meeting has been held by the Committee since March 2017. The OGCIO did not explain on the Digital 21 Strategy website the reasons for not holding further meetings after March 2017 nor the status of the Advisory Committee. Moreover, the Task Force on Digital Inclusion and Task Force on Industry Facilitation have not held any meeting since March 2015.

Need to update the strategies on promoting the wider use of IT in the community

5.5 In December 2017, the Government released the Smart City Blueprint for Hong Kong. The Blueprint maps out development plans in the next five years, aiming to enhance the effectiveness of city management and improve people's quality of living as well as Hong Kong's attractiveness and sustainability by making use of innovation and technology. The Steering Committee on Innovation and Technology chaired by the Chief Executive has started operation to steer development of innovation and technology and smart city projects. A Smart City Office will be set up in the ITB to take charge of the overall co-ordination and monitoring of the progress and effectiveness of smart city projects.

5.6 Audit noted that only three of the ten key initiatives (see para. 1.7) in promoting the wider use of IT in the community were mentioned briefly in the Smart City Blueprint for Hong Kong. These three initiatives were Wi-Fi Connected City Programme, PSI portal and technology start-ups supporting initiatives (see Table 19). The initiatives were only featured briefly in the Blueprint without details of their strategy and programme of work. Given the past Digital 21 Strategy Framework and updates to the strategy document, the ITB and the OGCIO need to promulgate their latest strategies and work programmes on promoting the wider use of IT in the community, especially those related to digital inclusion.

Table 19

Key initiatives in promoting the wider use of IT in the community mentioned in the Smart City Blueprint for Hong Kong

Key initiative	Coverage in Smart City Blueprint for Hong Kong
Wi-Fi Connected City Programme	The Government would continue to increase the number of free hotspots under the “Wi-Fi.HK” Scheme.
PSI portal	The Government would open up more data in digital forms via PSI portal.
Technology start-ups supporting initiatives	The Government would provide support to start-ups to build a stronger IT culture.

Source: Smart City Blueprint for Hong Kong published by ITB

5.7 Audit considers that the ITB and the OGCIO need to update regularly their strategies and work programmes on promoting the wider use of IT in the community, taking into account the Smart City Blueprint for Hong Kong and other policy directives and strategies on innovation and technology promulgated by the ITB. The OGCIO also needs to update the Digital 21 Strategy website regularly to reflect the latest developments such as the disbandment of the Digital 21 Strategy Advisory Committee.

Audit recommendations

5.8 Audit has *recommended* that the Secretary for Innovation and Technology and the Government Chief Information Officer should update regularly their strategies and work programmes on promoting the wider use of IT in the community, taking into account the Smart City Blueprint for Hong Kong and other policy directives and strategies on innovation and technology promulgated by the ITB.

Way forward

5.9 Audit has also *recommended* that the Government Chief Information Officer should update the Digital 21 Strategy website regularly to reflect the latest developments.

Response from the Government

5.10 The Secretary for Innovation and Technology and the Government Chief Information Officer agree with the audit recommendations.

Initiatives in promoting the wider use of IT in the community

Need to consider suitable measures to support students from low-income families on their web-based learning needs

5.11 The ILSP was launched in July 2011 to help students from low-income families undertake web-based learning at home. The OGCIO announced in December 2017 that the ILSP will be concluded at the end of August 2018.

5.12 Audit noted that the Smart City Blueprint for Hong Kong released in December 2017 did not cover digital inclusion initiatives, such as the support for students from low-income families on their web-based learning needs (see para. 5.6). Moreover, there is public concern on the way forward on the support measures for students from low-income families on their web-based learning needs after the end of the ILSP. According to a LegCo Member in January 2018, some parents of students pointed out that upon cessation of operation of the ILSP in August 2018, children from grass-roots families would face a number of problems in online learning, including:

- (a) the Internet service fees (about \$200 to \$300 per month) would be twice of those for the Internet access services subscribed through the ILSP because such service was available from only one Internet service provider for most of the inadequate housing (e.g. sub-divisions of flat units/cubicle apartments in old tenement buildings and remote areas) in which those children commonly resided; and

- (b) parents of grass-roots families in general lacked knowledge of computer technology and hence were unable to help their children tackle difficulties in online learning. While the Government was actively implementing science, technology, engineering and mathematics education, it should provide more support for children from grass-roots families to help them learn information technology.

5.13 According to the OGCIO, the ILSP aims to facilitate non-profit-making organisations to develop a long-term operation model to continue the support on Internet learning for needy students. The two implementers intend to continue providing Internet learning support services to students from low-income families after the ILSP ends. As at 31 December 2017, the two implementers are mapping out the scope of services and the relevant details.

5.14 With the advent of new technology and the implementation of science, technology, engineering and mathematics education, Audit considers that the OGCIO needs to continue to monitor the difficulties faced by the students from low-income families and consider suitable measures to support them on their web-based learning needs.

Need to be vigilant of the latest technology development in provision of free public Wi-Fi services

5.15 The proliferation of mobile devices and mobile data services (for accessing the Internet) offered by telecommunications companies in recent years may have an impact on the usage of free public Wi-Fi services. According to the Office of the Communications Authority, the number of 3G/4G mobile subscribers increased by 7.1 million (73%) from 9.7 million in December 2012 to 16.8 million in October 2017. Mobile phone subscription plans (which include mobile data usage for Internet connection) of telecommunications companies are very competitive nowadays, and their prices may be further driven down after the 5G services are launched.

5.16 According to the Smart City Blueprint for Hong Kong released by the Government in December 2017, 5G mobile networks are the catalyst for smart city development, offering ultra-high speed and high capacity. Hong Kong is geared up for the commercial launch of 5G services and applications in 2020. With the

Way forward

advancements in speed of mobile data such as through 4G technologies (or 5G technologies in the future), mobile data speeds are becoming comparable to existing Wi-Fi speeds.

5.17 In view of the proliferation of mobile data services and the latest development of 5G mobile networks, Audit considers that the ITB and the OGCIO needs to review the way forward for providing free public Wi-Fi services in the future, including the quality of services, the target user groups and the PPC model.

Need to assess progress of facilitating the development of data centres

5.18 In May 2010, the OGCIO commissioned a study on the wider economic benefits attributed to the data centre sector. According to the study:

- (a) the data centre sector contributed an economic value added of \$3.4 billion in 2009, which was about 0.21% of the GDP of \$1,622 billion. Total job opportunities attributed to the data centre sector was estimated to be around 4,800. The value added per data centre employee in 2009 was about \$727,300, which compared favourably to the overall average of \$466,200 per employee across all sectors (see para. 4.3); and
- (b) taking into consideration Hong Kong's position as a key technology and telecommunication hub for the region, the demand for data centre space, measured in terms of Raised Floor Space, would grow at a compound annual growth rate of 9.8% from 214,000 m² in 2009 to 381,000 m² in 2015. Some additional 170,000 m² of Raised Floor Space would be required for data centres by 2015, including some 47,000 m² for high-tier ones.

5.19 Since 2010, the OGCIO has not assessed the economic benefits attributed to the data centre sector and has not conducted survey on market supply and demand for data centres. According to the OGCIO:

- (a) some market research companies and some industry players regularly conduct research studies on the supply and demand for data centres;

- (b) the Planning Department conducted a study in 2016. The study provided information on the supply and demand for data centres for internal reference of other government bureaux/departments; and
- (c) the OGCIO can make reference to these studies to keep abreast of the latest market trend and forecast the supply and demand for data centres in Hong Kong.

5.20 The concessionary measures to facilitate the development of data centres have been implemented for six years and the concessionary measures involve important land policy and significant financial implications. The OGCIO needs to heed the market development of data centres and the economic benefits brought by the data centre sector with a view to taking appropriate measures.

Audit recommendations

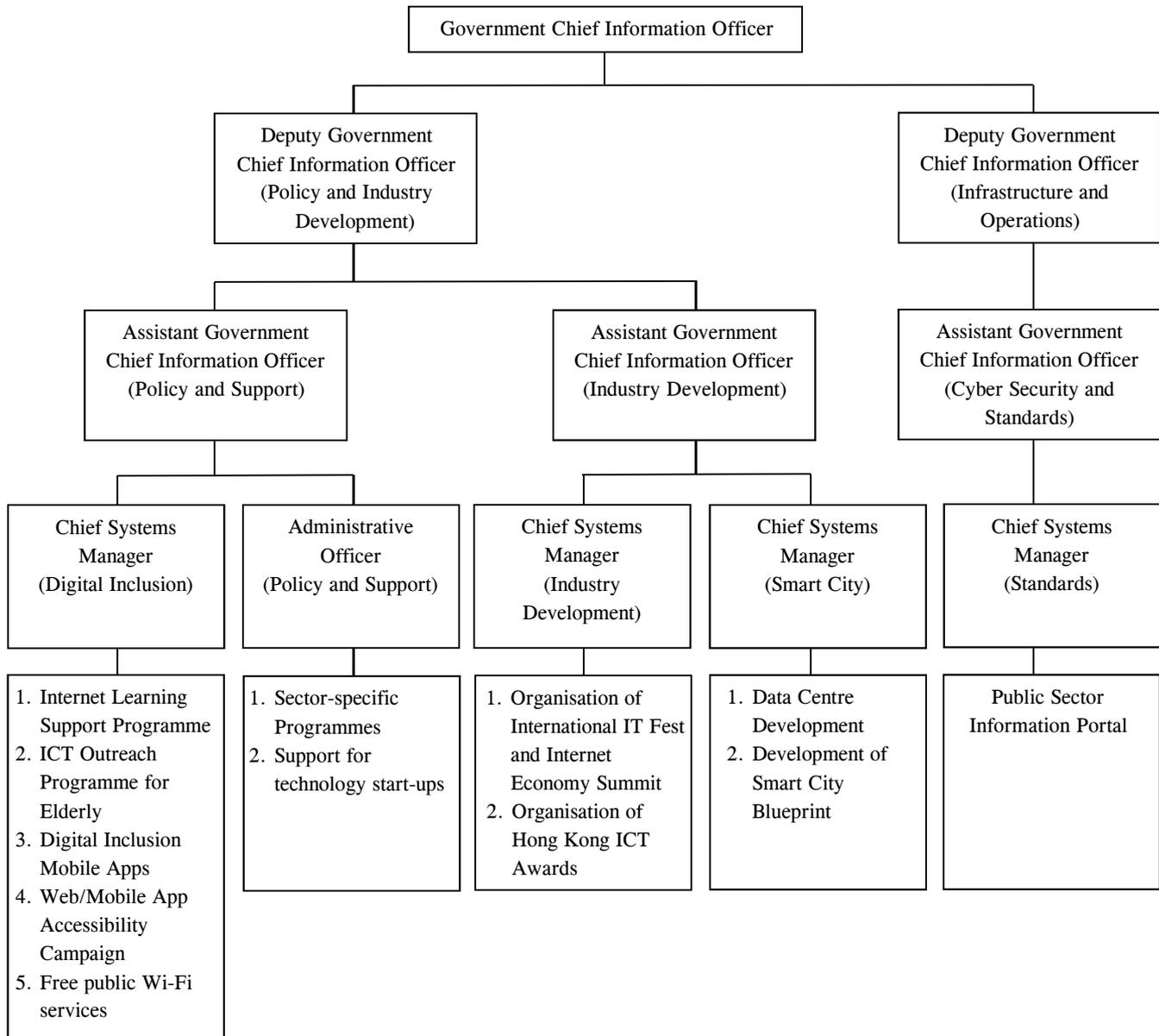
5.21 **Audit has *recommended* that the Secretary for Innovation and Technology and the Government Chief Information Officer should:**

- (a) **continue to explore suitable measures to support students from low-income families on their web-based learning needs;**
- (b) **in determining the way forward for providing free public Wi-Fi services in the future, take into account the latest developments in mobile data service technology; and**
- (c) **heed the market development of data centres and the economic benefits brought by the data centre sector with a view to taking appropriate measures.**

Response from the Government

5.22 The Secretary for Innovation and Technology and the Government Chief Information Officer agree with the audit recommendations.

**OGCIO: Organisation chart (extract)
(31 December 2017)**



Source: OGCI0 records

- Remarks: 1. The organisation chart is an extract of those responsible officers who oversee the operation of various programmes and projects to promote the wider use of IT in the community. These officers may also be responsible for other duties under the purview of the OGCI0.
2. To tie in with the re-organisation of the ITB with effect from 1 April 2018, the responsibilities of divisions within the OGCI0 were redistributed with effect from the same date for better collaboration and synergy. Some divisions and post-titles were renamed to better reflect the redistributed functions and responsibilities.

**Terms of reference of the Maintenance Board of
the Government Wi-Fi Programme**

- (a) To monitor the quality of GovWiFi services by reviewing the availability and performance of the services, user feedbacks and complaints, bandwidth requirements of premises, and to promote user awareness of GovWiFi services in the premises;
- (b) To monitor service availability by reviewing on-going support activities, daily operation issues, service incidents and problems;
- (c) To monitor implementation issues of new premises;
- (d) To monitor the performance of the GovWiFi contractor and the Electrical and Mechanical Services Trading Fund;
- (e) To review the selection criteria for adding new premises, and factors for determining the areas to be covered;
- (f) To monitor the cost effectiveness of the services in individual premises, and to review the criteria for removing low usage premises;
- (g) To endorse the inclusion of new premises into the Programme and removal of low usage premises;
- (h) To collect user feedback on the GovWiFi Programme; and
- (i) To keep abreast of the latest technological and service development of public Wi-Fi as well as mobile Internet access services both in Hong Kong and nearby regions.

Source: OGCIO records

Acronyms and abbreviations

Audit	Audit Commission
DSD	Drainage Services Department
EPD	Environmental Protection Department
FC	Finance Committee
GDP	Gross Domestic Product
GovWiFi	Government Wi-Fi Programme
ICT	Information and communications technology
ILSP	Internet Learning Support Programme
IT	Information technology
ITB	Innovation and Technology Bureau
LandsD	Lands Department
LegCo	Legislative Council
m ²	square metre
Mbps	Megabits per second
mobile apps	mobile applications
NGO	Non-governmental organisation
OGCIO	Office of the Government Chief Information Officer
PPC	Public-private collaboration
PSI	Public Sector Information
RCIB	Redevelopment and Conversion of Industrial Buildings
STT	Short Term Tenancy

CHAPTER 7

Home Affairs Bureau

Home Affairs Bureau's funding schemes and programmes for youth exchange and internship

**Audit Commission
Hong Kong
3 April 2018**

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. 70 of the Director of Audit contains 8 Chapters which are available on our website at <http://www.aud.gov.hk>

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HOME AFFAIRS BUREAU'S FUNDING SCHEMES AND PROGRAMMES FOR YOUTH EXCHANGE AND INTERNSHIP

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HOME AFFAIRS BUREAU'S FUNDING SCHEMES AND PROGRAMMES FOR YOUTH EXCHANGE AND INTERNSHIP

Executive Summary

1. The Home Affairs Bureau (HAB) provides exchange and internship activities outside Hong Kong to young people in the age range between 12 and 29 to expose them to diverse economic, social and cultural surroundings at the national as well as international level to broaden their perspectives, and to enhance their inclusiveness of other cultures. To provide the activities, the HAB runs four funding schemes for youth exchange and internship and three programmes of youth exchange: (a) Funding Scheme for Youth Exchange in the Mainland (YEFS); (b) Funding Scheme for Youth Internship in the Mainland (YIFS); (c) Funding Scheme for Exchange in Belt and Road Countries (BnRFS); (d) Funding Scheme for International Youth Exchange (IYEFS); (e) International Youth Exchange Programme (IYEP); (f) Summer Exchange Programme (SEP); and (g) Guangdong-Hongkong-Macao Youth Cultural Exchange Programme (CEP).

2. To implement the funding schemes for youth exchange and internship and the programmes of youth exchange, the HAB works closely with the Commission on Youth (CoY) and the Committee on the Promotion of Civic Education (CPCE), which are two non-statutory bodies established under the HAB's purview. Under the funding schemes for youth exchange and internship, exchange and internship opportunities are offered and provided to young people through different organisations (i.e. non-profit making organisations, statutory bodies and charitable organisations). Under the programmes of youth exchange, the HAB organises exchange projects on its own. In the five-year period 2012-13 to 2016-17, the number of projects, the number of participants, and the expenditure of exchange and internship activities had increased by 162% (from 137 in 2012-13 to 359 in 2016-17), 161% (from 8,774 in 2012-13 to 22,893 in 2016-17) and 384% (from \$26.4 million in 2012-13 to \$127.7 million in 2016-17) respectively. The Audit Commission (Audit) has recently conducted a review to examine the provision of youth exchange and internship activities by the HAB.

Management of funding schemes for youth exchange and internship

3. ***Granting of sponsorship.*** The HAB has laid down guidelines on application for and use of sponsorship by organisations (collectively referred to as funding guidelines). The guidelines on application for sponsorship cover matters such as the maximum amount of sponsorship for a project and that for an organisation. The guidelines on the use of sponsorship cover matters such as the need for an organisation to submit an activity report (providing information on the conduct of the project) and a financial report (providing financial information on the project). To apply for sponsorship, organisations submit project proposals to the HAB for assessment (paras. 2.2 and 2.3). Audit found that:

- (a) ***Need to improve assessment of project proposals.*** Of the 60 projects (for the period April 2012 to December 2017) examined by Audit, assessment interviews had been conducted for all YIFS and BnRFS projects. However, for YEFS and IYEFS projects, no assessment interviews had been conducted. In one case in 2016-17, YEFS sponsorship was granted to an organisation (paras. 2.5 and 2.6):
 - (i) whose tours under the projects had many places not taken up in 2014-15 (i.e. 158 (35%) of 450 places) and 2015-16 (i.e. 337 (75%) of 450 places) (para. 2.6); and
 - (ii) which had non-compliance with funding guidelines. In 2015-16, there was delay of some 17 months in the submission of financial reports of the projects by the organisation. As at 31 December 2017, after more than 19 months, the organisation still had not submitted the activity reports of the projects (para. 2.6);
- (b) ***Need to ensure consistency in granting sponsorship.*** Sponsorship covers exchange or internship activities as well as complementary activities (i.e. activities taking place outside the destinations of exchange/internship such as pre-trip activities and publicity). Among the 60 projects examined, complementary activities varied widely, accounting for 0% to 61% of the total sponsorship for a project. The HAB had imposed a sponsorship limit on the overall complementary activities of YIFS projects. However, no limit had been set for YEFS, BnRFS and IYEFS projects. Furthermore, the funding guidelines did not specify the circumstances for granting

Executive Summary

half-day sponsorship, hence causing inconsistency in the application of the daily sponsorship rate in 2 of the 60 projects (paras. 1.7 and 2.10); and

- (c) ***Need to ensure that sponsorship is granted within the intended limit.*** In one YIFS project in 2015-16, the project was approved a sponsorship of \$1.4 million, which exceeded the sponsorship limit for a single project (i.e. \$700,000 in 2015-16) in accordance with the funding guidelines. The HAB did not document any justification for the departure (para. 2.14).

4. ***Monitoring of funding schemes.*** Audit's findings were as follows:

- (a) ***Need to set minimum number of participants.*** The funding guidelines had set a requirement on the minimum actual number of participants per YIFS project, BnRFS project and IYEFS project. However, no such requirement had been set for YEFS projects. While there were no projects which had fewer than 10 participants in 2016-17, Audit noted that in 2015-16, there was one extreme case (a YEFS project) where the project had only one participant. In March 2018, the HAB informed Audit that a requirement on the minimum number of participants (i.e. 10 participants) had been imposed for YEFS projects for funding exercises in 2018-19 and thereafter (paras. 2.19 and 2.20); and
- (b) ***Need to expedite finalisation of projects.*** The funding guidelines require that organisations should submit activity reports and financial reports to the HAB within three months after the completion of projects. Of the 60 projects examined (see para. 3(a)), 55 projects had been completed. In 22 (40%) of the 55 completed projects, submission of activity reports/financial reports had not been timely (delay ranged from 10 days to 36 months, averaging 8.9 months) (paras. 2.22 and 2.23).

5. ***Need to improve handling of cancelled projects.*** In 2014-15 to 2016-17, 88 projects had been cancelled by applicant organisations after the HAB had approved the projects. Audit examined 30 projects cancelled in 2012-13 to 2016-17 and found that: (a) the main reasons for project cancellation were “low enrolment rate” and “inability to organise the tour within the approved time frame”; and (b) in 12 (40%) of the 30 projects, the organisations only informed the HAB of the cancellation of projects after the scheduled tour departure dates (paras. 2.28, 2.30 and 2.31).

Executive Summary

Provision of programmes of youth exchange

6. ***Provision of exchange places.*** The HAB invites different organisations (e.g. non-governmental organisations) and government bureau/departments to nominate suitable candidates for youth delegates (i.e. young people participating in IYEP projects, SEP projects or CEP projects) (paras. 3.3 and 3.4). Audit found that in 2012-13 to 2016-17:

- (a) ***Exchange places in demand but not fully utilised.*** The IYEP was 243% oversubscribed and the SEP was 124% oversubscribed. However, 7% (23 places) of the programme capacity of the IYEP and 12% (22 places) of that of the SEP had not been utilised (para. 3.5); and
- (b) ***Need to better promote CEP places.*** The number of nominations received and recruited for CEP projects had decreased by 43% from 42 in 2012-13 to 24 in 2016-17. In 2016-17, 42% of the budgeted number of the CEP places had not been utilised. The HAB needs to enhance the publicity for the CEP (paras. 3.9 and 3.10).

7. ***Delivery of exchange projects.*** In exchange tours, youth delegates are led by official delegates (i.e. HAB staff and/or members of a working group of the CoY) (para. 3.13). Audit found that:

- (a) ***Need to keep under review the adequacy of manpower support.*** For the 35 exchange projects organised under the programmes of youth exchange in 2012-13 to 2016-17, the ratio of official delegates to youth delegates ranged from 1:3 (i.e. 1 official delegate attending to 3 youth delegates) to 1:25 (i.e. 1 official delegate attending to 25 youth delegates). On the whole, in 9 (26%) of the 35 exchange projects, each official delegate needed to attend to more than 10 youth delegates. To ensure the adequacy of the support provided to participants, the HAB needs to keep under review the manpower support for programmes of youth exchange (paras. 3.14 and 3.16); and
- (b) ***Need to encourage participants to honour their post-trip service commitment.*** For IYEP projects, youth delegates were required to perform at least 50 hours of voluntary services (post-trip services) within one year upon returning from the overseas visit. Of the 308 youth delegates of IYEP projects conducted in 2012-13 to 2016-17, only 103 (33.4%) youth

Executive Summary

delegates reported that they had honoured their post-trip voluntary service commitment (paras. 3.17 and 3.18).

8. *Scope for improving response to outsourcing procurement.* The HAB conducted procurement exercises to outsource logistic services needed for implementing programmes of youth exchange. Audit noted that in 2012-13 to 2016-17, while many quotation invitations were sent out in the 29 procurement exercises, the response rate was only 9.4%. The response rate for the IYEP was particularly low (3.8%) (paras. 3.23, 3.25 and 3.26).

Governance matters and way forward

9. *Need to better engage members' participation.* The CoY and the CPCE each have 30 non-official members. Members have been invited to join working groups/sub-committees to help administer individual funding schemes for youth exchange and internship as well as programmes of youth exchange. Audit reviewed the attendance rates of members of the CoY, the CPCE, and the responsible working groups/sub-committee in 2014-15 to 2016-17. Audit found that in each of the three years, there were members who did not attend any meetings, and the proportion of members who did not attend any meetings was as high as 17% for the CoY's Working Group on Youth Exchange and Internship in the Mainland in 2014-15 (paras. 4.2 and 4.4).

10. *Scope for improving management of conflicts of interest.* The CoY and the CPCE have adopted a two-tier system for their members to declare personal interests. Audit reviewed the first-tier declaration forms submitted by members of the CoY and the CPCE for the years 2014-15 to 2017-18, and found that two CPCE members had not submitted the 2017-18 declaration forms and one CoY member had submitted an incomplete declaration form. Audit further examined the second-tier declaration forms submitted by 20 members of the CoY/CPCE for the years 2014-15 to 2017-18. Audit found that: (a) in 21 cases (involving 3 members), despite that potential conflicts of interest had been declared in the second-tier declaration forms, duties of assessing project proposals were still assigned to the members. For each case, the decisions on declared interests had not been documented in the minutes of meetings; and (b) to identify CoY/CPCE members who had potential conflicts of interest in handling assessment of project proposals, HAB staff manually matched declarations in the second-tier declaration forms with those in the first-tier declaration

Executive Summary

forms. The HAB did not have a computerised database to maintain the information on interests declared by members to facilitate checking and following-up of any omissions or inconsistencies in declarations (paras. 4.7, 4.8 and 4.11).

11. **Way forward.** The HAB's provision of youth exchange and internship activities has been mainly focused on projects in the Mainland. In the four years between 2012-13 and 2015-16, of the 726 projects of youth exchange and internship conducted, only 24 (3.3%) projects were conducted in other countries to provide international exchange experience. In 2016-17, the BnRFS was launched, bringing about an increase in the proportion of projects which provided international experience. In 2016-17, of the 359 projects conducted, 33 (9.2%) projects were conducted in other countries. Audit, however, noted that all the international projects were related to exchange activities. In 2012-13 to 2016-17, there were no projects which provided international internship places. Audit also noted that during the period 2012-13 to 2016-17, the vast majority (97% by expenditure) of exchange and internship activities were delivered under the funding schemes. According to the HAB, in comparison with programmes of youth exchange organised by the HAB directly, funding schemes have been more efficient as well as effective in promoting youth exchange projects in the community (paras. 4.14, 4.16, and 4.17).

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 Secretary for Home Affairs should:**

Management of funding schemes for youth exchange and internship

- (a) **keep under review the need for conducting assessment interviews for the different funding schemes for youth exchange and internship (para. 2.16(a));**
- (b) **regularly review the adequacy of practices on assessing project proposals, and take measures to enhance the assessment process where necessary (para. 2.16(b));**
- (c) **ensure that adequate funding guidelines are provided to HAB staff to facilitate the granting of sponsorship (para. 2.16(d));**

Executive Summary

- (d) **monitor the implementation of the new requirement on the minimum number of participants for YEFS projects, and keep in view the need for revising the minimum number having regard to the actual experience gained in implementation (para. 2.26(a));**
- (e) **closely monitor the submission of activity reports and financial reports, and take prompt action to follow up any late submission cases (para. 2.26(c));**
- (f) **strengthen liaison with organisations with a view to identifying any intended cancellation of projects and take necessary follow-up actions (para. 2.34(a));**

Provision of programmes of youth exchange

- (g) **explore ways to maximise the utilisation of the programme capacities of the IYEP and the SEP (para. 3.11(a));**
- (h) **enhance the publicity for the CEP (para. 3.11(b));**
- (i) **keep under review the manpower support for the programmes of youth exchange, with a view to ensuring the adequacy of support (para. 3.21(a));**
- (j) **in devising post-trip service requirements in future, be mindful of the need for securing delegates' compliance with the requirements (para. 3.21(b));**
- (k) **take measures to improve the response rate of service providers (para. 3.28(b));**

Governance matters and way forward

- (l) **take measures to improve members' attendance at meetings (para. 4.5);**
- (m) **take measures to prevent recurrence of late/incomplete submission of declarations of interests of CoY/CPCE members (para. 4.12(a));**

Executive Summary

- (n) **ensure that decisions on declared interests of CoY/CPCE members are documented in minutes of meetings (para. 4.12(b));**
- (o) **consider setting up a computerised database of interests declared by members (para. 4.12(c));**
- (p) **consider introducing internship projects that provide internship places in other countries (para. 4.20(a));**
- (q) **explore more countries for youth exchange activities so as to further broaden the youth's horizon (para. 4.20(b)); and**
- (r) **review the way forward of providing activities through the programmes of youth exchange (para. 4.20(d)).**

Response from the Government

13. The Secretary for Home Affairs 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 Home Affairs Bureau (HAB) is responsible for promoting youth development and civic education outside schools (Note 1). According to the HAB, the policy objectives on youth development and civic education outside schools are:

Youth development

- (a) fostering a culture of multi-faceted excellence and providing diversified learning, training and development opportunities to young people who have different aspirations;
- (b) encouraging them to develop an active approach to life and a positive sense of social awareness;
- (c) deepening their understanding in the developments of Hong Kong and the Mainland;
- (d) broadening their global perspectives;
- (e) allowing them to thoroughly understand their individual rights and be happy to take on social obligations;

Civic education outside schools

- (f) fostering good citizenship;

Note 1: *The HAB's work in promoting youth development and civic education outside schools falls under its programme area of Youth Development, Social Harmony and Civic Education. The HAB's other programme areas include: District, Community and Public Relations; Recreation, Sport and Entertainment Licensing; and Culture.*

Introduction

- (g) promoting civic awareness and civic responsibilities;
- (h) promoting national education and enhancing the sense of belonging among the community;
- (i) promoting understanding of and respect for core civic values and the rule of law; and
- (j) promoting the Basic Law in the local community.

1.3 In pursuing the objectives on youth development and civic education outside schools, the HAB provides exchange and internship activities (Note 2) outside Hong Kong to young people in the age range between 12 and 29 to expose them to diverse economic, social and cultural surroundings at the national as well as international level to broaden their perspectives, and to enhance their inclusiveness of

Note 2: *To promote youth development and civic education outside schools, in addition to providing exchange and internship activities, the HAB also has other initiatives including:*

- (a) **Uniformed groups.** *Subventions are provided to 11 uniformed groups (e.g. the Scout Association of Hong Kong, the Hong Kong Air Cadet Corps, and the Hong Kong Red Cross) for providing non-formal education and training programmes for young people;*
- (b) **Youth Development Fund.** *The Fund was set up in July 2016 to assist young people in starting their own business;*
- (c) **Youth Hostels.** *Six projects (the Po Leung Kuk's project and the Hong Kong Sheng Kung Hui Welfare Council Limited's project in Yuen Long, the Hong Kong Federation of Youth Groups' project in Tai Po, the Tung Wah Group of Hospitals' project in Sheung Wan, the Hong Kong Association of Youth Development's project in Mong Kok and the Hong Kong Girl Guides Association's project in Jordan) under the Youth Hostel Scheme are underway;*
- (d) **Youth Square.** *The Youth Square serves as a focal point for youth development activities by providing venues and facilities to young people and youth organisations at affordable prices; and*
- (e) **Youth Volunteerism.** *The United Nations Volunteers — Hong Kong Universities Volunteer Programme was launched in 2015 to provide opportunities for university students to participate in overseas voluntary work.*

These other initiatives are not the subject of this audit review.

other cultures. To provide the activities, the HAB runs four funding schemes for youth exchange and internship, and three programmes of youth exchange (Note 3):

- (a) Funding Scheme for Youth Exchange in the Mainland (YEFS);
- (b) Funding Scheme for Youth Internship in the Mainland (YIFS);
- (c) Funding Scheme for Exchange in Belt and Road Countries (BnRFS);
- (d) Funding Scheme for International Youth Exchange (IYEFS);
- (e) International Youth Exchange Programme (IYEP);
- (f) Summer Exchange Programme (SEP); and
- (g) Guangdong-Hongkong-Macao Youth Cultural Exchange Programme (CEP).

Commission on Youth and Committee on the Promotion of Civic Education

1.4 To implement the funding schemes for youth exchange and internship and the programmes of youth exchange, the HAB works closely with two non-statutory bodies established under its purview:

- (a) ***Commission on Youth (CoY)***. The CoY was set up in 1990 as an advisory body. Its vision is to foster a culture of multi-faceted excellence, and to

Note 3: *Other government bureaux/departments and their subvented non-governmental organisations also run youth exchange/internship programmes. For example, the Education Bureau provides subsidies for students of primary and secondary schools as well as tertiary institutions to attend exchange tours for enrichment of students' learning experiences. The Hong Kong Arts Development Council provides scholarships to arts practitioners with leadership potential for a full-time programme in the United Kingdom. This audit review covers only the HAB's exchange and internship activities (see also para. 1.13), which focus on the youth's overall development and development of civic awareness. An audit review on the Youth Square (see Note 2(d) to para. 1.3) had been conducted in March 2012 (Chapter 8 of the Director of Audit's Report No. 58).*

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nurture young people as future masters of Hong Kong with vision, creativity, leadership and commitment (Note 4); and

- (b) *Committee on the Promotion of Civic Education (CPCE)*. The CPCE was set up in 1986 as an advisory body to promote civic education outside schools and encourage all sectors of the community to actively promote civic awareness and assume civic responsibility.

In addition to advising matters relating to youth development and civic education outside schools, the CoY and the CPCE are also responsible for vetting and approving project proposals for the four funding schemes for youth exchange and internship (see Table 1 in para. 1.8). Furthermore, the CoY helps recruit young people for programmes of youth exchange and arranges for its members to attend such programmes (see paras. 3.2(a) and 3.4).

1.5 Members of the CoY and the CPCE are appointed by the Secretary for Home Affairs. The members comprise non-official members from different backgrounds (e.g. District Council members and academics) and ex-officio members who are representatives of government bureaux and departments (e.g. the HAB, the Education Bureau and the Social Welfare Department). The CoY has 30 non-official members (including a chairman) and 5 ex-officio members, while the CPCE has 30 non-official members (including a chairman) and 8 ex-officio members. Organisation charts of the CoY and the CPCE as at 31 December 2017 are shown at Appendices A and B respectively.

Note 4: *In April 2018, the Government established the Youth Development Commission (YDC). The YDC is chaired by the Chief Secretary for Administration and consists of a vice-chairman, 34 non-official and eight ex-officio members. According to the Government, the CoY will be incorporated into the YDC. The establishment of the YDC is to enhance co-ordination of youth policy within the Government. This will enable holistic and more effective examination of, and discussion on, issues of concern to young people. The YDC will give specific attention to issues on youth education, career pursuit and home ownership as well as the participation of young people in politics and their engagement in public policy discussion and debate.*

1.6 To assist the CoY and the CPCE, working groups/sub-committees (Note 5) are formed under the CoY and the CPCE. Terms of reference for the CoY/CPCE and the working groups/sub-committee relevant to this audit review (i.e. funding schemes for youth exchange and internship, and programmes of youth exchange) are shown at Appendices C and D respectively. The HAB also provides secretariat services to the CoY and the CPCE (see para. 1.12).

Funding schemes for youth exchange and internship

1.7 Under the HAB's funding schemes for youth exchange and internship, organisations (see Table 1 "Applicant for sponsorship" in para. 1.8 for more information) can apply for HAB sponsorship to organise projects of exchange and internship activities for young people. Activities comprise:

- (a) *Exchange and internship activities.* The HAB sponsors these activities according to a prescribed maximum grant for each participant. The amount of grant varies according to the tour destination (e.g. \$280 per day for each participant in an exchange tour to Guangdong Province in 2016-17); and
- (b) *Complementary activities.* These activities take place outside the destinations of exchange/internship and include those such as pre-trip team building and training activities, post-trip debriefing and learning reflection sessions, publicity, and the conduct of audit on the financial report of the project. Expenses for such activities are reimbursed on an actual basis, subject to sponsorship limits of individual expenditure items/activities.

Organisations are responsible for recruiting young people to participate in exchange and internship activities. They need to bear any activity expenses that exceed the amount of sponsorship or are not covered by the sponsorship, and may require participants to pay a fee which varies depending on the tour destination and duration, for example, \$580 in a YEFS project and \$8,960 in a BnRFS project in 2016-17 (Note 6).

Note 5: *Members of working groups/sub-committees consist of members of the CoY/CPCE and co-opted members.*

Note 6: *The YEFS project and the BnRFS project are examples quoted from the projects examined by the Audit Commission (see Note 10 to para. 2.5).*

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1.8 Salient features of the four funding schemes for youth exchange and internship are summarised in Table 1.

Table 1
Four funding schemes for youth exchange and internship
(December 2017)

	YEFS	YIFS	BnRFS	IYEFS (Note 1)
Established in	November 2013 (Note 2)	September 2013 (Note 2)	April 2016	June 2017
Objective	<ul style="list-style-type: none"> • Enhancing Hong Kong youth's awareness and understanding of the Mainland • Fostering exchange with the Mainland people • Strengthening the youth's sense of national identity 	<ul style="list-style-type: none"> • Providing young people with more internship opportunities in the Mainland • Enabling young people to have personal experience of actual workplace environment in the Mainland and a deeper understanding of the employment market, work culture and development opportunities in the Mainland 	<ul style="list-style-type: none"> • Promoting in-depth exchange between young people participating in the exchange projects and people of the Belt and Road countries, so as to achieve the target of fostering "people-to-people bond" 	<ul style="list-style-type: none"> • Providing more opportunities to join in-depth international exchange activities for young people • Encouraging young people to increase their global exposure • Broadening young people's international horizons

Source: HAB records

Note 1: Apart from the IYEFS, which has a financial commitment of \$100 million, there is no preset financial commitment for the other three funding schemes for youth exchange and internship. The three funding schemes (the YEFS, the YIFS and the BnRFS) are financed through the HAB's recurrent expenditure while the IYEFS is financed through the HAB's non-recurrent expenditure.

Note 2: In 1998-99, the HAB started a programme to sponsor both exchange and internship activities in the Mainland. In 2013, the programme was divided into two separate funding schemes, i.e. the YEFS for sponsoring youth exchange activities in the Mainland, and the YIFS for sponsoring youth internship activities in the Mainland.

Table 1
(Cont'd)

	YEFS	YIFS	BnRFS	IYEFS
Objective		<ul style="list-style-type: none"> Helping young people set the goal for their future careers, gain more working experience and establish business contacts, so as to enhance their personal competitiveness in employment 		
Project	Exchange tours to the Mainland	Internship tours to the Mainland	Exchange tours to Belt and Road countries (Note 3)	International exchange tours (Note 4)
Tour duration (Note 5)	3 to 12 days	18 to 34 days	4 to 11 days	9 to 19 days
Applicant for sponsorship	<ul style="list-style-type: none"> Non-profit-making organisations Statutory bodies Charitable organisations 			

Source: HAB records

Note 3: According to the HAB, the BnRFS covers over 60 countries along the Belt and Road (e.g. Azerbaijan, Czech Republic, Indonesia, Israel, Kazakhstan, Malaysia, Nepal, Poland, and Sri Lanka).

Note 4: International exchange tours include tours to Argentina, Australia, Belgium, Brazil, Cambodia, Chile, Columbia, Czech Republic, France, Germany, Hungary, Japan, Laos, Luxembourg, Myanmar, Nepal, Netherlands, Peru, Poland, Romania, Sri Lanka, Switzerland, Thailand, the United Kingdom and the United States.

Note 5: The tour duration figures are quoted from projects examined by the Audit Commission (see Note 10 to para. 2.5).

Introduction

**Table 1
(Cont'd)**

	YEFS	YIFS	BnRFS	IYEFS
Project vetting	CoY's Working Group on Youth Exchange and Internship in the Mainland	CoY's Working Group on Youth Exchange and Internship in the Mainland	CPCE's Research, Development and Community Participation Sub-committee	Members from the CoY's Working Group on International Exchanges and Conferences, and the CPCE's Research, Development and Community Participation Sub-committee
Eligible participant	People aged between 12 and 29 who are holders of a valid Hong Kong Identity (HKID) card and have not participated in any projects of the YEFS in the current year and the one before	People aged between 18 and 29 who are holders of a valid HKID card and have not participated in any projects of the YIFS in the current year and the one before	People aged between 15 and 29 who are holders of a valid HKID card	

Source: HAB records

Programmes of youth exchange

1.9 Unlike in the aforementioned funding schemes where exchange and internship opportunities are offered and provided to young people through sponsored organisations, the HAB organises exchange projects on its own under the programmes of youth exchange. To this end, the HAB calls for nomination of youth participants from local universities/educational institutes, uniformed groups, non-governmental organisations (NGOs) and/or relevant government bureau/departments as appropriate and commissions service providers to assist in tour arrangements for the exchange projects. Programme expenses such as air fares as well as board and lodging are provided by the HAB/overseas host parties as appropriate.

1.10 Salient features of the three programmes of youth exchange are summarised in Table 2.

Table 2

**Programmes of youth exchange
(December 2017)**

	IYEP	SEP	CEP
Established in	1996 (Note 1)	May 2011	February 2009
Objective	<ul style="list-style-type: none"> • Providing opportunities for youths to broaden their horizons and international perspectives • Exchanging ideas and experiences with youth's overseas counterparts 	<ul style="list-style-type: none"> • Providing local young people with an opportunity to broaden their horizons • Enhancing young people's interpersonal skills • Cultivating young people's ability to think from multiple perspectives 	<ul style="list-style-type: none"> • Enhancing Hong Kong young people's awareness and understanding of the home country • Fostering exchange with young people's counterparts in Guangdong • Strengthening young people's sense of national identity

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Table 2
(Cont'd)

	IYEP	SEP	CEP
Project	The HAB liaises with governments/ their appointed organisations of overseas partner countries (e.g. Australia, Ireland, Japan and Singapore) to arrange youth exchange projects	The HAB arranges overseas thematic tours during summer holidays	The HAB collaborates with the Department of Culture of Guangdong Province and the Tertiary Education Services Office of the Macao Special Administrative Region Government to arrange youth exchange projects
Programme duration	7 to 11 days	6 days	About 10 days
Eligible participant	People aged between 18 and 24 who are holders of a valid HKID card and have not participated in the SEP or the previous IYEP	People aged between 15 and 24 who are holders of a valid HKID card and have not participated in the IYEP or the previous SEP (except for youth team leaders — Note 2)	People aged between 18 and 24 who are holders of a valid HKID card and students of post-secondary institutions (or equivalent)

Source: HAB records

Note 1: The programme first started in 1979 under the name of “Commonwealth Exchange Programme” with exchanges of youth between Hong Kong and the United Kingdom. In 1996, the scope of the programme was extended to cover other countries and has since been renamed as the IYEP.

Note 2: To help conduct exchange projects, the HAB may recruit young people who have satisfactorily attended related activities (e.g. activities of IYEP projects) as team leaders of other youth participants.

Remarks: All three programmes are financed through the HAB’s recurrent expenditure.

Projects and expenditure

1.11 Table 3 shows data relating to projects of youth exchange and internship activities conducted in 2016-17. Tables 4 to 6 show similar data for the five-year period 2012-13 to 2016-17. Compared with 2012-13, the number of projects, the number of participants, and the expenditure of exchange and internship activities had increased by 162%, 161% and 384% respectively in 2016-17.

Table 3

Projects of youth exchange and internship activities
(2016-17)

Funding scheme/ programme	No. of projects (a)	No. of participants (b)	Expenditure (c) (\$ million)	Expenditure per project (d) = (c) ÷ (a) (\$)	Expenditure per participant (e) = (c) ÷ (b) (\$)
<i>Funding scheme for youth exchange and internship (Note 1)</i>					
YEFS	234	18,475	55.7	238,034	3,015
YIFS (Note 2)	91	3,637	64.5	708,791	17,734
BnRFS	27	648	5.2	192,593	8,025
IYEFS (Note 3)	N.A.	N.A.	N.A.	N.A.	N.A.
Overall	352	22,760	125.4	356,250	5,510
<i>Programme of youth exchange</i>					
IYEP (Note 4)	5	62	1.5	300,000	24,194
SEP	1	36	0.4	424,290	11,786
CEP	1	35	0.4 (Note 5)	375,426	10,726
Overall	7	133	2.3	328,571	17,293
Overall for funding schemes and programmes	359	22,893	127.7	355,710	5,578

Source: HAB records

Note 1: The Table does not include projects for which sponsorship had been approved by the HAB but subsequently not taken forward.

Note 2: According to the HAB, comparing with other funding schemes, the higher expenditure per participant for the YIFS was due to the longer duration of the projects.

Note 3: The IYEFS was launched in June 2017 (i.e. 2017-18). As at 31 December 2017 (the time of audit), 33 IYEFS projects had been approved but not yet completed.

Note 4: According to the HAB, as the IYEP had a longer duration and usually involved visiting distant countries, the expenditure per participant was higher than that of the SEP and the CEP.

Note 5: The figure includes expenditure incurred for 35 Hong Kong participants as well as certain expenditure incurred for their counterparts (i.e. young people from Guangdong and Macao joining exchange activities held in Hong Kong). According to the HAB, the established arrangement was for the host cities (e.g. Hong Kong) to fully bear the expenditure for activities held in the city.

Table 4
Projects of youth exchange and internship activities
(2012-13 to 2016-17)

Funding scheme/ programme	No. of projects				
	2012-13	2013-14	2014-15	2015-16	2016-17
<i>Funding scheme</i>					
YEFS	131	112	119	220	234
YIFS	(Note 1)	(Note 1)	37	79	91
BnRFS (Note 2)	N.A.	N.A.	N.A.	N.A.	27
IYEFS (Note 3)	N.A.	N.A.	N.A.	N.A.	N.A.
<i>Programme</i>					
IYEP	4	3	7	6	5
SEP	1	1	1	1	1
CEP	1	1	1	1	1
Total	137	117	165	307	359

Source: HAB records

Note 1: Prior to 2014-15, both youth exchange projects and youth internship projects were organised under the programme “Community Participation Scheme for Organising Study Tours to the Mainland” (see Note 2 to Table 1 in para. 1.8). Breakdown for the two types of projects is not available.

Note 2: The BnRFS was launched in April 2016 (i.e. 2016-17).

Note 3: The IYEFS was launched in June 2017 (i.e. 2017-18). As at 31 December 2017 (the time of audit), 33 IYEFS projects had been approved but not yet completed.

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Table 5

**Participants in projects of youth exchange and internship activities
(2012-13 to 2016-17)**

Funding scheme/ programme	No. of participants				
	2012-13	2013-14	2014-15	2015-16	2016-17
<i>Funding scheme</i>					
YEFS	8,627	9,138	10,210	18,404	18,475
YIFS	(Note 1)	(Note 1)	1,604	3,373	3,637
BnRFS (Note 2)	N.A.	N.A.	N.A.	N.A.	648
IYEFS (Note 3)	N.A.	N.A.	N.A.	N.A.	N.A.
<i>Programme</i>					
IYEP	65	43	72	66	62
SEP	40	42	44	48	36
CEP	42	44	50	33	35
Total	8,774	9,267	11,980	21,924	22,893

Source: HAB records

Note 1: Prior to 2014-15, both youth exchange projects and youth internship projects were organised under the programme "Community Participation Scheme for Organising Study Tours to the Mainland" (see Note 2 to Table 1 in para. 1.8). Breakdown for the two types of projects is not available.

Note 2: The BnRFS was launched in April 2016 (i.e. 2016-17).

Note 3: The IYEFS was launched in June 2017 (i.e. 2017-18). As at 31 December 2017 (the time of audit), 33 IYEFS projects had been approved but not yet completed.

Table 6

**Expenditure on projects of youth exchange and internship activities
(2012-13 to 2016-17)**

Funding scheme/ programme	Expenditure (\$ million)				
	2012-13	2013-14	2014-15	2015-16	2016-17
<i>Funding scheme</i>					
YEFS	23.8	23.8	24.0	48.8	55.7
YIFS	(Note 1)	(Note 1)	23.0	53.7	64.5
BnRFS (Note 2)	N.A.	N.A.	N.A.	N.A.	5.2
IYEFS (Note 3)	N.A.	N.A.	N.A.	N.A.	N.A.
<i>Programme</i>					
IYEP	1.6	0.8	1.6	1.3	1.5
SEP	0.5	0.3	0.5	0.5	0.4
CEP	0.5	0.5	0.5	0.4	0.4
Total	26.4	25.4	49.6	104.7	127.7

Source: HAB records

Note 1: Prior to 2014-15, both youth exchange projects and youth internship projects were organised under the programme "Community Participation Scheme for Organising Study Tours to the Mainland" (see Note 2 to Table 1 in para. 1.8). Breakdown for the two types of projects is not available.

Note 2: The BnRFS was launched in April 2016 (i.e. 2016-17).

Note 3: The IYEFS was launched in June 2017 (i.e. 2017-18). As at 31 December 2017 (the time of audit), 33 IYEFS projects had been approved but not yet completed.

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HAB responsible staff

1.12 An extract of the organisation chart of the HAB showing staff responsible for the provision of youth exchange and internship activities (including the provision of secretariat services to the CoY and the CPCE — see para. 1.6) is at Appendix E.

Audit review

1.13 In November 2017, the Audit Commission (Audit) commenced a review to examine the provision of youth exchange and internship activities by the HAB. The review focused on the following areas:

- (a) management of funding schemes for youth exchange and internship (PART 2);
- (b) provision of programmes of youth exchange (PART 3); and
- (c) governance matters and way forward (PART 4).

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

General response from the Government

1.14 The Secretary for Home Affairs agrees with the audit recommendations.

Acknowledgement

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

PART 2: MANAGEMENT OF FUNDING SCHEMES FOR YOUTH EXCHANGE AND INTERNSHIP

2.1 This PART examines the HAB's management of funding schemes for youth exchange and internship, focusing on the following areas:

- (a) granting of sponsorship (paras. 2.2 to 2.17);
- (b) monitoring of funding schemes (paras. 2.18 to 2.27); and
- (c) management of cancelled projects (paras. 2.28 to 2.35).

Granting of sponsorship

2.2 Through its four funding schemes (i.e. YEFS, YIFS, BnRFS and IYEFS), the HAB grants sponsorship to organisations for conducting projects of youth exchange and internship (sample itineraries of exchange projects and internship projects are shown at Appendix F). The HAB has laid down guidelines on application for sponsorship and has issued guidelines on the use of sponsorship (hereinafter collectively referred to as funding guidelines — Note 7).

2.3 To apply for sponsorship, organisations submit project proposals to the HAB for assessment:

Note 7: *Guidelines on application for sponsorship cover matters such as the maximum amount of sponsorship for a project and that for an organisation. Guidelines on the use of sponsorship cover matters such as the need for an organisation to submit an activity report (providing information on the conduct of the project) and a financial report (providing financial information on the project). Both the activity report and financial report should be submitted to the HAB within three months after the completion of the project.*

Management of funding schemes for youth exchange and internship

- (a) **Marking scheme.** On behalf of the HAB, relevant authorities (see “project vetting” of Table 1 in para. 1.8) assess project proposals according to a marking scheme. Marks are awarded to proposals for elements such as the content of the project, experience of the organisation, intended number of participants and cost-effectiveness of the project (Note 8);
- (b) **Merit-point and demerit-point system.** Marks awarded through the marking scheme (see (a) above) are further adjusted by a merit-point and demerit-point system to arrive at a final score. Under the system, the relevant authorities give additional marks for merits (e.g. arranging exchange activities in rest days) and deduct marks for demerits (e.g. organisation violating funding guidelines in the past); and
- (c) **Vetting of sponsorship.** For project proposals whose final score reaches/exceeds the passing mark, the HAB ranks the projects according to their scores. For each project, the HAB vets the intended number of participants and the proposed project expenditure, and calculates the amount of sponsorship. Subject to the availability of funding, the HAB sets aside funding for individual projects’ sponsorship in the order of their rankings.

Projects for which funding has been set aside are referred to as “approved” by the HAB. Funding for sponsorship is earmarked under the Estimates of the HAB (Note 9).

2.4 Table 7 shows, for 2012-13 to 2016-17, the number of project proposals received, approved and conducted.

Note 8: *As an example, in 2016-17, the assessment criteria laid down in the marking scheme of the YEFS included content of exchange portion of the project proposal; pre-trip arrangement and promotion; post-trip evaluation and assessment; experience, background and track record of the organisation and itinerary arrangement; and target, number of participants and cost-effectiveness of the project. Different funding schemes have different elements.*

Note 9: *Funding for the YEFS, YIFS and BnRFS is provided under the item “964 Youth Development Activities”, while funding for the IYEFS is provided under the subhead “700 International Youth Exchange Programme”.*

Management of funding schemes for youth exchange and internship

Table 7

Projects under the funding schemes for youth exchange and internship (2012-13 to 2016-17)

	No. of projects					
	2012-13	2013-14	2014-15	2015-16	2016-17	All five years
<i>Project proposals received (a)</i>						
YEFS	295	292	227	343	311	1,729
YIFS	(Note 1)	(Note 1)	52	92	117	
BnRFS (Note 2)	N.A.	N.A.	N.A.	N.A.	103	103
IYEFS (Note 3)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Total	295	292	279	435	531	1,832
<i>Projects approved (b)</i>						
YEFS	142	123	135	253	265	1,131
YIFS			38	80	95	
BnRFS	N.A.	N.A.	N.A.	N.A.	29	29
IYEFS	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Total	142	123	173	333	389	1,160
<i>Projects cancelled (c) (Note 4)</i>						
YEFS	11	11	16	33	31	108
YIFS			1	1	4	
BnRFS	N.A.	N.A.	N.A.	N.A.	2	2
IYEFS	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Total	11	11	17	34	37	110
<i>Projects conducted (d) = (b) - (c)</i>						
YEFS	131	112	119	220	234	1,023
YIFS			37	79	91	
BnRFS	N.A.	N.A.	N.A.	N.A.	27	27
IYEFS	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Total	131	112	156	299	352	1,050

Source: HAB records

Note 1: Prior to 2014-15, both youth exchange projects and youth internship projects were organised under the programme "Community Participation Scheme for Organising Study Tours to the Mainland" (see Note 2 to Table 1 in para. 1.8).

Note 2: The BnRFS was launched in April 2016 (i.e. 2016-17).

Note 3: The IYEFS was launched in June 2017 (i.e. 2017-18). As at 31 December 2017 (the time of audit), 33 IYEFS projects had been approved but not yet completed.

Note 4: Organisations cancelled the proposed projects (see paras. 2.28 to 2.33).

Management of funding schemes for youth exchange and internship

2.5 Audit randomly selected 60 exchange/internship projects of the four funding schemes (i.e. YEFS, YIFS, BnRFS and the IYEFS) for examination, covering the period April 2012 to December 2017 (Note 10).

Need to improve assessment of project proposals

2.6 Audit examination of the 60 projects indicated areas that warrant attention:

- (a) ***No assessment interviews for YEFS and IYEFS projects.*** In assessment interviews, representatives of applicant organisations were invited to present their project proposals and address the relevant authorities' (see "project vetting" of Table 1 in para. 1.8) enquiries. According to the HAB, assessment interviews were conducted on a need basis, having regard to the nature and individual circumstances of the funding schemes concerned, and whether the benefits of assessment interviews would outweigh the costs involved and the burden created upon interviewers who were non-official CoY/CPCE members. Audit noted that, of the 60 projects, assessment interviews had been conducted for all YIFS and BnRFS projects. However, for YEFS and IYEFS projects, no assessment interviews had been conducted; and
- (b) ***Granting sponsorship to an organisation with less than satisfactory track record.*** In one case, YEFS sponsorship was granted to an organisation whose track record was less than satisfactory (see Case 1).

Note 10: *The 60 projects comprised:*

- (a) *55 projects (i.e. 30 YEFS projects, 20 YIFS projects, and 5 BnRFS projects) conducted in 2012-13 to 2016-17. Audit reviewed the assessment, delivery and monitoring of these projects. Projects for 2017-18 were still in progress at the time of audit and therefore not selected for review; and*
- (b) *5 IYEFS projects approved during June 2017 (date of launch of the IYEFS) to December 2017 (related records were the latest available at the time of audit). As the delivery and monitoring of these projects were still in progress at the time of audit, Audit only reviewed the assessment of these projects.*

Case 1

**Granting of YEFS sponsorship to an organisation
with less than satisfactory track record
(2016-17)**

1. Organisation A submitted a proposal for a YEFS project in 2016-17. An exchange tour was to be conducted.
2. Organisation A had previously conducted the same project (i.e. same tour with same destination, same duration, and same capacity of 150 places for young people). HAB records indicated that in 2014-15 and 2015-16:
 - (a) ***Many places not taken up in 2014-15 and 2015-16.*** Organisation A conducted the project three times each year in 2014-15 and 2015-16, targetting to recruit 150 participants in each of the projects. Of the 450 places provided each year (i.e. 150 participants per project × 3), 292 (65%) places and 113 (25%) places were taken up in 2014-15 and 2015-16 respectively, while 158 (35%) places and 337 (75%) places were not taken up; and
 - (b) ***Non-compliance with funding guidelines in 2015-16.*** According to the funding guidelines, within three months after the completion of each project, Organisation A should submit to the HAB an activity report providing information on the conduct of the project and a financial report providing financial information of the project. Audit, however, noted that for the three projects conducted in 2015-16:
 - (i) Organisation A only submitted the financial reports of the projects after October 2017, i.e. after some 17 months had elapsed since the final project was completed; and
 - (ii) as at 31 December 2017, i.e. after more than 19 months had elapsed since the final project was completed, Organisation A still had not submitted the activity reports of the projects.

(to be continued)

(Cont'd)

3. The relevant authorities assessed the 2016-17 project proposal and awarded a total score which was higher than the passing mark. The project was accordingly approved with a sponsorship of \$134,000. According to the HAB:

- (a) while the project did not receive a high sub-score in terms of track record, it obtained a better sub-score in some areas such as the intended number of participants; and
- (b) while the participation rate was not high (see para. 2(a) above), a respectable number of participants benefitted from the programme.

HAB records further indicated that due to Organisation A's delay in reporting information on the projects conducted in 2015-16 (see para. 2(b) above), the actual number of participants for 2015-16 was not available when the 2016-17 project proposal was assessed.

4. Organisation A conducted the 2016-17 project which, as in the past, was not well received. Vis-à-vis a capacity of 150 places, the project had only 25 participants.

Audit comments

5. The project proposal was approved despite Organisation A's less than satisfactory track record. The same project was conducted again in 2016-17.

Source: Audit analysis of HAB records

2.7 Upon enquiry, the HAB informed Audit in March 2018 that:

- (a) assessment interviews were conducted on a need basis (see para. 2.6(a)). With the experience accumulated over the years, panels conducting assessments would normally be able to make comprehensive assessments of the merits of applications for short-term exchange projects on the basis of written submissions, including the proposed itineraries and description of proposed activities, as well as track records:

Management of funding schemes for youth exchange and internship

- (i) as regards the BnRFS, since it was the first funding scheme targeting overseas destinations at the time it was introduced in April 2016, the assessment panel concerned did not have sufficient information and experience (e.g. in relation to the appropriateness of itinerary and track records) in assessing applications for exchange projects to overseas destinations. Accordingly, assessment interviews were conducted for the first two rounds of applications (i.e. initial stage of the funding scheme) to obtain a better understanding of the projects; and
 - (ii) for the IYEFS, though newly launched in June 2017, it was largely modelled on the BnRFS. With the experience gained from the two rounds of assessment conducted under the BnRFS, it was decided that no assessment interviews were required for the IYEFS; and
- (b) for granting sponsorship despite less than satisfactory track records:
- (i) the decision on whether to grant sponsorship to a particular application was made by the relevant assessment panel having regard to a host of relevant factors. Apart from track records, the diversity of projects (including location, theme or nature) was also an important aspect to be considered;
 - (ii) it was considered that assessment panels should not only support popular projects that appeal to the general youth population, but should also try out different types of projects that could broaden the horizon of the young people despite their being less popular; and
 - (iii) while the actual participation might be lower than the target participation, participation depended on various factors, including those outside the organisation's control.

2.8 Audit notes the above explanations for the HAB's practices. However, it is also worth noting that:

- (a) the IYEFS was newly rolled out in June 2017. At the time of audit in December 2017, the delivery and monitoring of the first batch of IYEFS

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projects were still in progress (see also Note 10(b) to para. 2.5). In Audit's view, before accumulating more experience in conducting IYEFS projects, it would be prudent for the HAB to consider conducting assessment interviews for the scheme; and

- (b) regarding the granting of sponsorship to Organisation A, HAB records indicated that apart from the project proposal mentioned in Case 1 (see para. 2.6(b)), Organisation A had also submitted two more project proposals for conducting the same tour under the YEFS in 2016-17 (each proposal was for conducting one tour) (Note 11). HAB records further indicated that while these two project proposals had been approved, one tour turned out to have 51 participants (out of a capacity of 150 places) and the other tour was subsequently cancelled by Organisation A due to low enrolment. This showed that Organisation A's project was not well received and might not be viable.

In this respect, Audit notes that the number of participants under the YEFS and the YIFS are key performance indicators in the Controlling Officer's Report of the HAB. HAB's assessment process should seek to identify projects which can benefit more young people.

2.9 Audit considers that the HAB needs to keep under review the need for conducting assessment interviews for the different funding schemes for youth exchange and internship, taking into account relevant factors such as sufficiency of experience in assessing project proposals based on information contained in paper submissions, and changes in the scope and extensiveness of exchange projects. Moreover, the HAB needs to regularly review the adequacy of practices on assessing project proposals (covering such elements as the marking scheme, merit-point and demerit-point system, and passing mark), and based on the review results, take measures to enhance the assessment process where necessary, with a view to better taking into account the past track records of applicant organisations (e.g. track records of late submission of activity reports).

Note 11: *The two proposals were outside the 60 projects examined by Audit (see para. 2.5).*

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Need to ensure consistency in granting sponsorship

2.10 In the 60 projects examined (see para. 2.5), Audit noted that there was room for better ensuring consistency in granting the amount of sponsorship:

- (a) *Expenses on complementary activities varied widely.* Audit noted that:
- (i) the funding guidelines stipulated the sponsorship limits of individual complementary activities (see para. 1.7(b)) (Note 12). Audit analysis of the 60 projects showed that the sponsorship for overall complementary activities varied widely, accounting for 0% to 61% of the total sponsorship for a project (see Table 8); and

Table 8

**Proportion of sponsorship for complementary activities in 60 projects
(2012-13 to 2016-17)**

Funding scheme	Lowest proportion			Highest proportion		
	Sponsorship for complementary activities (\$)	Total sponsorship (\$)	Proportion	Sponsorship for complementary activities (\$)	Total sponsorship (\$)	Proportion
YEFS	6,500	409,700	2%	134,900	220,900	61%
YIFS	42,048	848,448	5%	130,219	380,923	34%
BnRFS	0	140,000	0%	56,069	117,269	48%
IYEFS	0	400,000	0%	41,785	226,748	18%

Source: Audit analysis of HAB records

Note 12: *In 2016-17, the funding guidelines stipulated a total of 15 complementary activities which were subject to individual sponsorship limits. For example, the sponsorship for publicity, which was one of the complementary activities, was capped at 10% of the approved expenditure of the project.*

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- (ii) in 2017-18, the HAB imposed a sponsorship limit on the overall complementary activities of YIFS projects (i.e. 25% of the total sponsorship for a project or \$200,000, whichever was lower). However, no limit had been set for the other three funding schemes which were related to exchange projects (i.e. YEFS, BnRFS and IYEFS); and

- (b) ***Sponsorship rate not applied in consistent manner.*** In two projects, the calculation of sponsorship was at variance with each other (see Case 2).

Case 2

Daily sponsorship rate not consistently applied in two projects (2012-13 and 2015-16)

1. The HAB calculated the sponsorship for a YEFS project, which was a 7-day exchange tour for 16 youths to Sichuan Province in 2015-16. The HAB arrived at a sponsorship of \$53,760 for the project, as follows:

$$\begin{aligned} \text{Daily sponsorship rate} \times 7 \text{ days} \times 16 \text{ persons} &= \$53,760 \\ (\$480 \text{ per person}) \end{aligned}$$

2. There were no exchange activities in the morning session of the first day and in the last day, during which the delegation took transportation between Hong Kong and the Mainland. In the circumstances, a whole-day sponsorship was paid for both the first and the last day.

3. In another YEFS project which was a 7-day exchange tour for 30 youths to Xinjiang and Gansu Province in 2012-13, there were no exchange activities in both the morning session and the afternoon session of the last day, during which the delegation took transportation between Hong Kong and the Mainland. In contrast to the practice in paragraph 2 above, only half-day sponsorship was paid for the last day.

4. Upon enquiry, the HAB informed Audit in March 2018 that according to the HAB's practices, sponsorship also covers transportation.

Audit comments

5. The funding guidelines did not specify the circumstances for granting half-day sponsorship to cover transportation, hence causing inconsistency in the application of the daily sponsorship rate.

Source: Audit analysis of HAB records

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2.11 In this connection, Audit noted that the scope and extensiveness of exchange projects could be subject to change. For example, under the 2017-18 Budget, the Financial Secretary announced an additional funding allocation of \$100 million for international youth exchange. Consequently, in June 2017, the HAB launched the IYEFS (see Table 1 in para. 1.8). This will likely impact the scale of complementary activities of exchange projects.

2.12 To ensure that sponsorship for complementary activities is granted with propriety and in view of possible future changes in the scope and extensiveness of exchange projects that might impact on the scale of complementary activities, Audit considers that the HAB needs to continuously monitor the proportion of approved expenditure on complementary activities and review the sponsorship limits on complementary activities for different funding schemes at regular intervals. The HAB also needs to ensure that adequate funding guidelines (i.e. on any revised sponsorship limits and on calculating the daily sponsorship rates) are provided to HAB staff to facilitate the granting of sponsorship.

Need to ensure that sponsorship is granted within the intended limit

2.13 The HAB has set in the funding guidelines two types of limits on sponsorship:

- (a) ***Project sponsorship limit.*** In 2016-17, the maximum amounts of sponsorship for each project under the YEFS, YIFS and BnRFS were \$660,000, \$880,000 and \$300,000 respectively; and
- (b) ***Organisation sponsorship limit.*** In 2016-17, the maximum amounts of sponsorship for each organisation under the YEFS, YIFS and BnRFS were \$1 million, \$2.45 million and \$300,000 respectively.

The limits have been revised from time to time.

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2.14 Audit examined the sponsorship granted to 1,050 projects (see Table 7 in para. 2.4) in 2012-13 to 2016-17 (Note 13), and found that the requirement on sponsorship limits had generally been followed, except that in one case where the project sponsorship limit was exceeded:

- (a) in 2015-16, a sponsorship of \$1.4 million was approved for one YIFS project, which exceeded the sponsorship limit for a single project (i.e. \$700,000 in 2015-16); and
- (b) HAB records did not document any justification for the departure.

Upon enquiry, the HAB informed Audit in March 2018 that the project was co-organised by two organisations. The actual number of participants in the project was smaller than the approved number. Accordingly, the final amount of sponsorship received by the two organisations was \$679,300 in total (i.e. lower than the limit of \$700,000).

2.15 Audit considers that the HAB needs to look into the reasons for not complying with the project limit when approving sponsorship in the case noted by Audit, and take measures to prevent non-compliance with limits on sponsorship in future.

Note 13: *According to the funding guidelines, full amount of sponsorship will be paid to the organisation upon completion of the project and submission of an activity report and a financial report. Of the 1,050 projects conducted in 2012-13 to 2016-17 under the funding schemes for youth exchange and internship, 773 projects had the reports submitted and the payments of sponsorship finalised.*

Audit recommendations

- 2.16 **Audit has *recommended* that the Secretary for Home Affairs should:**
- (a) **keep under review the need for conducting assessment interviews for the different funding schemes for youth exchange and internship;**
 - (b) **regularly review the adequacy of practices on assessing project proposals, and based on the review results, take measures to enhance the assessment process where necessary;**
 - (c) **continuously monitor the proportion of approved expenditure on complementary activities and review the sponsorship limits on complementary activities for different funding schemes at regular intervals;**
 - (d) **ensure that adequate funding guidelines are provided to HAB staff to facilitate the granting of sponsorship; and**
 - (e) **look into the reasons for not complying with the project limit on the grant of sponsorship in the case noted by Audit (see para. 2.14) and take measures to prevent non-compliance with limits on sponsorship in future.**

Response from the Government

2.17 The Secretary for Home Affairs generally agrees with the audit recommendations. He has said that:

- (a) assessment panels, which comprise non-official members, would decide on the need for conducting assessment interviews for youth exchange projects on a need basis having regard to the nature and circumstances of the individual funding schemes and the panels' experience in processing such applications;
- (b) the HAB and the relevant advisory committees will continue to keep under review the adequacy of the assessment criteria and practices (including but

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not limited to the need for assessment interviews), and assessment would continue to be conducted by assessment panels comprising non-official members;

- (c) complementary activities such as pre-trip team building and post-trip learning reflection are worthwhile and form a core part of an exchange/internship project. Given the varying nature, destinations and number of participants of the projects, the proportion of approved expenditure attributed to complementary activities would also vary accordingly. Besides, some organisations might choose to bear part of the costs of a project, and hence affecting the proportion of approved expenditure spent on different parts of a project; and
- (d) the HAB has already enhanced its internal funding guidelines by clearly setting out the methodology to be adopted in different circumstances to facilitate staff to calculate the amount of sponsorship so as to ensure consistency and prevent non-compliance with sponsorship limits in future. Besides, the HAB has enhanced its computer system which would automatically draw staff's attention if the amount of sponsorship entered into the system exceeds any of the applicable sponsorship limits.

Monitoring of funding schemes

2.18 According to the funding guidelines, within three months after completion of projects, organisations are required to submit activity reports. The reports provide information on the conduct of projects and the number of participants in the projects. Table 9 shows, for projects completed in 2016-17, the distribution of participants among the 143 projects of which the activity reports had been submitted.

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Table 9

**Participants in projects under
the funding schemes for youth exchange and internship
(2016-17)**

No. of participants	No. of projects			Total
	YEFS	YIFS	BnRFS	
10 to <25 (Note 1)	5 (6.9%)	11 (22.4%)	12 (54.5%)	28 (19.6%)
25 to <50	29 (40.3%)	34 (69.4%)	10 (45.5%)	73 (51.0%)
50 to <100	24 (33.3%)	4 (8.2%)	0 (0.0%)	28 (19.6%)
100 to <300	13 (18.1%)	0 (0.0%)	0 (0.0%)	13 (9.1%)
300 or above	1 (1.4%) (Note 2)	0 (0.0%)	0 (0.0%)	1 (0.7%)
Total	72 (100.0%)	49 (100.0%)	22 (100.0%)	143 (100.0%)

Source: HAB records

Note 1: For the funding schemes in 2016-17, there were no projects which had fewer than 10 participants.

Note 2: The number of participants was 486.

Need to set minimum number of participants for YEFS projects

2.19 Audit noted that while the funding guidelines had set a requirement on the minimum actual number of participants per YIFS project (i.e. 12 participants), BnRFS project (i.e. 10 participants) and IYEFS project (i.e. 10 participants), no such requirement had been set for YEFS projects. While there were no projects which had fewer than 10 participants in 2016-17, Audit found that in 2015-16, there was one extreme case (a YEFS project) where the project had only one participant eligible for sponsorship (see Case 3).

Case 3

A YEFS project with only one youth participant (2015-16)

1. In a YEFS project, a 3-day exchange tour to Hunan Province was to be held in 2015-16. The intended number of youth participants was 28. The HAB approved a sponsorship for exchange activities of \$40,320 (i.e. \$1,440 per head × 28 youths). The organisation that ran the project also needed to carry out complementary activities of \$11,245, comprising \$4,093 for conducting an audit for the project and \$7,152 for hiring a coach to carry participants (Note 1). The average cost per head was therefore \$1,842 $((\$40,320 + \$11,245) \div 28 \text{ youth participants})$.

2. The tour was conducted and it turned out that there was only one youth participant. While the youth participant was joined by three representatives from the organisation, the youth participant was the only person eligible for sponsorship. Eventually, the coach was not hired. The HAB reduced the sponsorship accordingly. The final amount received by the organisation was \$5,533, comprising \$1,440 sponsorship per head for exchange activities, and \$4,093 for the audit fee (Note 2).

Audit comments

3. Given the reduced number of participants, the cost per head had increased by 200% from \$1,842 to \$5,533.

Source: Audit analysis of HAB records

Note 1: Being complementary activities, the audit fee and coach hire were to be reimbursed on an actual basis. The \$4,093 and the \$7,152 were the estimated costs reported by the organisation.

Note 2: It was a usual practice that the HAB paid a portion of sponsorship in advance (usually up to 50% of the approved amount of sponsorship) to an organisation. Excess advance payment would be recovered from the organisation after receipt and review of the activity report and the financial report (see Note 7 to para. 2.2). In this case, the HAB had recovered the excess advance payment from the organisation that ran the YEFS project. No overpayment was involved.

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2.20 It was less than satisfactory that the HAB had not set a minimum number of participants for YEFS projects. In March 2018, the HAB informed Audit that:

- (a) as can be seen in Case 3, sponsorship for exchange activities in YEFS projects was calculated on a per head basis. Hence, organisations generally had no incentive to organise projects with a very small number of participants, bearing in mind the amount of sponsorship for exchange activities receivable would likely be much lower than the actual cost associated with these activities and the difference would have to be borne by the organisations themselves;
- (b) the exchange project in Case 3 was to visit under-privileged children studying in schools in remote rural areas in the Mainland. It was understood that the organisation concerned decided to proceed notwithstanding the low turnout rate, and arranged four people to embark on the project (i.e. one youth participant funded under the YEFS and three representatives from the organisation who were not funded under the YEFS) in order not to disappoint the schools and the children involved; and
- (c) nevertheless, in the light of the experience gained, the HAB had imposed a requirement on the minimum number of participants (i.e. 10 participants) for YEFS projects for funding exercises in 2018-19 and thereafter, thereby avoiding the recurrence of situations similar to Case 3.

2.21 Audit considers that the HAB needs to monitor the implementation of this new requirement on the minimum number of participants for YEFS projects, and revise the requirement based on actual experience.

Need to expedite finalisation of projects

2.22 Within three months after the completion of projects, organisations are required to submit activity reports and financial reports (see Note 7 to para. 2.2) to the HAB. Based on these reports, the HAB finalises the projects by making necessary adjustments to the amount of sponsorship (see Case 3 in para. 2.19 for an example).

2.23 Of the 60 projects examined by Audit (see para. 2.5), 55 projects had been completed. Audit noted that in 22 (40%) of the 55 completed projects, submission of

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the activity reports/financial reports had not been timely, contrary to the requirements of the funding guidelines. The extent of delay ranged from 10 days to 36 months (see Table 10), averaging 8.9 months.

Table 10

**Delay in submission of activity report/financial report in 55 projects
(31 December 2017)**

Delay (months)	No. of projects			
	YEFS	YIFS	BnRFS	All three schemes
< 1	1 (Note 1)	0	0	1
1 to < 5	8	0	2	10
5 to < 10	0	2	1	3
10 to < 20	2	3	1	6
20 to < 30	1	0	0	1
30 to 36	1 (Note 2)	0	0	1
Project with delay	13 (43%)	5 (25%)	4 (80%)	22 (40%)
Project without delay	17 (57%)	15 (75%)	1 (20%)	33 (60%)
Total	30 (100%)	20 (100%)	5 (100%)	55 (100%)

Source: Audit analysis of HAB records

Note 1: There was a delay of 10 days.

Note 2: There was a delay of 36 months.

2.24 Late submission of activity reports and financial reports would hold up the finalisation of projects, and is not conducive to the timely recovery of any unused sponsorship. Audit further noted from the 60 projects examined that the HAB had

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not always taken prompt action to follow up delay cases. In one extreme case, HAB records indicated that the HAB reminded an organisation to submit the activity and financial reports 23 months after the project had been completed.

2.25 Audit considers that the HAB needs to regularly remind organisations of the need to submit activity reports and financial reports in accordance with the funding guidelines. The HAB also needs to closely monitor the submission of such reports and take prompt action to follow up any late submission cases.

Audit recommendations

2.26 **Audit has *recommended* that the Secretary for Home Affairs should:**

- (a) **monitor the implementation of the new requirement on the minimum number of participants for YEFS projects, and keep in view the need for revising the minimum number having regard to the actual experience gained in implementation;**
- (b) **regularly remind organisations of the need to submit activity reports and financial reports in accordance with the funding guidelines; and**
- (c) **closely monitor the submission of activity reports and financial reports, and take prompt action to follow up any late submission cases.**

Response from the Government

2.27 The Secretary for Home Affairs agrees with the audit recommendations. He has said that:

- (a) with the introduction of the requirement on the minimum number of participants for YEFS projects, situations similar to Case 3 could be avoided. The HAB will keep in view the implementation of this requirement having regard to the actual experience gained; and
- (b) the HAB has stepped up efforts in ensuring timely submission of activity reports and financial reports by organisers by deploying more manpower

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resources to monitor the implementation and follow-up work of the large number of YEFS projects. The relevant assessment criteria have also been revised such that late submission of report(s) by organisations in previous exercises would be taken into account in the demerit-point system for the YEFS and YIFS starting from the 2018-19 exercises, and for the BnRFS in its 2017-18 exercise.

Management of cancelled projects

2.28 As shown in Table 7 in paragraph 2.4, in 2014-15 to 2016-17, 88 (17 + 34 + 37) projects had been cancelled. The majority (80 projects or 91%) of the cancelled projects were YEFS projects. In this period, the number of approved projects under the YEFS, YIFS and BnRFS were 653, 213 and 29 respectively. Vis-à-vis the number of cancelled projects (i.e. 80 YEFS projects, 6 YIFS projects and 2 BnRFS projects), the proportion of cancelled projects was 12% under the YEFS, 3% under the YIFS, and 7% under the BnRFS.

2.29 The objective of the HAB's funding schemes is to expose young people to the economic, social and cultural surroundings at both the national and international levels through exchange and internship activities (see para. 1.3). To meet the objective, there is a need to minimise the number of cancelled projects as far as possible.

Need to improve handling of cancelled projects

2.30 Audit examined 30 projects cancelled in 2012-13 to 2016-17 (i.e. 25 YEFS projects, 3 YIFS projects and 2 BnRFS projects). Audit found that, in the majority (64%) of projects, the main reasons for project cancellation were “low enrolment rate” and “inability to organise the tour within the approved time frame” (see Table 11).

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Table 11

Reasons for project cancellation in 30 projects (2012-13 to 2016-17)

Reason	No. of projects	
Low enrolment rate	14 (47%)	} 19 (64%)
Inability to organise the tour within the approved time frame	5 (17%)	
Insufficient sponsorship	3 (10%)	
Safety issues of the destination	3 (10%)	
Restructuring of the organisation	1 (4%)	
Others	2 (6%)	
No reason was provided	2 (6%)	
Total	30 (100%)	

Source: Audit analysis of HAB records

2.31 Audit noted that, of the 30 cancelled projects, the organisations in 12 (40%) projects only informed the HAB of the cancellation of projects after the scheduled tour departure dates.

2.32 In Audit's view, without knowing the intended cancellation of projects, the HAB could not take timely action to help organisations address their difficulties. Should projects be cancelled, those already enrolled in the projects would be affected. Upon enquiry, the HAB informed Audit in March 2018 that:

- (a) organisations might have strived to recruit till it was close to the start date of the projects, and hence they might not be able to inform the HAB of the cancellation beforehand;
- (b) in fact, organisations were required under the funding guidelines to report on any change of their exchange/internship projects, including cancellation of projects. As a way of good monitoring and governance, such

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requirement would be set out in the guidelines more explicitly for organisations to follow in funding exercises for 2018-19 and thereafter; and

- (c) since February 2018, the HAB had introduced a one-stop-information portal on the CoY website. The portal provided participants and the public with more information on exchange/internship projects funded by the HAB's funding schemes, and facilitated their choice/decision-making as and when needed.

2.33 While appreciating the HAB's initiatives (see para. 2.32(b) and (c)), Audit considers that the HAB needs to strengthen liaison with organisations with a view to identifying any intended cancellation of projects. Furthermore, the HAB needs to take into account the reasons for previous cancellation of projects (e.g. why organisations were unable to organise tours within the approved time frame) in the assessment of project proposals, with a view to selecting and funding more viable projects in future. Moreover, the HAB needs to closely monitor the operation of the newly launched one-stop-information portal so as to ensure that it is implemented as intended.

Audit recommendations

2.34 **Audit has *recommended* that the Secretary for Home Affairs should:**

- (a) **strengthen liaison with organisations with a view to identifying any intended cancellation of projects and take necessary follow-up actions;**
- (b) **take into account the reasons for previous cancellation of projects in the assessment of project proposals in future; and**
- (c) **closely monitor the operation of the newly launched one-stop-information portal so as to ensure that it is implemented as intended.**

Response from the Government

2.35 The Secretary for Home Affairs agrees with the audit recommendations. He has said that, during briefing sessions, the HAB has reminded organisations to inform the bureau as soon as possible once the decision to cancel a project is made, and to draw the attention of participants who have enrolled in the cancelled project, if any, to other comparable exchange opportunities with reference to the one-stop information portal. The HAB will take into account the reasons for previous cancellation of projects in the assessment of project proposals in future funding exercises.

PART 3: PROVISION OF PROGRAMMES OF YOUTH EXCHANGE

3.1 This PART examines the provision of the HAB's programmes of youth exchange, focusing on the following issues:

- (a) provision of exchange places (paras. 3.2 to 3.12);
- (b) delivery of exchange projects (paras. 3.13 to 3.22); and
- (c) commissioning of contractor services (paras. 3.23 to 3.29).

Provision of exchange places

3.2 Apart from organising exchange projects for young people through sponsored organisations (see PART 2), the HAB also organises exchange projects on its own through three programmes of youth exchange:

- (a) ***IYEP and SEP.*** The HAB puts forward project proposals to the CoY's Working Group on International Exchanges and Conferences (WGIEC), and seeks the WGIEC's endorsement of the proposals. To monitor the delivery of endorsed projects, the WGIEC arranges for its members to attend activities of each project (Note 14); and
- (b) ***CEP.*** In collaboration with the Department of Culture of Guangdong Province and with the Tertiary Education Services Office of the Macao Special Administrative Region Government, the HAB organises exchange projects in Guangdong and Macao respectively. The HAB liaises with the Guangdong and Macao authorities to make arrangements for the exchange

Note 14: *According to the HAB, an exchange tour is normally attended by one member, while an activity (other than exchange tours) is normally attended by more than one member.*

Provision of programmes of youth exchange

projects. The delivery of projects is subject to the HAB's monitoring (Note 15).

Each year, the HAB prepares budgets for the projects to be held under the three programmes. Funding for the programmes are earmarked under the Estimates of the HAB (Note 16).

3.3 According to the HAB, young people participating in SEP or CEP projects are Hong Kong's youth delegates, while those participating in IYEP projects are Hong Kong's youth ambassadors (Note 17). These young people (hereinafter collectively referred to as youth delegates for simplicity) attend outbound exchange tours to other places. In 2012-13 to 2016-17, a total of 722 youth delegates went on exchange tours in 35 projects (see Table 12).

Note 15: *Since no working group nor committee was involved in the CEP, an HAB officer is assigned to attend project activities with other youth participants.*

Note 16: *Funding for the IYEP is provided under the item "Other Charges — International Youth Exchange Programme". Funding for the SEP and the CEP is provided under the item "Other Charges — youth development activities".*

Note 17: *According to the HAB, youth ambassadors may serve as youth team leaders under the SEP and the CEP, who help lead, liaise and facilitate the activities in tours.*

Provision of programmes of youth exchange

Table 12

**Youth delegates of
programmes of youth exchange
(2012-13 to 2016-17)**

Year	Programme							
	IYEP		SEP		CEP		All three programmes	
	No. of projects	No. of youth delegates	No. of projects	No. of youth delegates	No. of projects	No. of youth delegates	No. of projects	No. of youth delegates
2012-13	4	65	1	40	1	42	6	147
2013-14	3	43	1	42	1	44	5	129
2014-15	7	72	1	44	1	50	9	166
2015-16	6	66	1	48	1	33	8	147
2016-17	5	62	1	36	1	35	7	133
Total	25	308	5	210	5	204	35	722

Source: HAB records

Exchange places in demand but not fully utilised

3.4 The HAB invites different organisations and government bureau/departments to nominate suitable candidates for youth delegates (Note 18). The HAB/WGIEC may select youth delegates from these candidates. For the SEP and the CEP, apart from those nominated candidates, the HAB would directly recruit young people who have satisfactorily attended other activities (e.g. activities of IYEP projects) as team leaders of the youth delegates.

Note 18: *The organisations being invited include local universities, post-secondary institutions, uniformed groups and NGOs. The government bureau/departments being invited include the Education Bureau, the Social Welfare Department and the Home Affairs Department.*

Provision of programmes of youth exchange

3.5 In 2012-13 to 2016-17, nominations from organisations and government bureau/departments far exceeded the programme capacity of the IYEP and the SEP. Table 13 shows that, during the period, the IYEP was 243% oversubscribed and the SEP was 124% oversubscribed. Audit, however, noted that the programme capacities of the IYEP and the SEP had not been fully utilised to provide exchange places for the candidates. As shown in Table 13, during the period, the unutilised capacity of the IYEP was 7% (23 places) of its overall capacity of 331 places, while that of the SEP was 12% (i.e. 22 places) of its overall capacity of 180 places.

Provision of programmes of youth exchange

Table 13

Nomination and selection of youth delegates for IYEP and SEP (2012-13 to 2016-17)

Year	Programme capacity (Note 1) (a) (No. of youths)	Candidates			Capacity over/(under) utilised (e) = (c) – (a) (No. of youths)	Over/(under) subscription $(f) = \frac{(b) - (a)}{(a)} \times 100\%$ (Percentage)
		Nominated (b) (No. of youths)	Selected (c) (No. of youths)	Not selected (d) = (b) – (c) (No. of youths)		
IYEP						
2012-13	65	247	65	182	0	280%
2013-14	50	238	43	195	(7)	376%
2014-15	65	212	72 (Note 2)	140	7	226%
2015-16	81	238	66	172	(15)	194%
2016-17	70	199	62	137	(8)	184%
Overall	331	1,134	308	826	(23) or 7% of 331	243%
SEP						
2012-13	36	106	36	70	0	194%
2013-14	36	N.A. (Note 3)	22	N.A.	(14)	N.A.
2014-15	36	102	36	66	0	183%
2015-16	36	103	36	67	0	186%
2016-17	36	93	28	65	(8)	158%
Overall	180	404	158	268	(22) or 12% of 180	124%

Source: Audit analysis of HAB records

Note 1: Programme capacity refers to the number of youth delegates that was originally budgeted for.

Note 2: The HAB received further invitations from certain youth organisations in an overseas country. Two more exchange tours to the country were then organised and therefore the number of participants was larger than the planned programme capacity.

Note 3: According to the HAB, no nomination was required for the SEP in 2013-14. The youth delegates for the 2013-14 SEP comprised awardees of the HAB's other youth programmes and youth ambassadors.

Provision of programmes of youth exchange

3.6 Upon enquiry, the HAB informed Audit in March 2018 that selection of candidates for the IYEP and the SEP was based on individual merits and only those who had good performance at selection interviews were selected for the exchange tours. For these reasons, the numbers of candidates selected for the IYEP and the SEP might be lower than the intended programme capacities. This would ensure that the right and suitable candidates participated in the programmes as Hong Kong's youth ambassadors. Moreover, for the IYEP, the actual number of youth participants selected was subject to the hosting capacity of overseas partner countries/provinces/cities, which could only be ascertained at a later stage and might be different from the originally estimated programme capacity.

3.7 While noting the need for ensuring candidates' quality, Audit considers that it is not desirable for programmes to have unutilised capacity vis-à-vis the high demand for exchange places. The HAB needs to explore ways to maximise the utilisation of the programme capacities of the IYEP and the SEP, having regard to the need for providing more exchange places for young people as well as the need for ensuring the quality of programme participants.

Need to better promote CEP places

3.8 Local universities and post-secondary institutions nominate suitable candidates for CEP places. In addition, the HAB identifies young people who have satisfactorily attended other youth activities (e.g. IYEP activities) and recruits them directly as team leaders of youth delegates in CEP projects. According to the HAB, for CEP projects, as the target participants are students of post-secondary institutions or equivalent, the HAB had not invited other organisations and government bureau/departments to submit nominations.

3.9 In 2012-13 to 2016-17, the number of nominations received and recruited for CEP projects had decreased by 43% from 42 in 2012-13 to 24 in 2016-17. Meanwhile, to strengthen the tour management, the HAB had identified and recruited more young people as team leaders (the number of team leaders increased from nil in 2012-13 to 11 in 2016-17). However, the total number of youth delegates (i.e. those recruited through nominations and those recruited directly as team leaders) decreased by 17% from 42 in 2012-13 to 35 in 2016-17. In 2016-17, 42% of the budgeted number of the CEP places had not been utilised. Table 14 shows Audit's analysis.

Provision of programmes of youth exchange

Table 14

**Recruitment of youth delegates for the CEP
(2012-13 to 2016-17)**

Year	Programme capacity (a) (No. of youths)	Youth delegate		Capacity utilised (d) = (b) + (c) (No. of youths)	Capacity not utilised (e) = (a) - (d) (No. of youths)
		Recruited through nominations (b) (No. of youths)	Recruited directly as team leaders (c) (No. of youths)		
2012-13	50	42	0	42 (84%)	8 (16%)
2013-14	50	42	2	44 (88%)	6 (12%)
2014-15	50	47	3	50 (100%)	0 (0%)
2015-16	60	26	7	33 (55%)	27 (45%)
2016-17	60	24	11	35 (58%)	25 (42%)
Overall	270	181	23	204 (76%)	66 (24%)

Source: Audit analysis of HAB records

3.10 Audit noted that, unlike the IYEP and the SEP where information about these two programmes could be found on the CoY website, there was no information on the Internet about the CEP. In spite of the decreased nominations and the CEP's unused capacity (see Table 14 above), the HAB had not stepped up the publicity of the CEP. Young people who were eligible for and interested in the CEP might therefore not be aware of the programme. In order to benefit more young people, Audit considers that the HAB needs to enhance the publicity for the CEP.

Audit recommendations

3.11 **Audit has recommended that the Secretary for Home Affairs should:**

Provision of programmes of youth exchange

- (a) **explore ways to maximise the utilisation of the programme capacities of the IYEP and the SEP; and**
- (b) **enhance the publicity for the CEP.**

Response from the Government

3.12 The Secretary for Home Affairs generally agrees with the audit recommendations. He has said that:

- (a) it is important to ensure that only suitable candidates are selected to participate in the IYEP and the SEP, so that they could benefit the most from these programmes and serve as Hong Kong's ambassadors to the partnering countries/provinces/cities. The HAB will continue to encourage nominating agencies to nominate suitable candidates for participation in these programmes; and
- (b) measures are being taken to enhance the publicity for the CEP starting from 2018, including expanding the list of tertiary institutions to be invited to nominate participants and featuring the CEP in the one-stop information portal (see para. 2.32(c)).

Delivery of exchange projects

3.13 In projects organised under the programmes of youth exchange, youth delegates are led by HAB staff and/or WGIEC member(s) in exchange tours depending on the nature of the programmes and operational need (hereinafter, the HAB staff and the accompanying WGIEC members are referred to as official delegates). Service contractors of the HAB (see para. 3.23) also accompany the youth delegates as appropriate. According to the HAB, the official delegates and the accompanying service contractor need to ensure the safety of youth delegates and attend to their needs during exchange tours (Note 19).

Note 19: *According to the HAB, throughout the exchange tour at the host country/province/city, providing local logistic support is the responsibility of the host or its contractor.*

Provision of programmes of youth exchange

Need to keep under review the adequacy of manpower support

3.14 Audit conducted an analysis of the ratios of official delegates to youth delegates for the 35 exchange projects organised under the programmes in 2012-13 to 2016-17. Audit found that the ratios ranged from 1:3 (i.e. 1 official delegate attending to 3 youth delegates) to 1:25 (i.e. 1 official delegate attending to 25 youth delegates), as follows:

- (a) **IYEP projects.** The ratios were between 1:3 to 1:10;
- (b) **SEP projects.** The ratios were between 1:7.2 to 1:16; and
- (c) **CEP projects.** The ratios were between 1:16.5 to 1:25.

On the whole, in 26% of the exchange projects, each official delegate needed to attend to more than 10 youth delegates (see Table 15).

Table 15

**Youth delegates attended to by one official delegate
(2012-13 to 2016-17)**

No. of youth delegates attended to by 1 official delegate	No. of projects				Overall
	IYEP	SEP	CEP		
21 to 25	0	0	3	3	} 9 (26%)
16 to 20	0	1	2	3	
11 to 15	0	3	0	3	
10 or below	25	1	0	26	} 26 (74%)
Total	25	5	5	35	

Source: Audit analysis of HAB records

Provision of programmes of youth exchange

3.15 On the issue of manpower support, in March 2018, the HAB informed Audit that:

- (a) at present, youth delegates joining exchange programmes organised by the HAB were led by HAB staff (1 staff member for each CEP project and 2 staff for each SEP project) and/or a WGIEC member (1 member for each IYEP project or SEP project) during the exchange;
- (b) for the IYEP and the SEP, having regard to genuine operational need (e.g. location and duration of exchange projects, and age of youth participants), working staff of the HAB's responsible service contractor also accompanied the youth delegates as appropriate. For the CEP and the SEP, experienced youth ambassadors were assigned as team leaders or helpers (see para. 3.4); and
- (c) the existing manpower arrangement was adequate as well as cost effective. For example:
 - (i) more manpower was deployed for the SEP in view of the younger age (minimum 15 years old) of participants and the farther destinations (overseas countries); and
 - (ii) participants in CEP projects were adults (aged 18 to 24) and destinations of those projects were much closer to Hong Kong (Macao and Guangdong). The current manpower ratio was therefore considered appropriate.

3.16 Audit notes the HAB's efforts in ensuring the adequacy of manpower support for its programmes of youth exchange. Nevertheless, Audit considers that there is a need for the HAB to keep under review the manpower support for programmes of youth exchange, with a view to ensuring the adequacy of the support. This is particularly necessary when visits to new or remote countries/cities are involved. Furthermore, the enhanced publicity for the CEP (see para. 3.11(b)) could help boost participation which might have an implication for stepping up manpower support.

Need to encourage participants to honour their post-trip service commitment

3.17 Before 2017-18, for IYEP projects, youth delegates were required to sign a letter of undertaking to perform at least 50 hours of voluntary services (post-trip services) within one year upon returning from the overseas visit. According to the HAB, this was intended to enhance the youth’s participation and to contribute to the community with what they had learned during overseas visits.

3.18 ***Low compliance rate.*** Audit noted that, of the 308 youth delegates of IYEP projects conducted in 2012-13 to 2016-17, only 103 (33.4%) youth delegates reported that they had honoured their post-trip voluntary service commitment (see Table 16). HAB records did not indicate that actions had been taken to follow up the post-trip voluntary services provided by the remaining 205 (66.6%) youth delegates.

Table 16

**Post-trip voluntary service commitment
honoured by 308 youth delegates
(2012-13 to 2016-17)**

Post-trip service commitment	No. of youth delegates			
Honoured	103		(33.4%)	
Not honoured	21	} 205	(6.8%)	} (66.6%)
Youth delegates did not report whether or not they had honoured the commitment	184		(59.8%)	
Total	308		(100.0%)	

Source: Audit analysis of HAB records

3.19 ***New requirements for 2017-18.*** HAB records indicated that, in 2017-18, the letter of undertaking no longer required the youth delegates to perform the post-trip voluntary services. Upon enquiry, the HAB informed Audit in February 2018 that, to tie in with the celebration of the 20th Anniversary of the

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establishment of the Hong Kong Special Administrative Region, the IYEP for 2017-18 was enhanced:

- (a) instead of providing 50 hours of post-trip voluntary services, youth delegates were required to represent Hong Kong as ambassadors/volunteers to assist in various 20th Anniversary international conferences, events and activities; to help receive overseas youths visiting Hong Kong as a 20th Anniversary initiative; and to organise and implement innovative and practicable programmes for the benefit of the community and in celebration of the 20th Anniversary; and
- (b) the WGIEC had endorsed the parameters of the 20th Anniversary programme at its meeting held in August 2016.

According to the HAB, the new requirements were well received by the youth delegates as the exposure gained and contributions made were more valuable.

3.20 In Audit's view, while serving as ambassadors/volunteers for the 20th Anniversary celebration was well-received, the HAB needs to devise a sustainable post-trip service requirement with a view to broadening the delegates' horizons and experience.

Audit recommendations

3.21 **Audit has *recommended* that the Secretary for Home Affairs should:**

- (a) **keep under review the manpower support for the programmes of youth exchange, with a view to ensuring the adequacy of support; and**
- (b) **in devising post-trip service requirements in future, be mindful of the need for securing delegates' compliance with the requirements as well as the need for broadening delegates' horizons.**

Response from the Government

3.22 The Secretary for Home Affairs agrees with the audit recommendations. He has said that:

- (a) the HAB has ensured and will continue to ensure that adequate manpower support is provided for the youth exchange programmes; and
- (b) given the success of the 20th Anniversary youth ambassador programme, the HAB has formulated the proposed programme details of the IYEP for use in future along this model, with a view to providing similar opportunities to the youth delegates to gain wider exposure and serve the community.

Commissioning of contractor services

3.23 The HAB outsourced logistic services which were required for implementing programmes of youth exchange. Table 17 shows the services outsourced and the target providers of services.

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Table 17

Services outsourced and target service providers

Programme	Service	Target service provider
IYEP	Logistic arrangements including arranging selection interviews of youth delegates, providing training to youth delegates, receiving and arranging itineraries for overseas delegates, and helping youth delegates to fulfil the requirement of 50 hours of post-trip services (up to 2016-17 — see para. 3.17).	Local uniformed groups and large NGOs
SEP	Logistic services for briefing sessions, training seminars, etc.	Professional event management firms
	Organising the overseas tour and providing administrative and logistic support during the tour.	Travel agencies
CEP	Organising and implementing programmes for receiving delegates (i.e. Guangdong, Macao and Hong Kong delegates) in Hong Kong, and making related logistic arrangements.	Companies specialised in programme/event organisation

Source: HAB records

3.24 In 2012-13 to 2016-17, the HAB conducted 29 procurement exercises for outsourcing the above services. The HAB invited quotations from service providers and awarded 29 service contracts to them (one contract for each procurement exercise).

Scope for improving response to outsourcing procurement

3.25 Audit noted that in 2012-13 to 2016-17, while many invitations were sent out in the 29 procurement exercises, not many service providers responded (see Table 18).

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Table 18

Response to quotation invitations (2012-13 to 2016-17)

	IYEP	SEP	CEP	Overall
No. of quotation invitations issued (a)	416	105	42	563
No. of quotations received (b)	16	25	12	53
Response rate (c) = (b)/(a) × 100%	3.8%	23.8%	28.6%	9.4%

Source: Audit analysis of HAB records

3.26 As can be seen from Table 18, the response rate in procurement exercises for the IYEP was particularly low (3.8%). Audit further noted that:

- (a) of the 16 quotations received for the IYEP over the five-year period, 14 (87.5%) were received from the same service provider (an NGO); and
- (b) in 2012-13 to 2016-17, the NGO was the sole contractor providing services for IYEP projects. The NGO charged a contractor fee for providing services. The contractor fee comprised a service charge which was a fixed price, and programme expenses for which the NGO was reimbursed on an actual basis. In 2012-13 to 2016-17, for IYEP projects, the proportion of service charges in contractor fees had increased from 24.7% in 2012-13 to 38.7% in 2016-17. On the whole, for IYEP projects, the service charges accounted for 32.6% of the contractor fees in the period (see Table 19).

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Table 19

Contractor fees for IYEP (2012-13 to 2016-17)

Year	No. of service contracts	Contractor fees	
		Programme expenses (\$)	Service charge (\$)
2012-13	2	1,241,021 (75.3%)	407,700 (24.7%)
2013-14	3	584,977 (70.7%)	242,200 (29.3%)
2014-15	3	1,101,413 (68.6%)	504,270 (31.4%)
2015-16	3	802,216 (61.3%)	506,105 (38.7%)
2016-17	3	938,790 (61.3%)	593,560 (38.7%)
Overall	14	4,668,417 (67.4%)	2,253,835 (32.6%)

Source: Audit analysis of HAB records

3.27 Audit further noted that the HAB last reviewed its supplier list in September 2017 with a view to widening the pool of potential bidders for quotation exercises. However, HAB records did not indicate that the HAB had taken measures to ascertain the reasons for the low response rate in the past procurement exercises (e.g. contacting the service providers to enquire about their reasons for not responding).

Audit recommendations

3.28 Audit has *recommended* that the Secretary for Home Affairs should:

- (a) ascertain the reasons for the lukewarm response of service providers in quotation invitations for programmes of youth exchange; and
- (b) having regard to the reasons ascertained, take measures to improve the response rate of service providers.

Response from the Government

3.29 The Secretary for Home Affairs agrees with the audit recommendations. He has said that in future quotation exercises, the HAB will arrange briefing sessions for interested service providers, with a view to helping them understand better the terms and conditions of the quotation documents.

PART 4: GOVERNANCE MATTERS AND WAY FORWARD

4.1 This PART examines matters relating to the governance of the CoY and the CPCE, and the HAB's way forward in the provision of youth exchange and internship activities, focusing on the following areas:

- (a) engaging of members (paras. 4.2 to 4.6);
- (b) management of conflicts of interest (paras. 4.7 to 4.13); and
- (c) way forward (paras. 4.14 to 4.21).

Engaging of members

4.2 Currently, the CoY and the CPCE each have 30 non-official members (see para. 1.5). Members have been invited to join working groups/sub-committee to help administer individual funding schemes for youth exchange and internship as well as programmes of youth exchange. Table 20 shows the working groups/sub-committee.

Table 20

**Working groups/sub-committee
for administering youth exchange/internship activities
(December 2017)**

Funding scheme/ programme	Responsible working group/sub-committee
<i>Funding scheme for youth exchange and internship</i>	
YEFS	CoY's Working Group on Youth Exchange and Internship in the Mainland (Note 1)
YIFS	
BnRFS	CPCE's Research, Development and Community Participation Sub-committee (Note 2)
IYEFS	Members from the CoY and the CPCE (Note 3)
<i>Programme of youth exchange</i>	
IYEP	CoY's WGIEC (Note 4)
SEP	
CEP	N.A.

Source: HAB records

Note 1: The working group comprised 23 non-official members of the CoY (including one member served as a convener) and 3 co-opted members in 2017-18. The working group held 5, 6, and 4 meetings in 2014-15, 2015-16 and 2016-17 respectively.

Note 2: The sub-committee comprised 16 non-official members of the CPCE (including one member served as a convener) and a government representative of the Social Welfare Department in 2017-18. The sub-committee held 3 meetings in each year during 2014-15 to 2016-17.

Note 3: No working group had been set up for the IYEFS. The HAB invited members from the CoY's WGIEC and the CPCE's Research, Development and Community Participation Sub-committee to help conduct assessments of project proposals. The assessments were conducted through circulation of papers. No meeting was convened.

Note 4: The working group comprised 18 non-official members of the CoY (including one member served as a convener) and 5 co-opted members in 2017-18. The working group held 4, 5, and 3 meetings in 2014-15, 2015-16 and 2016-17 respectively.

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4.3 In appointing members to the CoY and the CPCE, the Secretary for Home Affairs considered the merit of individuals concerned, taking into account their ability, expertise, experience, integrity and commitment to public service.

Need to better engage members' participation

4.4 Audit reviewed the attendance rates of members of the CoY, the CPCE, the two working groups and the sub-committee responsible for the various exchange or internship funding schemes/programmes in 2014-15 to 2016-17. Audit found that in each of the three years, there were members who did not attend any meetings, and the proportion of members who did not attend any meetings was as high as 17% for the CoY's Working Group on Youth Exchange and Internship in the Mainland in 2014-15 (see Table 21). In one extreme case, a member of the Working Group on Youth Exchange and Internship in the Mainland did not attend any meetings in the period.

Table 21

**CoY/CPCE/working group/sub-committee members
who did not attend any meetings
(2014-15 to 2016-17)**

CoY/CPCE/working group/ sub-committee	No. of members who did not attend any meetings (percentage of members in the CoY/CPCE/working group/ sub-committee)		
	2014-15	2015-16	2016-17
CoY (Note 1)	2 (6%)	0 (0%)	2 (6%)
CPCE (Note 2)	0 (0%)	1 (3%)	4 (13%)
CoY's Working Group on Youth Exchange and Internship in the Mainland	5 (17%)	2 (7%)	2 (7%)
CoY's WGIEC	3 (16%)	3 (12%)	3 (12%)
CPCE's Research, Development and Community Participation Sub-committee	1 (7%)	1 (7%)	2 (13%)

Source: Audit analysis of HAB records

Note 1: The CoY held 4 meetings each year during 2014-15 to 2016-17.

Note 2: The CPCE held 3 meetings each year during 2014-15 to 2016-17.

Audit recommendation

4.5 Audit has recommended that the Secretary for Home Affairs should take measures to improve members' attendance at meetings.

Response from the Government

4.6 The Secretary for Home Affairs agrees with the audit recommendation. He has said that the HAB has stepped up efforts in reminding members, especially those with low attendance rates, of the importance of attending meetings of the committees

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and their working groups. The HAB will take into account member's attendance rates in future appointment exercises.

Management of conflicts of interest

4.7 The CoY and the CPCE have adopted a two-tier system for their members to declare personal interests. According to HAB records:

- (a) ***First-tier declaration of interests.*** Each year, members are required to sign a standard declaration form and register with the HAB any personal interests that conflict, or may conflict with the business of the CoY/CPCE (Note 20). The HAB has informed members that it will keep a register of members' interests; and
- (b) ***Second-tier declaration of interests.*** If a member is aware of actual or potential conflict between his personal interests and any matters under consideration by the CoY/CPCE, he must disclose to the CoY/CPCE prior to the discussion of the matter (Note 21). Each case of declaration of interests will be recorded in a declaration form and in the minutes of the meeting.

Note 20: *According to an HAB circular memorandum on declaration of interests, the types of interests required for registration shall include:*

- (a) *proprietorships, partnerships or directorships of companies;*
- (b) *remunerated employments, offices, trades, professions or vocations;*
- (c) *shareholdings in a publicly listed or private company (e.g. 1% or more of the company's issued share capital);*
- (d) *membership of boards, committees, companies, firms, clubs, associations, unions or other organisations which might be construed by members of the public as a declarable interest; and/or*
- (e) *other declarable interests, taking into consideration the nature of work of the respective CoY and CPCE.*

Note 21: *The Chairman of the CoY/CPCE, or the convener of the respective working group/sub-committee as appropriate, will decide whether the member disclosing an interest may speak or vote on the matter, may remain in the meeting as an observer, or should withdraw from the meeting.*

Scope for improving first-tier declarations

4.8 Audit reviewed the first-tier declaration forms submitted by members of the CoY and the CPCE for the years 2014-15 to 2017-18, and found that two CPCE members had not submitted the 2017-18 declaration forms and one CoY member had submitted an incomplete declaration form (with a missing page). In March 2018, Audit noted from the HAB records that the two CPCE members concerned had submitted the 2017-18 declaration forms in January 2018, and the CoY member concerned had subsequently provided the missing page.

4.9 Audit considers that the HAB needs to take measures to prevent recurrence of late/incomplete submission of declarations of interests of CoY/CPCE members.

Scope for improving management of second-tier declarations

4.10 According to the HAB, its staff would examine members' declared interests in the second-tier declaration forms. The staff would also cross-check the declared interests with the interests declared in first-tier declarations before assigning duties to CoY/CPCE members. This was to ensure that CoY/CPCE members who conducted assessments of project proposals would not have conflicts of interest.

4.11 Audit examined the second-tier declaration forms submitted by 20 members of the CoY/CPCE for the years 2014-15 to 2017-18 and found that:

- (a) ***Decisions on declared interests not documented.*** In 21 cases (involving 3 members), despite that potential conflicts of interest had been declared in the second-tier declaration forms, duties of assessing applications were still assigned to the members. Upon enquiry, the HAB informed Audit in March 2018 that the concerned members had declared interests prior to application discussions and the conveners of the meetings (see notes to Table 20 in para. 4.2) decided that the members could remain at the application assessment interviews as observers, but they could not comment or give assessment on the applications. According to the HAB, while this was in line with the documented practice at the time, the decisions on each case had not been individually documented in the minutes of the meetings; and

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- (b) *Scope for facilitating identification of conflicts of interest.* To identify CoY/CPCE members who had potential conflicts of interest in handling assessment of project proposals, HAB staff manually matched declarations in the second-tier declaration forms with those in the first-tier declaration forms. Members usually served the CoY/CPCE for a number of years and most of them served numerous other organisations (e.g. a member listed 46 organisations in his first-tier declaration form). The HAB, however, did not have a computerised database to maintain the information on interests declared by members. The establishment of such a database would facilitate checking and following-up of any omissions or inconsistencies in declarations, as well as help ensure that project proposals are assigned to members who are free of interests in applicant organisations.

Audit considers that the HAB needs to ensure that decisions on declared interests of CoY/CPCE members are documented in minutes of meetings. The HAB also needs to consider setting up a computerised database of interests declared by members.

Audit recommendations

- 4.12 **Audit has *recommended* that the Secretary for Home Affairs should:**
- (a) **take measures to prevent recurrence of late/incomplete submission of declarations of interests of CoY/CPCE members;**
 - (b) **ensure that decisions on declared interests of CoY/CPCE members are documented in minutes of meetings; and**
 - (c) **consider setting up a computerised database of interests declared by members to facilitate checking and following-up of any omissions or inconsistencies in declarations of interests.**

Response from the Government

4.13 The Secretary for Home Affairs agrees with the audit recommendations. He has said that:

- (a) the HAB has stepped up efforts in reminding members to submit declarations of interests on time, and such submissions will be vigilantly vetted by staff to ensure completeness. The HAB will also make use of electronic means to manage the database of interests declared by members; and
- (b) all decisions on declared interests of members have been properly documented since the 2018-19 round of assessment.

Way forward

Need to enhance overseas internship and exchange experience

4.14 The HAB's provision of youth exchange and internship activities has been mainly focused on projects in the Mainland. As can be seen from Table 4 in paragraph 1.11:

- (a) in the four years between 2012-13 and 2015-16, of the 726 projects (i.e. 137, 117, 165 and 307 projects) of youth exchange and internship projects conducted, only 24 (3.3%) projects were conducted in other countries to provide international exchange experience. These 24 projects comprised 20 IYEP projects (i.e. 4, 3, 7 and 6 projects) and 4 SEP projects (i.e. 1 SEP project conducted in each of the four years); and
- (b) in 2016-17, the BnRFS was launched. Of the 359 youth exchange and internship projects conducted in the year, 33 (9.2%) projects were conducted in other countries. These 33 projects comprised 27 BnRFS projects, 5 IYEP projects and 1 SEP project.

The BnRFS had brought about an increase in the proportion of projects which provided international experience. Audit, however, noted that all the international projects (i.e. BnRFS projects, IYEP projects and SEP projects) were related to exchange activities. In 2012-13 to 2016-17, there were no projects which provided international internship places.

4.15 Audit considers that the HAB needs to consider introducing internship projects that provide internship places in other countries in addition to the Mainland

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through the YIFS. The HAB also needs to explore more countries for youth exchange activities so as to further broaden the youth's horizon.

Scope for rationalising operation

4.16 Through its funding schemes for youth exchange and internship as well as its programmes of youth exchange, the HAB provides exchange and internship activities to young people. During the period 2012-13 to 2016-17, the vast majority of exchange and internship activities were delivered under the funding schemes. Table 22 shows that the funding schemes accounted for 97% of the number of projects conducted, 99% of the number of participants, and 97% of the project expenditure.

Table 22

**Exchange and internship activities
provided under funding schemes and programmes of youth exchange
(2012-13 to 2016-17)**

Funding schemes/ programmes	2012-13	2013-14	2014-15	2015-16	2016-17	Overall	
<i>No. of projects</i>							
Funding schemes	131	112	156	299	352	1,050	(97%)
Programmes	6	5	9	8	7	35	(3%)
Total	137	117	165	307	359	1,085	(100%)
<i>No. of participants</i>							
Funding schemes	8,627	9,138	11,814	21,777	22,760	74,116	(99%)
Programmes	147	129	166	147	133	722	(1%)
Total	8,774	9,267	11,980	21,924	22,893	74,838	(100%)
<i>Expenditure (\$ million)</i>							
Funding schemes	23.8	23.8	47.0	102.5	125.4	322.5	(97%)
Programmes	2.6	1.6	2.6	2.2	2.3	11.3	(3%)
Total	26.4	25.4	49.6	104.7	127.7	333.8	(100%)

Source: Audit analysis of HAB records

4.17 Audit noted that under the 2017-18 Budget, the Financial Secretary had announced an additional funding allocation of \$100 million for international youth exchange. In June 2017, the HAB launched the IYEFS (see Table 1 in para. 1.8) under the funding schemes to utilise the additional allocation. According to the HAB, in comparison with programmes of youth exchange organised by the HAB directly, funding schemes have been more efficient as well as effective in promoting youth exchange projects in the community. The HAB intended to use the \$100 million over a number of years. The funding schemes would therefore continue to be dominant over the programmes of youth exchange.

4.18 In PART 2 of this audit review, room for improvement has been found in the funding schemes for youth exchange and internship. Furthermore, enhancement could be made to the monitoring of funding schemes. Audit considers that the HAB needs to take into account the results of this audit review in expanding youth exchange and internship activities through the funding schemes.

4.19 On the other hand, as can be seen from Table 22 in paragraph 4.16, only a very small proportion (3% by expenditure) of the exchange and internship activities in 2012-13 to 2016-17 had been conducted through the programmes of youth exchange. Audit considers that the HAB needs to review the way forward of providing activities through the programmes.

Audit recommendations

- 4.20 **Audit has recommended that the Secretary for Home Affairs should:**
- (a) **consider introducing internship projects that provide internship places in other countries;**
 - (b) **explore more countries for youth exchange activities so as to further broaden the youth's horizon;**
 - (c) **take into account the results of this audit review in expanding youth exchange and internship activities through the funding schemes in future; and**

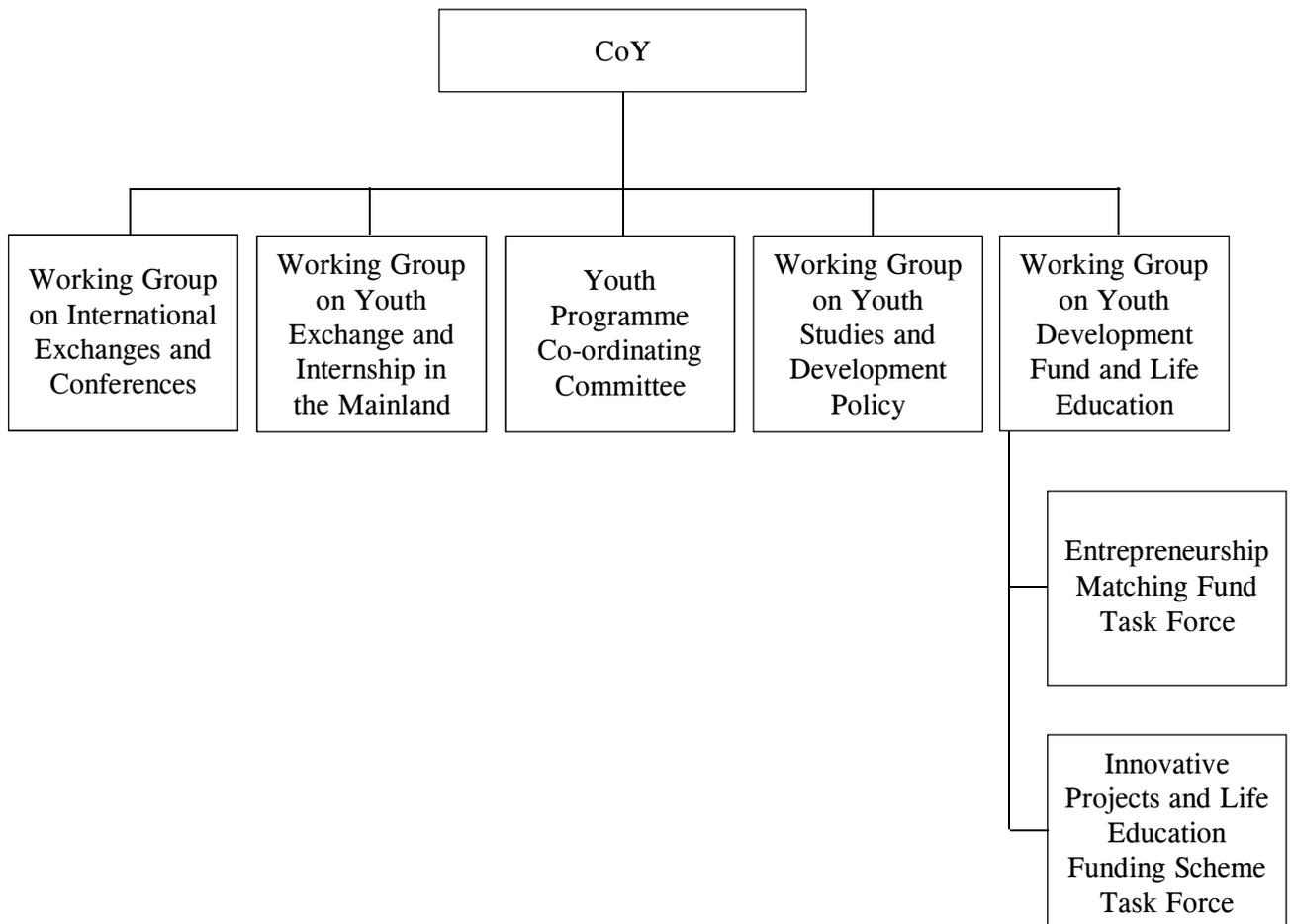
Governance matters and way forward

- (d) **review the way forward of providing activities through the programmes of youth exchange.**

Response from the Government

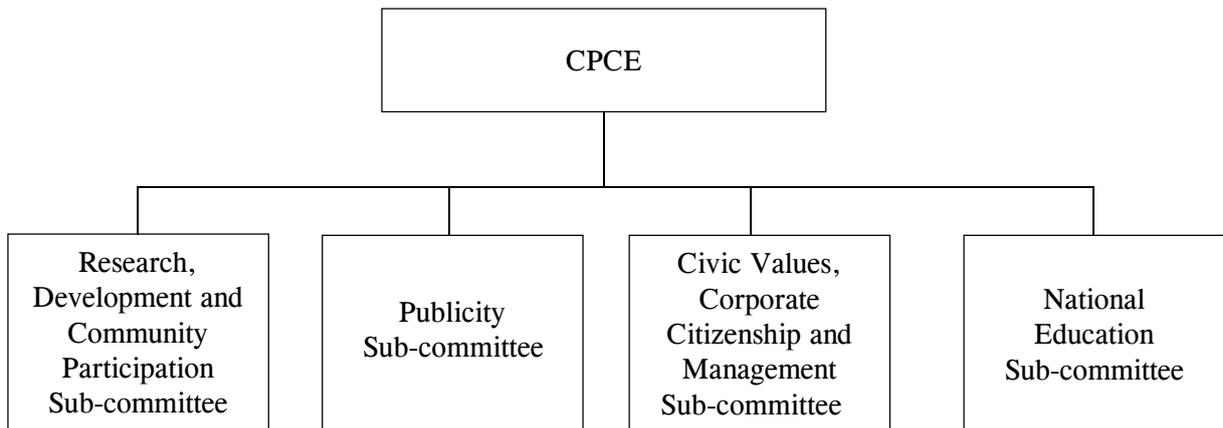
4.21 The Secretary for Home Affairs agrees with the audit recommendations. He has said that the Government is committed to expanding exchange and internship opportunities both on the Mainland and in overseas countries to enable young people to better understand the prevailing economic, social and cultural landscape at the national and international levels, as well as the work culture and career prospects in different places. With regard to overseas internships, the HAB has launched new programmes to increase internship opportunities in overseas countries recently, notably the United Nations Volunteers — Hong Kong Universities Volunteer Internship Programme and the Pilot Scheme on Corporate Summer Internship on the Mainland and Overseas launched in mid-March 2018. The HAB will continue to explore other possibilities of providing overseas internship opportunities.

**Commission on Youth
Organisation chart
(31 December 2017)**



Source: CoY records

**Committee on the Promotion of Civic Education
Organisation chart
(31 December 2017)**



Source: CPCE records

Commission on Youth and relevant working groups

Terms of reference

Terms of reference of the CoY

- (a) To advise the Chief Executive on matters pertaining to youth.
- (b) To exchange ideas and information with other Government advisory bodies on youth matters with a view to ensuring that interests of young people are taken into account in the design of relevant service programmes.
- (c) To encourage better cooperation between Government departments, voluntary agencies, district organisations and private organisations involved in youth service provision.
- (d) To gather information and initiate research on matters pertaining to youth.
- (e) To act as focal liaison point with other international youth organisations, and to promote opportunities for the young people of Hong Kong to acquire international experience and exposure.
- (f) To enhance the civic awareness of young people and their participation in community affairs.
- (g) To promote leadership training for young people.

Terms of reference of the Working Group on International Exchanges and Conferences

- (a) To assist in formulating the objectives and content of the International Youth Exchange Programme, including the selection of suitable delegates, assisting in the selection of suitable contractors, monitoring of the implementation of the programme and evaluating its effectiveness.
- (b) To assist in developing funding criteria, application procedures and publicity and promotion plans for the IYEFS, as well as to examine applications and to monitor and evaluate the effectiveness of the Scheme.
- (c) To organise the Youth Summit, including formulating its objectives, themes, format, etc.

**Terms of reference of the Working Group
on Youth Exchange and Internship in the Mainland**

- (a) To assist in developing funding criteria, application procedures and publicity and promotion plans for the YEFS, as well as to examine applications and to monitor and evaluate the effectiveness of the Scheme.
- (b) To assist in developing funding criteria, application procedures and publicity and promotion plans for the YIFS, as well as to examine applications and to monitor and evaluate the effectiveness of the Scheme.

Source: CoY records

**Committee on the Promotion of Civic Education
and relevant sub-committee
Terms of reference**

Terms of reference of the CPCE

Having regard to the existing programmes and activities in promoting civic awareness and responsibility:

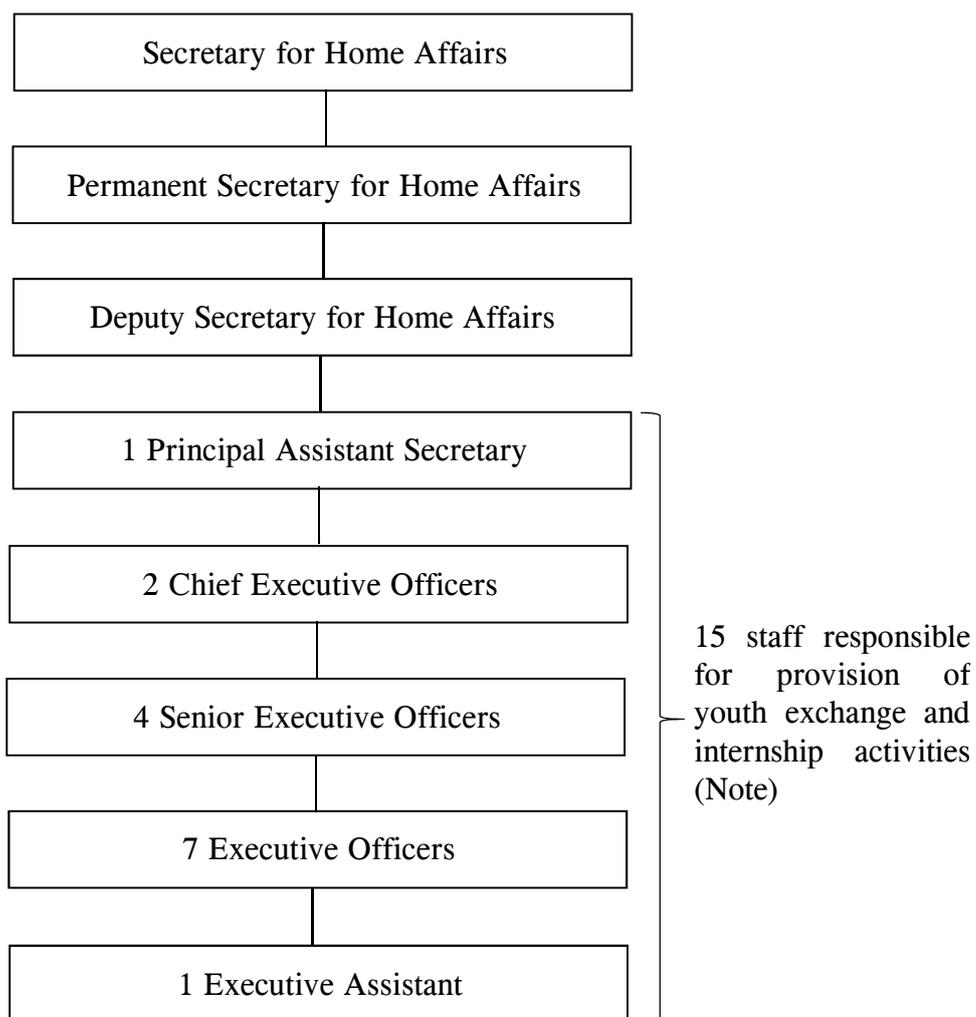
- (a) study, discuss and make proposals on the objectives and scope of civic education and its ways of implementation, including mapping out the strategy and plans on promotion of national education and encouraging cooperation amongst the Government, voluntary agencies, youth organisations, district and community organisations in promoting national education;
- (b) liaise with and assist in the efforts of various Government departments and community organisations in promoting civic education; and
- (c) encourage all sectors of the community to actively promote civic and national awareness, the respective responsibilities and to participate in associated activities, as well as to provide the necessary guidelines and support for this purpose.

**Terms of reference of the Research, Development and
Community Participation Sub-committee**

- (a) To assist in the implementation of the Community Participation Scheme and the Co-operation Scheme with District Councils, vetting funding applications for individual civic education projects and evaluating the effectiveness of the schemes.
- (b) To assist in the implementation of the BnRFS, vetting funding applications and evaluating the effectiveness of the Funding Scheme.
- (c) To liaise with encourage community organisations to work in collaboration to promote civic education.
- (d) To advise on studies relating to civic education.

Source: CPCE records

**Home Affairs Bureau
Organisation chart (extract)
(31 December 2017)**



Source: *HAB records*

Note: *In addition to the provision of youth exchange and internship activities, the 15 staff were also responsible for providing other services relating to the promotion of youth development and civic education outside schools (e.g. the operation of the Youth Development Fund — see Note 2(b) to para. 1.3).*

Sample itineraries of youth exchange and internship activities

Itinerary of a 28-day YIFS tour to Guangzhou, Guangdong Province

Day	Day of week	Activities
1	Friday	<ul style="list-style-type: none"> • Travelling from Hong Kong to Guangzhou • Welcoming ceremony • Visit to internship employers
2 & 3	Saturday & Sunday	<ul style="list-style-type: none"> • Tour visits at Heyuan City
4 – 8	Monday to Friday	<ul style="list-style-type: none"> • Internship placement • Sharing of participants (Friday night)
9	Saturday	<ul style="list-style-type: none"> • Tour visits
10	Sunday	<ul style="list-style-type: none"> • Free time • Submission of weekly report by participants
11 – 15	Monday to Friday	<ul style="list-style-type: none"> • Internship placement • Sharing of participants (Friday night)
16	Saturday	<ul style="list-style-type: none"> • Enterprise visits
17	Sunday	<ul style="list-style-type: none"> • Free time • Submission of weekly report by participants
18 – 22	Monday to Friday	<ul style="list-style-type: none"> • Internship placement • Sharing of participants (Friday night)
23	Saturday	<ul style="list-style-type: none"> • Engage in volunteer services
24	Sunday	<ul style="list-style-type: none"> • Free time • Submission of weekly report by participants
25 – 27	Monday to Wednesday	<ul style="list-style-type: none"> • Internship placement • Sharing of participants (Wednesday night)
28	Thursday	<ul style="list-style-type: none"> • Submission of final report by participants • Travelling from Guangzhou to Hong Kong

Source: Audit analysis of HAB records

Appendix F
(Cont'd)
(para. 2.2 refers)

Itinerary of a 8-day IYEP tour to Kagoshima, Japan

Day	Time of day	Activities
1	AM and PM	Travelling from Hong Kong to Kagoshima
	Night	Welcoming dinner
2	AM	Courtesy visit to Kagoshima Prefectural Government Office
	PM	<ul style="list-style-type: none"> • Japanese culture experience (e.g. oshima tsumugi weaving) • Visiting non-profit organisation “Food Bank Kagoshima”
	Night	International exchange dinner
3	AM	Experiencing sand bath hot spring
	PM	<ul style="list-style-type: none"> • Visiting Chiran Peace Museum • Visiting Chiran Samurai Residence • Preparing dinner at Iwaya Park Campground
4	AM	<ul style="list-style-type: none"> • Visiting non-profit organisation “Ei-Okosokai” • Experiencing Kagoshima regional cuisine cooking
	PM	<ul style="list-style-type: none"> • Visiting Senganen Garden • Opinion exchange and homestay pairing session
	Night	Homestay
5	Whole day	Homestay
6	AM and PM	Homestay
	Night	Dinner at Kagomma Furusato Yataimura (i.e. food stall village near Kagoshima Chuo Station)
7	AM and PM	Hong Kong-Kagoshima Youth Summit
	Night	Farewell party
8	AM	Visiting high school
	PM	Travelling from Kagoshima to Hong Kong

Source: Audit analysis of HAB records

Acronyms and abbreviations

Audit	Audit Commission
BnRFS	Funding Scheme for Exchange in Belt and Road Countries
CEP	Guangdong-Hongkong-Macao Youth Cultural Exchange Programme
CoY	Commission on Youth
CPCE	Committee on the Promotion of Civic Education
HAB	Home Affairs Bureau
HKID	Hong Kong Identity
IYEFS	Funding Scheme for International Youth Exchange
IYEP	International Youth Exchange Programme
NGO	Non-governmental organisation
SEP	Summer Exchange Programme
WGIEC	Working Group on International Exchanges and Conferences
YDC	Youth Development Commission
YEFS	Funding Scheme for Youth Exchange in the Mainland
YIFS	Funding Scheme for Youth Internship in the Mainland

CHAPTER 8

**Highways Department
Civil Engineering and Development Department
Transport Department**

Sha Tin Section of Route 8

**Audit Commission
Hong Kong
3 April 2018**

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. 70 of the Director of Audit contains 8 Chapters which are available on our website at <http://www.aud.gov.hk>

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SHA TIN SECTION OF ROUTE 8

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SHA TIN SECTION OF ROUTE 8

Executive Summary

1. Route 8 links Sha Tin with North Lantau via Cheung Sha Wan and Tsing Yi. In order to alleviate traffic congestion at the then existing road links between Kowloon and Sha Tin, and meet the future traffic demand, the Government commenced the construction of Sha Tin Section (between Sha Tin and Cheung Sha Wan) of Route 8 in 2002. The construction was implemented through awarding three works contracts, namely Contracts A, B and C, and a traffic control and surveillance system (TCS System) contract (Contract D). The project works under Contracts A, B and D were implemented by the Highways Department (HyD) while those works under Contract C were entrusted to the Civil Engineering and Development Department (CEDD) for implementation. The design and construction supervision work of Sha Tin Section were conducted under Consultancy X (for Contracts A and B by Consultant X) and Consultancy Y (for Contract C by Consultant Y).

2. Between March 1997 and June 2002, the Finance Committee of the Legislative Council (LegCo) approved funding of \$7,083.9 million in total for the investigation, detailed design and construction of Sha Tin Section. After the substantial completion of the main works, Sha Tin Section was commissioned in March 2008. As of December 2017, the Government had incurred \$6,179.1 million for the Sha Tin Section project, \$904.8 million (13%) below approved funding.

3. Sha Tin Section (a 5.6 kilometre (km) dual three-lane expressway), together with Tsing Yi Section (a 7.6 km dual three-lane expressway between Cheung Sha Wan and Tsing Yi) of Route 8, form the Tsing Sha Control Area (TSCA). The management, operation and maintenance (MOM) of the TSCA has been outsourced to an operator through open tender since commissioning of Sha Tin Section. The Transport Department (TD) is responsible for handling the tendering of management contract, and for overseeing and monitoring the performance of the contractor for the TSCA. The Audit Commission (Audit) has recently conducted a review of Sha Tin Section of Route 8, covering mainly Contracts A to C (Contract D involved the implementation of the TCS System for both Sha Tin Section and Tsing Yi Section, and an audit review of Tsing Yi Section in 2014 had covered this contract).

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Administration of Contract A

4. Contract A mainly involved the construction of Lai Chi Kok (LCK) Viaduct. In September 2003, the HyD awarded Contract A to Contractor A at a contract sum of \$1,066.2 million. The contract works were completed in November 2009 (about 24 months later than the original completion date of November 2007) and the total contract expenditure was \$1,445 million (an increase of \$378.8 million (36%) over the original contract sum of \$1,066.2 million). In the construction of LCK Viaduct, there were disputes under Contract A and disputes under Consultancy X. The disputes under Contract A mainly consisted of two key issues, namely adequacy of the design for viaduct structure and erection, and measurements and valuations of additional or varied works (a majority of which were related to the viaduct design). In October 2012, the HyD and Contractor A agreed to settle all the disputes under Contract A at an extra-contractual settlement sum of \$273 million on a “without admission of liability” basis. The disputes under Consultancy X were mainly in respect of the viaduct design issues. In November 2016, Consultant X, also on a “without admission of liability” basis, agreed to pay an extra-contractual settlement sum of \$133.1 million to settle all the disputes under Consultancy X (paras. 2.2 to 2.4, 2.7, 2.9 and 2.11 to 2.14).

5. *Need to strengthen vetting of consultant’s design.* One of the key issues in the disputes between the HyD and Contractor A related to the design for viaduct structure and erection. According to the HyD, this issue concerned, for example, whether the design for the permanent structure of the viaduct envisaged to be built by the balanced cantilever method should have taken into account the temporary loadings during construction. In the course of disputes resolution, having considered legal opinion and views of an engineering expert on the design for the permanent structure of LCK Viaduct, the HyD noted that: (a) the construction and erection loadings did not appear to have been properly considered in the design; (b) the contract drawings only showed the use of balanced cantilever method of construction but did not indicate the need for certain requisite construction systems; and (c) Consultant X’s response to a tender query requesting clarification of the temporary loads used in Consultant X’s design could lead to confusion that construction and erection loadings had been considered in Consultant X’s design. In implementing a works project in future, there is a need for the HyD to take measures to strengthen vetting of a consultant’s design, including carrying out appropriate level of independent checking on the design of highway structures (paras. 2.15, 2.16 and 2.21).

Executive Summary

6. *Need to strengthen measures in handling responses to tender queries.* Audit noted that Consultant X's response to the tender query could lead to confusion (see para. 5(c)) and could give rise to grounds for claims on the design for viaduct structure and erection. In view of the possible significant implications of responses to tender queries, there is a need for the HyD to strengthen measures in handling responses to tender queries (paras. 2.22 and 2.24).

7. *Need to consult Financial Services and the Treasury Bureau (FSTB) earlier regarding extra-contractual settlement of claims.* The Stores and Procurement Regulations set out requirements for contract negotiation. In July 2012, the HyD discussed with Contractor A and reached a non-committal consensus (which was subject to the Government's internal approval and the execution of a formal settlement agreement) to settle all the disputes under Contract A at an extra-contractual settlement sum of \$273 million. Audit noted that the HyD had not sought the FSTB's prior agreement before discussing with Contractor A and reaching such consensus (paras. 2.30 and 2.31).

Administration of Contract B and Contract C

8. Contract B mainly involved the construction of Eagle's Nest (EN) Tunnel. In September 2003, the HyD awarded Contract B to Contractor B at a contract sum of \$1,836 million. In the event, the contract works were completed in February 2009 (about 15 months later than the original completion date of November 2007). The total contract expenditure was \$2,317.1 million (an increase of \$481.1 million (26%) over the original contract sum of \$1,836 million). Contract C mainly involved the construction of Sha Tin Heights (STH) Tunnel and Approaches. The HyD entrusted the works to the CEDD which awarded Contract C to Contractor C in November 2002 at a contract sum of \$1,073.8 million. The contract works were completed in September 2008 (about three months later than the extended completion date). The total contract expenditure was \$1,199.6 million (an increase of \$125.8 million (12%) over the original contract sum of \$1,073.8 million) (paras. 3.2 to 3.4, 3.27 and 3.28).

9. *Discrepancy between contract clause and contract drawing in Contract B.* Contract B was a remeasurement contract under which the costs of works are based on the actual quantities of works done to be remeasured and the prices of different works items as priced by the contractor in the Bills of Quantities (BQ) according to the contract. Under Contract B, a contract clause on tunnelling works required that

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a layer of smoothing shotcrete should be applied outside the extrados of the permanent concrete lining of EN Tunnel. However, the thickness of smoothing shotcrete was stated at a maximum of 100 millimetres (mm) in the contract clause and 170 mm in the contract drawing. According to Consultant X's assessment, the thickness of the smoothing shotcrete should have been 170 mm. The 170 mm smoothing shotcrete was omitted in the BQ. In the event, the thickness of smoothing shotcrete measured 170 mm and the HyD paid \$43.7 million to Contractor B for the works item omitted in the BQ (paras. 2.2, 3.2, 3.6 and 3.8).

10. *Unclear contract clauses for measurement of tunnelling works.* A contract clause on tunnelling works of Contract B required the adoption of controlled blasting techniques for the formation of the tunnel perimeter. Contractor B contended that such a works item was omitted in the BQ for excavation in tunnel. Consultant X agreed that the BQ for excavation in tunnel had not included controlled blasting as a works item and it was desirable to expand the BQ for excavation in tunnel to cover controlled blasting. In the event, the HyD paid \$54.6 million to Contractor B for its claims (paras. 3.10 to 3.12).

11. *Scope for conducting more thorough preliminary site investigations.* At the tender stage of Contract B, drawings showing the ground investigation information obtained at the design stage would be provided to tenderers for reference upon request. Audit noted that total prolongation costs of \$34.5 million were awarded under Contract B due to extensions of time for additional works at three slopes at which actual site conditions were undetected in earlier site investigations. There is merit for the HyD and its consultants to conduct more thorough preliminary site investigations for works at critical locations with a view to incorporating more accurate information on site conditions for design and tender purposes as far as practicable (paras. 3.22 and 3.24).

12. *Shortened facilitation period arising from an error in drafting of Contract C.* The scope of works entrusted to the CEDD (implemented under Contract C) did not include electrical and mechanical (E&M) works and TCS System works which had to be performed by the HyD contractors under Contracts B and D respectively. After the substantial completion of certain sections of works in Contract C, the HyD contractors' follow-on works would commence. Under Contract C, Contractor C would provide the necessary facilitation works (e.g. temporary ventilation and lighting) to enable the HyD contractors to carry out

Executive Summary

follow-on works at the site areas of such sections for a period of nine months (facilitation period). However, due to a processing error during the drafting of Contract C, the facilitation period was defined to be about 7.5 months instead of the agreed duration of 9 months. Audit considers that the processing error could have been avoided with more diligence and care (paras. 3.29, 3.31 and 3.32).

Usage and management of Sha Tin Section

13. Since commissioning of Sha Tin Section in March 2008, the MOM of the TSCA has been outsourced to an operator through open tender. The TD awarded the current MOM contract in June 2013 to an operator at a fixed lump-sum management fee of \$964.4 million for six years from 19 September 2013 to 18 September 2019. The operator is responsible for the proper MOM of the TSCA. According to the current TSCA MOM contract: (a) a Government Monitoring Team (GMT), comprising officers from the TD, the HyD, the Electrical and Mechanical Services Department (EMSD) and the Architectural Services Department, is responsible for monitoring the TSCA operator's performance; (b) the operator shall at all times provide and maintain sufficient number of competent personnel at all levels for safe, effective and efficient MOM of the TSCA in accordance with the staff plan specified in the contract; and (c) if the operator fails to employ the required number of staff at certain ranks, the operator shall pay the Government, as liquidated damages (LD), the sum for shortfall of staff at each rank (paras. 4.10 to 4.12).

14. *Need to make better use of spare capacity of Sha Tin Section.* In 2002, the Transport and Housing Bureau informed LegCo that the construction of Sha Tin Section of Route 8 was needed to alleviate the traffic congestion at the then existing road links between Kowloon and Sha Tin, in particular Lion Rock Tunnel and Tate's Cairn Tunnel. However, Audit noted that as of April 2017, during weekday peak hours, EN Tunnel and STH Tunnel of Sha Tin Section still had spare capacity while Lion Rock Tunnel and Tate's Cairn Tunnel had exceeded their respective design capacities. For example, in the AM peak hours, EN Tunnel and STH Tunnel were at 79% of their tunnel design capacity with no observable traffic queue, while Lion Rock Tunnel and Tate's Cairn Tunnel reached 135% and 138% of their respective tunnel design capacities and with traffic queues of 1.8 km and 1.9 km respectively (para. 4.4).

Executive Summary

15. ***Responsibilities of GMT members not clearly set out.*** According to the TD, the GMT members monitor the performance of the operator under their respective purview. However, Audit noted that the respective responsibilities among the GMT members were not specified in the TSCA MOM contract or documented in other records (paras. 4.13 and 4.14).

16. ***Manning level requirements for some types of staff not monitored.*** According to the TD, for different types of staff specified in the TSCA MOM contract, the GMT members are responsible for monitoring the staff manning level and imposing LD for any staff shortfall. Audit noted that, as of December 2017, the manning level of administrative and supporting staff and that of building maintenance staff had not been monitored since the commencement of the TSCA MOM contract in September 2013 (paras. 4.15 and 4.16).

17. ***Staff manning level requirement not met.*** According to the TD, the TSCA operator is required to deploy a total of 403 staff, of which 343 staff are subject to LD for any shortfall. However, the operator was not able to continuously maintain the required staff manning level since the commencement of the contract in September 2013 and, as a mitigation measure, had arranged its staff to work overtime to fill the vacancies as far as possible. Audit found that, for the period from January to September 2017, out of the required manning level of 343 staff subject to LD for any shortfall, there was a shortfall of about 25 staff on average (around 7% of the required manning level of 343 staff), mostly attributed to the shortfall of about 24 E&M staff (around 20% of the required manning level of 122 E&M staff) (paras. 4.25 to 4.27).

18. ***Delay in imposing LD.*** The TD initiated action to impose LD for staff shortfall on the TSCA operator in October 2014. However, due to unclear methodology set out in the MOM contract, it took 27 months (from November 2014 to January 2017) for discussing and agreeing with the operator the methodology for calculating the amount of LD. Audit noted that, as of December 2017: (a) for E&M staff, in respect of the operator's staff shortfall for about 51.5 months from 19 September 2013 to 31 December 2017, the TD had only imposed LD of about \$5.7 million for about 14.5 months, and the TD and the EMSD had not yet ascertained the amount of LD for the remaining 37 months; and (b) for building maintenance staff, as the manning level of such staff had not been monitored since the commencement of the TSCA MOM contract, information on staff shortfall remained

Executive Summary

to be checked and hence no LD had been imposed up to December 2017 (paras. 4.32 and 4.33).

Audit recommendations

19. **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:**

Administration of Contract A

- (a) **in implementing a works project in future, take measures to strengthen vetting of a consultant's design, and strengthen measures in handling responses to tender queries (para. 2.25(a) and (b));**
- (b) **strictly follow the Stores and Procurement Regulation requirements for contract negotiation and seek the relevant authority's prior agreement to the strategy or bottom line for the contract negotiation before entering into negotiation with contractors or consultants in future (para. 2.40(a));**

Administration of Contract B and Contract C

- (c) **in preparing documents for a works contract in future, take measures to strengthen the checking of consistency between contract clauses and contract drawings, and strengthen the vetting of tender documents regarding contract clauses for the measurement of works (para. 3.18(a) and (b));**
- (d) **consider conducting more thorough preliminary site investigations for works at critical locations with a view to incorporating more accurate information on site conditions for design and tender purposes as far as practicable (para. 3.25);**
- (e) **in preparing documents for a works contract in future, take measures to ensure that contract clauses for time programmes are carefully checked to ensure their accuracy and consistency (para. 3.38(a));**

Executive Summary

Usage and management of Sha Tin Section

- (f) **explore measures to make better use of the spare capacity of EN Tunnel and STH Tunnel of Sha Tin Section to alleviate the traffic congestion at the existing road links between Kowloon and Sha Tin (para. 4.8(a));**
- (g) **set out clearly the responsibilities of each member of the GMT in monitoring the TSCA operator's performance (para. 4.36(a));**
- (h) **take measures to ensure that the TSCA operator complies with the manning level requirement in the MOM contract for all staff, and take timely actions to monitor the staff manning level of the TSCA operator (para. 4.36(b), (c) and (f)); and**
- (i) **take timely actions in calculating and imposing LD for the TSCA operator's shortfall of E&M staff and building maintenance staff (para. 4.36(g)).**

Response from the Government

20. 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

Route 8

1.2 Route 8 is a 27.7-kilometre (km) expressway linking Sha Tin and North Lantau via Cheung Sha Wan and Tsing Yi. It comprises three road sections, namely North Lantau Section, Tsing Yi Section and Sha Tin Section (see Figure 1). The Highways Department (HyD) was responsible for the implementation of Route 8.

Figure 1

Route 8



Source: HyD records

Note 1: North Lantau Section of Route 8 includes Lantau Link (comprising Tsing Ma Bridge, Ma Wan Viaduct and Kap Shui Mun Bridge) and North Lantau Highway.

Note 2: Tsing Yi Section of Route 8 comprises Ngong Shuen Chau Viaduct, Stonecutters Bridge, East Tsing Yi Viaduct, Nam Wan Tunnel and West Tsing Yi Viaduct.

Introduction

1.3 North Lantau Section of Route 8 (comprising Tsing Ma Bridge, Ma Wan Viaduct, Kap Shui Mun Bridge and North Lantau Highway) is of 14.5 km long linking Tsing Yi and the Hong Kong International Airport on North Lantau. Its construction works commenced in May 1992 and were completed in April 1997. To cope with the increasing traffic demand, the construction of Sha Tin Section and Tsing Yi Section commenced in 2002. After the substantial completion of the main works, Sha Tin Section and Tsing Yi Section were commissioned in March 2008 and December 2009 respectively. The remaining works (including the establishment works — Note 1) for the two sections were completed in November 2009 and January 2010 respectively (see Table 1).

Table 1

Sha Tin Section and Tsing Yi Section of Route 8

Road section	Road length (km)	Major part	Works commenced in	Works completed in	Commissioned in (Note)
Sha Tin Section (between Sha Tin and Cheung Sha Wan — see Figure 2 in para. 1.4)	5.6	Lai Chi Kok (LCK) Viaduct Eagle's Nest (EN) Tunnel Sha Tin Heights (STH) Tunnel and Approaches	November 2002	November 2009	March 2008
Tsing Yi Section (between Cheung Sha Wan and Tsing Yi)	7.6	Ngong Shuen Chau Viaduct Stonecutters Bridge East Tsing Yi Viaduct Nam Wan Tunnel West Tsing Yi Viaduct	April 2002	January 2010	December 2009

Source: HyD records

Note: The two sections were commissioned after the substantial completion of the main works.

Note 1: According to the HyD, establishment works include regular inspections, cultivations and other operations as specified to be performed during the period of establishment following completion of the landscape softworks.

Justifications for constructing Sha Tin Section

1.4 In 2002, in seeking funding approval from the Finance Committee of the Legislative Council (LegCo) for the construction of Sha Tin Section of Route 8 (see Figure 2), the Transport and Housing Bureau (THB — Note 2) informed LegCo that:

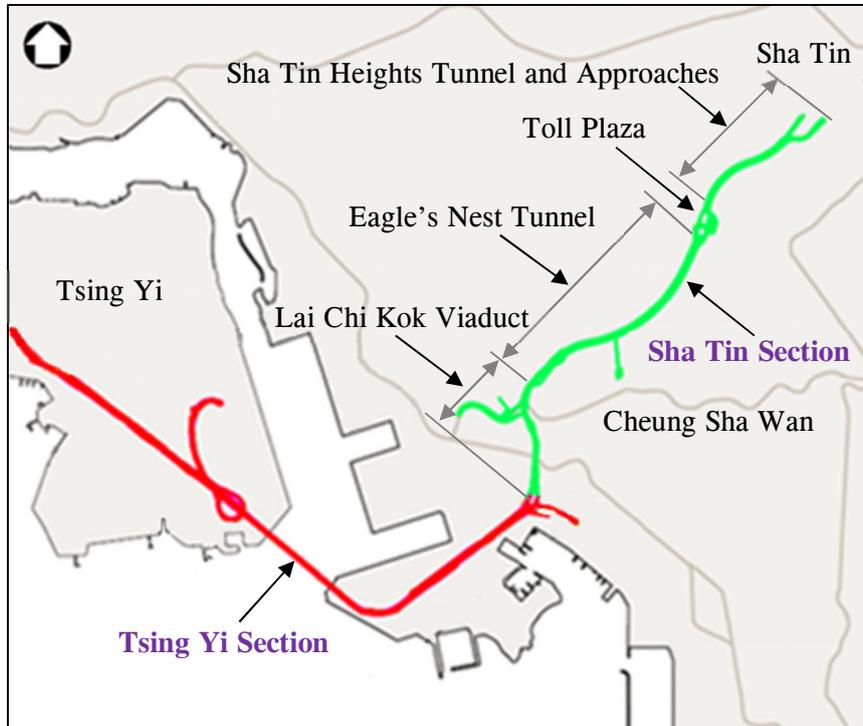
- (a) there was traffic congestion at the then existing road links between Kowloon and Sha Tin, in particular Lion Rock Tunnel and Tate’s Cairn Tunnel, during morning peak hours. To alleviate traffic congestion, the construction of Sha Tin Section of Route 8 was needed in order to provide an additional road link between Kowloon and Sha Tin; and
- (b) the Strategic Highway Project Review (Note 3) carried out by the Transport Department (TD) in 2001-02 found that Sha Tin Section of Route 8 would be required by 2007, and a dual three-lane configuration of the project was appropriate for meeting the future traffic demand and relieving traffic pressure on the then existing external road corridors from Sha Tin to the urban areas and the container ports in Kwai Chung or Tsing Yi.

Note 2: *Before July 2002, the then Transport Bureau was responsible for the policy portfolio of transport matters. In July 2002, the then Environment, Transport and Works Bureau was formed to take over the policy portfolio. In July 2007, the THB was formed to take over the transport policy portfolio. For simplicity, the then Transport Bureau and the then Environment, Transport and Works Bureau are referred to as the THB in this Audit Report.*

Note 3: *A Strategic Highway Project Review is conducted regularly to examine the need, timing, scope and configuration of strategic highway projects to ensure that they are planned and implemented in an effective and timely manner to meet future transport demands.*

Figure 2

Sha Tin Section of Route 8



Source: HyD records

1.5 Between March 1997 and June 2002, the Finance Committee of LegCo approved funding of \$7,083.9 million in total for the investigation, detailed design and construction of Sha Tin Section (see Table 2).

Table 2
Funding approvals for Sha Tin Section
(March 1997 to June 2002)

Date	Particulars	Approved amount (\$ million)
<i>Investigation and detailed design</i>		
March 1997	Investigation	15.5
February 1998	Detailed design	263.0
<i>Construction works</i>		
November 2001	Enabling works (Note 1)	45.7
June 2002	Implementing LCK Viaduct, EN Tunnel, STH Tunnel and Approaches, and associated traffic control and surveillance system (TCS System)	6,759.7 (Note 2)
Total		7,083.9

Source: HyD records

Note 1: The enabling works refer to the entrustment of the construction of ten piers of a section of slip roads in Tai Wai to the Kowloon-Canton Railway Corporation.

Note 2: The Financial Services and the Treasury Bureau (FSTB) has put in place measures to ensure proper control and use of funding under the approved project estimate. If the outturn tender price is lower than the approved estimate, the FSTB would administratively adjust downward the capital resources allocated to the project. The lower spending limit would become an administrative cap on the project expenditure. Works departments should not expend beyond the administrative cap unless with full justifications and approval by the FSTB. In 2003, the FSTB imposed an administrative cap of \$5,339.8 million on the works project for Sha Tin Section in view of its lower outturn tender prices (see Table 5 in para. 1.10). The FSTB subsequently approved the revisions of the administrative cap several times to \$6,136 million in 2015.

Introduction

1.6 The project works for LCK Viaduct, EN Tunnel and the TCS System were implemented by the HyD while those works for STH Tunnel and Approaches were entrusted to the Civil Engineering and Development Department (CEDD — Note 4) for implementation (Note 5).

1.7 The design and construction supervision work of Sha Tin Section were conducted under two consultancies (see Table 3).

Note 4: *In July 2004, the CEDD was formed upon the merging of the then Civil Engineering Department and the then Territory Development Department. For simplicity, the then Territory Development Department is referred to as the CEDD in this Audit Report.*

Note 5: *According to a paper submitted by the HyD in May 1998 to the Engineering and Associated Consultants Selection Board (which approves the selection and appointment of engineering and associated consultants for government projects, and is chaired by the Director of Civil Engineering and Development and comprises members from the FSTB and the Development Bureau), since the consultancy work for all strategic infrastructure within Sha Tin New Town (including STH Tunnel and Approaches) was covered by a consultancy agreement of the CEDD, the project works for STH Tunnel and Approaches were proposed to be entrusted to the CEDD for implementation. The Board approved the proposed entrustment of works in June 1998.*

Table 3

Consultancies and contracts for Sha Tin Section

Consultancy	Consultant	Cost (\$ million)	Responsible for design and construction supervision work
X (Awarded by the HyD in July 1999)	X	83.5	LCK Viaduct (Contract A) EN Tunnel (Contract B)
Y (Note)	Y	57.6	STH Tunnel and Approaches (Contract C)
Total		141.1	

Source: HyD and CEDD records

Note: In 1998, the CEDD appointed Consultant Y to conduct the design and construction supervision work of STH Tunnel and Approaches under Consultancy Y.

1.8 Between November 2002 and October 2004, three works contracts and a TCS System contract (Contract D) were awarded to four contractors (Contracts A, B and D by the HyD and Contract C by the CEDD).

Completion of Sha Tin Section

1.9 Contracts A, B and C were completed in November 2009, February 2009 and September 2008 respectively, and the TCS System under Contract D was completed in January 2010 (Note 6), which were later than the respective original contract completion dates (see Table 4).

Note 6: *The TCS System under Contract D for Sha Tin Section was completed in March 2008 and that for Tsing Yi Section was completed in December 2009 (Tsing Yi Section of Route 8 was opened to traffic in the same month). The system operability test for Sha Tin Section was completed in April 2008, while that for Tsing Yi Section was completed in January 2010, upon which the contract was completed.*

Introduction

Table 4

Contracts A to D for Sha Tin Section

Contract	Works	Commencement date	Original contract completion date	Actual completion date	No. of months later than original contract completion date
<i>Works contracts</i>					
A	LCK Viaduct (1.9 km)	23.9.2003	4.11.2007	12.11.2009	24
B	EN Tunnel (2.1 km)	20.10.2003	24.11.2007	27.2.2009	15
C	STH Tunnel and Approaches (1.6 km)	18.11.2002	17.5.2007	22.9.2008	16
<i>TCS System contract</i>					
D	TCS System (Note)	12.10.2004	8.8.2008	19.1.2010	17

Source: HyD and CEDD records

Note: Under Contract D, the TCS System was implemented for both Sha Tin Section and Tsing Yi Section and the system cost was to be shared between the two road projects.

Costs of Sha Tin Section

1.10 The accounts of Contracts A to D (see Table 5) were finalised between October 2010 and December 2012. Consultancy X was completed in January 2017 (following settlement of all the disputes under Consultancy X in November 2016 — see para. 2.14) and the consultancy work relating to Sha Tin Section under Consultancy Y was completed in February 2011. As of December 2017, \$6,179.1 million (87%) of the approved project estimate totalling \$7,083.9 million (see Table 2 in para. 1.5) for Sha Tin Section had been incurred. Of the \$6,179.1 million, \$5,119.6 million (83%) were related to expenditures for Sha Tin Section under Contracts A to D (see Note 6 to Table 5). The remaining \$1,059.5 million (17%) mainly included resident site staff costs, consultancy fees and works carried out by other government departments (see Table 6).

Table 5

**Total contract expenditure of Contracts A to D
(December 2017)**

Contract	Original contract sum (a) (\$ million)	Total contract expenditure (Note 1) (b) (\$ million)	Increase (c) = (b) – (a) (\$ million)	Increase due to price fluctuation adjustment (Note 2) (d) (\$ million)	Increase after price fluctuation adjustment (e) = (c) – (d) (\$ million)
A	1,066.2	1,445.0	378.8 (36%)	83.6 (8%)	295.2
B	1,836.0	2,317.1 (Note 3)	481.1 (26%)	172.6 (9%)	308.5
C	1,073.8	1,199.6 (Note 4)	125.8 (12%)	123.6 (12%)	2.2
D (Note 5)	255.0	309.2	54.2 (21%)	—	54.2
Overall	4,231.0	5,270.9 (Note 6)	1,039.9 (25%)	379.8 (9%)	660.1

Source: HyD and CEDD records

Note 1: The accounts of Contracts A to D were finalised in November 2012, November 2012, October 2010 and December 2012 respectively.

Note 2: The original contract sums of Contracts A to C already included provisions for price fluctuation adjustments. These are additional sums to cover excessive price fluctuation adjustments.

Note 3: For Contract B, \$2.7 million of the total contract expenditure of \$2,317.1 million was regional laboratory expenditure reimbursed by the CEDD and not funded under the works project for Sha Tin Section.

Note 4: For Contract C, out of the total contract expenditure of \$1,199.6 million, \$12.2 million was funded under the works project of the CEDD for the construction of Road T3 (an elevated roadway connecting the existing Tai Po Road (Sha Tin Heights Section) and Route 8 (Sha Tin Section) to the existing Tai Po Road (Sha Tin Section)), and \$0.2 million was regional laboratory expenditure reimbursed by the CEDD and not funded under the works project for Sha Tin Section.

Note 5: Contract D did not include a provision for price fluctuation adjustments. Furthermore, \$136.2 million of the total contract expenditure of \$309.2 million was funded under the works project for Tsing Yi Section and the remaining \$173 million was funded under the works project for Sha Tin Section.

Note 6: Of the \$5,270.9 million, \$5,119.6 million related to Sha Tin Section, \$2.7 million (see Note 3) and \$0.2 million (see Note 4) were reimbursed by the CEDD, \$12.2 million related to the construction of Road T3 (see Note 4) and \$136.2 million related to Tsing Yi Section (see Note 5).

Table 6

**Other expenditures for Sha Tin Section
(December 2017)**

Item	Amount (\$ million)
Resident site staff costs (Note 1) paid to Consultants X and Y	601.2
Consultancy fees paid to Consultants X and Y	141.1
Project insurance premium	50.3
Works carried out by other government departments (Note 2)	166.1
Miscellaneous costs (Note 3)	100.8
Total	1,059.5

Source: HyD and CEDD records

Note 1: Consultants are required to employ resident site staff in different grades (e.g. professional grade and technical grade) for supervising contractors' works. The Government reimburses consultants the personal emoluments of resident site staff and pays an on-cost to consultants to cover their costs in managing the resident site staff.

Note 2: Works carried out by other government departments mainly included public works regional laboratory services provided by the CEDD, and electrical and mechanical (E&M) services provided by the Electrical and Mechanical Services Department (EMSD).

Note 3: Miscellaneous costs mainly included expenditures on advance works, reprovisioning of waterworks and dispute resolution, and were netted off by an amount received for settlement of claims (see para. 2.14).

Introduction

Usage and management of Sha Tin Section

1.11 Apart from Lion Rock Tunnel and Tate's Cairn Tunnel, EN Tunnel and STH Tunnel constructed under Sha Tin Section provide additional land tunnels connecting Kowloon and Sha Tin (Note 7). The alleviation of traffic congestion of Lion Rock Tunnel and Tate's Cairn Tunnel was one of the reasons for the construction of Sha Tin Section (see para. 1.4(a)). However, as of April 2017, during weekday peak hours, EN Tunnel and STH Tunnel (commissioned in March 2008) still had spare capacity while the other two tunnels had exceeded their respective design capacities.

1.12 Sha Tin Section, together with Tsing Yi Section, form the Tsing Sha Highway. The Government enacted the Tsing Sha Control Area Ordinance (Cap. 594) in June 2007 (which came into operation in March 2008) for the management, operation and maintenance (MOM) of the Tsing Sha Control Area (TSCA), which comprises Tsing Sha Highway. The MOM of the TSCA has been outsourced to an operator through open tender (annual fee for 2016-17 amounted to \$159 million) since commissioning of Sha Tin Section in March 2008 (Note 8). According to the TD's Controlling Officer's Report, the TD is responsible for handling the tendering of management contracts for a number of government transport infrastructure and services (including the TSCA), and for overseeing and monitoring the performance of the contractors that operate and maintain these transport infrastructure and services.

Note 7: *As of December 2017: (a) EN Tunnel and STH Tunnel of Sha Tin Section were tolled at a flat rate of \$8 for all vehicle types; (b) the toll for Lion Rock Tunnel was at a flat rate of \$8 for all vehicle types; and (c) the tolls for Tate's Cairn Tunnel varied between \$15 and \$35 according to vehicle types.*

Note 8: *The arrangement is similar to that for the Tsing Ma Control Area which comprises North Lantau Section of Route 8 (see para. 1.3). The Government enacted the Tsing Ma Control Area Ordinance (Cap. 498) in January 1997 (which came into operation in May 1997). The MOM of the Control Area has been outsourced to an operator through open tender.*

Audit review

1.13 In 2014, the Audit Commission (Audit) completed a review of Tsing Yi Section of Route 8 and the results of which were included in Chapter 4 of the Director of Audit's Report No. 62 of April 2014.

1.14 Against the above background and with the recent completion of Consultancy X in January 2017 (see para. 1.10), Audit commenced a review of Sha Tin Section of Route 8 in October 2017. This review mainly covered Contracts A to C (Note 9), focusing on the following areas:

- (a) administration of Contract A (PART 2);
- (b) administration of Contract B and Contract C (PART 3); and
- (c) usage and management of Sha Tin Section (PART 4).

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

Acknowledgement

1.15 Audit would like to acknowledge with gratitude the full cooperation of the staff of the HyD, the CEDD, the TD, the EMSD and the Architectural Services Department (ArchSD) during the course of the audit review.

Note 9: *Contract D involved works for both Sha Tin Section and Tsing Yi Section (see Note to Table 4 in para. 1.9 and Note 5 to Table 5 in para. 1.10). The 2014 audit review of Tsing Yi Section (see para. 1.13) had covered this contract and the audit findings were mentioned in paragraphs 4.2 to 4.24 of the 2014 Audit Report.*

PART 2: ADMINISTRATION OF CONTRACT A

2.1 This PART examines the administration of Contract A by the HyD, focusing on:

- (a) design for viaduct structure and erection (paras. 2.15 to 2.28); and
- (b) general contract management issues (paras. 2.29 to 2.41).

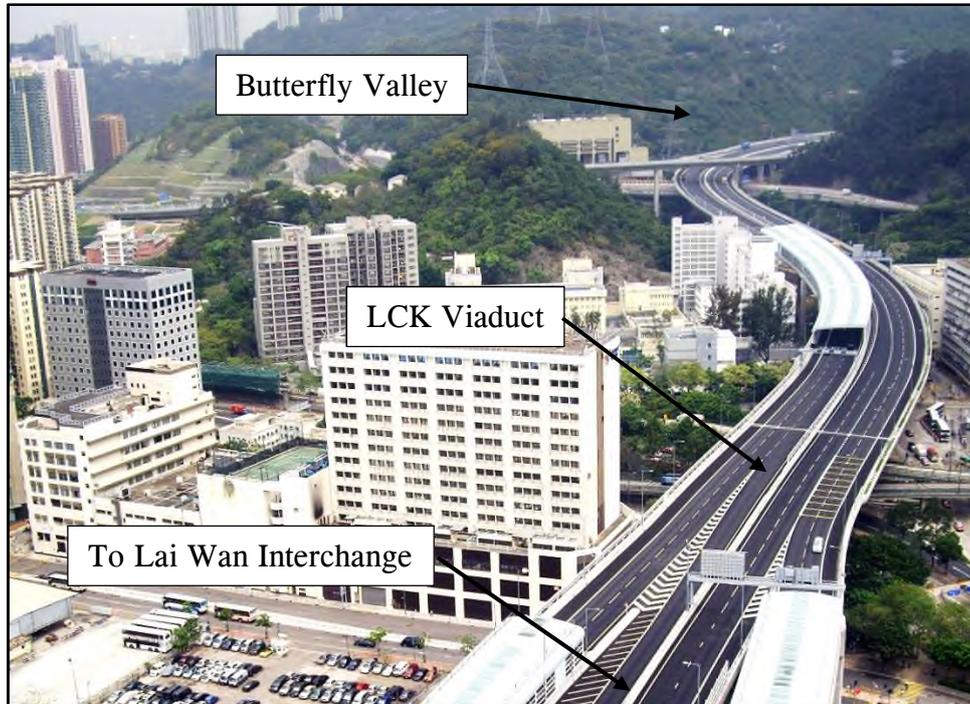
Contract A

2.2 Contract A was a remeasurement contract (Note 10) covering the construction of a 1.4 km long dual three-lane LCK Viaduct from Lai Wan Interchange to Butterfly Valley (see Photograph 1) and its slip roads, a 0.5 km long dual three-lane carriageway within Butterfly Valley, and noise barriers and noise enclosures on the viaduct and its slip roads.

Note 10: *Under a remeasurement contract, the costs of works are based on the actual quantities of works done to be remeasured and the prices of different works items as priced by the contractor in the Bills of Quantities according to the contract. Bills of Quantities, which form part of the tender documents and subsequently the contract documents after the award of a contract, contain estimated quantities of various works items. A tenderer needs to provide a tender price for the relevant Bills of Quantities items. For the successful tenderer, the Bills of Quantities prices would be used for valuing the actual works performed as remeasured.*

Photograph 1

LCK Viaduct



Source: HyD records

2.3 The HyD awarded Contract A to Contractor A in September 2003 at a contract sum of \$1,066.2 million. The works commenced in September 2003 with a contract period of about 49 months. Consultant X was the Engineer responsible for supervising the contract works. In the event, the contract works were completed in November 2009 (including the establishment works — see Note 1 to para. 1.3), about 24 months (739 days) later than the original completion date of November 2007. Of the 739 days, extensions of time (EOTs) of 276 days were granted to Contractor A (of which 33 days were owing to inclement weather) in accordance with the terms of Contract A, and the remaining 463 days were delays resulting in liquidated damages (LD) settled under a Settlement Agreement with Contractor A in 2012 (see para. 2.11). The account of Contract A was finalised in November 2012 and the total contract expenditure was \$1,445 million (see Table 7).

Administration of Contract A

Table 7

**Total contract expenditure of Contract A
(November 2012)**

Particulars	Amount (\$ million)	Amount (\$ million)
1. Contract works completed	926.8	
2. Payment for contract price fluctuation (Note 1)	88.6	
3. Alternative-design works completed under Supplementary Agreement (SA) 1 (Note 2)	2.1	
4. Alternative-design works completed under SA2, SA3 and SA4 (Note 3)	23.6	
5. Alternative-design works completed under SA5 (Note 4)	45.2	
Total works completed		1,086.3
Payments for settling contract claims		
6. Claims certified by Consultant X	85.7	
7. Full and final settlement of all claims (see para. 2.11)	273.0	
Total claims		358.7
Total contract expenditure		1,445.0

Source: *Audit analysis of HyD records*

Note 1: *Of the \$88.6 million payment for contract price fluctuation, \$5 million was provision for price fluctuation adjustments included in the original contract sum.*

Note 2: *In September 2005, the HyD and Contractor A entered into SA1, under which Contractor A's alternative design and construction of the foundations of two piers at a fixed cost of \$2.1 million would replace the corresponding contract works of \$2.6 million, with a saving of \$0.5 million.*

Note 3: *Between May and July 2006, the HyD and Contractor A entered into SA2, SA3 and SA4, under which Contractor A's alternative designs and construction of three retaining walls at a fixed cost of \$23.6 million in total would replace the corresponding contract works of \$26.6 million in total, with a saving of \$3 million in total.*

Note 4: *In September 2007, the HyD and Contractor A entered into SA5, under which Contractor A's alternative design and construction of the structural steel frame for noise barriers and noise enclosures at a fixed cost of \$45.2 million would replace the corresponding contract works of \$51.2 million, with a saving of \$6 million.*

Contract disputes

2.4 In the construction of LCK Viaduct, there were disputes under Contract A (see paras. 2.5 to 2.11) and disputes under Consultancy X (see paras. 2.12 to 2.14).

Disputes under Contract A

2.5 *Mediation with Contractor A.* Contractor A submitted claims under Contract A, of which Consultant X certified a much lower sum. In February 2008, Contractor A disputed Consultant X's decisions on the claims and submitted a request for mediation. The HyD accepted the request in the same month. The mediation was conducted in March 2009. However, after extensive exchanges of information and analysis, the HyD and Contractor A were unable to make further progress towards settlement of the disputes and agreed that the mediation was concluded without settlement.

2.6 *Arbitration with Contractor A.* Following the unsuccessful mediation, Contractor A then served a Notice of Arbitration in June 2009 to refer the claims to arbitration (Arbitration A). To prepare for the arbitration with Contractor A, the Government engaged a quantum expert (to assess the claims and assist in the arbitration) and an engineering expert (to review Consultant X's design for the viaduct) in April and May 2010 respectively.

2.7 *Key dispute issues.* According to the HyD, the disputes between the HyD and Contractor A on the claims in Arbitration A mainly consisted of the following two key issues:

- (a) adequacy of the design for viaduct structure and erection; and
- (b) measurements and valuations of additional or varied works (a majority of the disputes were related to item (a)).

2.8 After obtaining legal opinion of the Legal Advisory Division (Works) (LAD) of the Development Bureau (which had taken into account the assessments of experts), the HyD considered that the Government would have a rather heavy exposure on viaduct design issues, and a majority of the Government's assessed gross

Administration of Contract A

potential financial exposure was related to viaduct design issues, which affected a number of claims in Arbitration A between the Government and Contractor A.

2.9 *Extra-contractual settlement.* In the course of arbitration proceedings, in July 2012, after a number of meetings, the HyD and Contractor A reached a consensus (which was non-committal and subject to the Government’s internal approval and the execution of a formal settlement agreement) to settle all the disputes under Contract A at an extra-contractual settlement sum of \$273 million (inclusive of interest and costs) on a “without admission of liability” basis (proposed settlement). According to the HyD, the justifications for the proposed settlement were as follows:

- (a) before reaching the non-committal consensus with Contractor A, the HyD had sought the advice from the LAD in the course including the assessment, strategy and considerations mentioned in (b) and (c) below;
- (b) the Government had carried out a detailed assessment of the total risk exposure of the Government regarding the disputes and, based on that, formulated the negotiation strategy; and
- (c) the HyD considered that the proposed settlement would cost appreciably less and be beneficial to the Government having regard to the assessed total risk exposure mentioned in (b) above and the costs in continuing the arbitration proceedings.

2.10 In August 2012, the HyD:

- (a) informed the FSTB of the non-committal consensus reached in July 2012 and the justifications for the proposed settlement as mentioned in paragraph 2.9; and
- (b) sought the FSTB’s approval to settle with Contractor A for full and final settlement of all the disputes under Contract A at the proposed extra-contractual settlement sum of \$273 million on a “without admission of liability” basis.

2.11 The arbitration proceedings were then suspended. In October 2012, the FSTB approved the proposed settlement. Accordingly, the HyD entered into a Settlement Agreement with Contractor A for full and final settlement of all the disputes under Contract A at a sum of \$273 million in the same month. According to the HyD, the settlement sum was a lump sum figure which was less than the assessed total risk exposure of the Government (including the exposure on cost) as advised by the LAD.

Disputes under Consultancy X

2.12 *Arbitration with Consultant X.* After settling the disputes under Contract A and taking into account legal advice, the Government served a Notice of Arbitration on Consultant X mainly in respect of the viaduct design issues in April 2013 (Arbitration B).

2.13 *Extra-contractual settlement.* In the course of proceedings in Arbitration B, in August 2016, Consultant X made an offer, on a “without admission of liability” basis, to pay the Government an extra-contractual settlement sum of \$133.1 million (inclusive of interest and costs) for full and final settlement of the Government’s claims in Arbitration B. According to the HyD, based on legal advice and after thorough analysis of the likely range of recovery by the Government in Arbitration B (including the costs to be incurred in continuing the proceedings), it was considered desirable for the Government to accept Consultant X’s offer of settlement.

2.14 In September 2016, the HyD sought the FSTB’s approval to accept the offer and the FSTB approved the acceptance in the same month. In November 2016, the HyD entered into a Settlement Deed with Consultant X at a sum of \$133.1 million (the sum was received in the same month) for full and final settlement of all the disputes under Consultancy X. Consultancy X was then completed in January 2017.

Design for viaduct structure and erection

2.15 As mentioned in paragraph 2.7(a), one of the two key issues in the disputes between the HyD and Contractor A related to the design for viaduct structure and erection. According to the HyD, this issue concerned, for example, whether the design for the permanent structure of the viaduct envisaged to be built by the balanced

Administration of Contract A

cantilever method (Note 11) should have taken into account the temporary loadings during construction.

2.16 In the course of disputes resolution, having considered legal opinion and views of the engineering expert (see para. 2.6) on the design for the permanent structure of LCK Viaduct, the HyD noted the following:

- (a) the construction and erection loadings did not appear to have been properly considered in the design;
- (b) the contract drawings only showed the use of balanced cantilever method of construction but did not indicate the need for certain requisite construction systems (e.g. substantial propping systems and cranes); and
- (c) Consultant X's response to a tender query requesting clarification of the temporary loads used in the design (which was circulated to all tenderers, including Contractor A) could lead to confusion that construction and erection loadings had been considered in Consultant X's design.

2.17 As mentioned in paragraph 2.7(b), measurements and valuations of additional or varied works were another key issue in the disputes between the HyD and Contractor A. According to the HyD, this issue concerned whether measurements and valuations of additional or varied works were carried out in accordance with the rules prescribed in the Standard Method of Measurement (SMM) for Civil Engineering Works (Note 12) and valued at applicable rates set out in the Bills of Quantities (BQ — see Note 10 to para. 2.2) in Contract A or at rates agreed with Contractor A. The HyD considered that a majority of the disputes were related to the viaduct design.

Note 11: *According to the HyD, the balanced cantilever method is the form of construction of concrete bridge decks where precast concrete segments are erected in sequence and in balance on either side of a pier such that the concrete deck extends as a cantilever away from the pier evenly and in balance such that the overturning moment on the pier is minimised at all times.*

Note 12: *The SMM for Civil Engineering Works lays down the method and criteria for the measurement of civil engineering works undertaken for the Government.*

2.18 In the event, the claims relating to the two key issues (i.e. design for viaduct structure and erection, and measurements and valuations of additional or varied works) were settled together with other claims under Arbitration A at an extra-contractual settlement sum of \$273 million (see para. 2.11). Subsequently, the Government succeeded in recovering \$133.1 million (see para. 2.14) from Consultant X. According to the HyD:

- (a) this took into account legal opinion that not all of the disputes with Contractor A settled under the \$273 million could be attributed to Consultant X; and
- (b) the Government would have to bear part of the additional costs claimed by Contractor A by way of increased tender sum of Contract A if Consultant X had, in the design, allowed for the temporary loadings during construction and the additional or varied works.

Need to strengthen vetting of consultant's design

2.19 According to the Project Administration Handbook for Civil Engineering Works issued by the CEDD, in preparing contract documents:

- (a) it is essential that the contract documents for each contract are prepared with great care and by an experienced professional who has thorough knowledge of the works to be constructed;
- (b) the documents forming a contract must be scrutinised for comprehensive coverage, accuracy and consistency with one another before tenders are invited; and
- (c) the responsibility for ensuring that tender documents are properly prepared rests with the professional officers handling the project.

2.20 The HyD advised Audit in February 2018 that:

- (a) according to the consultancy agreement between the Government and Consultant X, it was Consultant X's contractual duties to carry out detailed design (including specifications, drawings, dimensions, sections, design

Administration of Contract A

data and calculations, checking and other information) of all aspects of the works following the requirements of the Project Administration Handbook for Civil Engineering Works, including those requirements mentioned in paragraph 2.19; and

- (b) the HyD, as the employer of Consultant X, also needed to follow such requirements in its consultancy management work.

2.21 Audit noted that the Government would have a rather heavy exposure on viaduct design issues, and a majority of the Government's assessed gross potential financial exposure was related to viaduct design issues, which affected a number of claims in Arbitration A between the Government and Contractor A (see para. 2.8). According to the handbook issued by the Engineering and Associated Consultants Selection Board (see Note 5 to para. 1.6), in monitoring and administering a consultancy agreement, a government department should monitor the consultant's compliance with the agreement and also, to the extent authorised therein, with government regulations and procedures. In Audit's view, in implementing a works project in future, the HyD needs to take measures to strengthen vetting of a consultant's design, including carrying out appropriate level of independent checking on the design (Note 13) of highway structures (e.g. construction and erection loadings of structures).

Need to strengthen measures in handling responses to tender queries

2.22 Audit noted that Consultant X's response to the tender query could lead to confusion (see para. 2.16(c)) and could give rise to grounds for claims on the design for viaduct structure and erection from Contractor A. In response to Audit's enquiry, the HyD advised Audit that:

- (a) it was Consultant X's contractual duties under Consultancy X to answer queries on the tender documents;

Note 13: *In August 2006 (after the awards of Consultancy X and Contract A in July 1999 and September 2003 respectively), the HyD amended the Structures Design Manual for Highways and Railways setting out guidelines for carrying out appropriate level of independent checking on the design of different categories of new highway structures and the associated modification of existing highway structures by consultants or contractors employed by the Government.*

- (b) based on HyD records, Consultant X had forwarded the tender query to the HyD for information and copied the response to the tender query to the HyD when issued; and
- (c) there was no record indicating that Consultant X had sought the HyD's comments on the response to the tender query before issue.

2.23 In this connection, Audit notes that the Project Administration Handbook for Civil Engineering Works issued by the CEDD only specifies the timeframe for responding to queries from tenderers, and the requirement for providing the same information to all tenderers for fairness and transparency. As far as could be ascertained, there is no further guidance for handling tender queries, including the need to provide a clear and accurate response and the need for a consultant to seek the responsible project department's comments on the response before issue.

2.24 In view of the possible significant implications of responses to tender queries, Audit considers that, in implementing a works project in future, the HyD needs to strengthen measures in handling responses to tender queries, including reminding its consultants to provide a clear and accurate response and, where warranted, seek the HyD's comments on its response before issue. In addition, the CEDD needs to consider providing further guidelines for handling tender queries.

Audit recommendations

2.25 **Audit has recommended that, in implementing a works project in future, the Director of Highways should:**

- (a) **take measures to strengthen vetting of a consultant's design, including carrying out appropriate level of independent checking on the design of highway structures (e.g. construction and erection loadings of structures); and**
- (b) **strengthen measures in handling responses to tender queries, including reminding HyD consultants to provide a clear and accurate response and, where warranted, seek the HyD's comments on its response before issue.**

2.26 Audit has *recommended* that the Director of Civil Engineering and Development should consider providing further guidelines for handling tender queries, including the need to provide a clear and accurate response and the need for a consultant to seek the responsible project department's comments on the response before issue.

Response from the Government

2.27 The Director of Highways agrees with the audit recommendations in paragraph 2.25. He has said that the HyD will:

- (a) remind its staff and consultants to continue to strictly follow the guidelines stipulated in the Structures Design Manual for Highways and Railways; and
- (b) in handling tender queries, remind its consultants to provide a clear and accurate response and, where warranted, seek the HyD's comments on its responses before issue. The HyD will also continue to remind its staff to take action to this end.

2.28 The Director of Civil Engineering and Development agrees with the audit recommendation in paragraph 2.26.

General contract management issues

2.29 In the administration of Contract A and Consultancy X, the HyD is required to follow the requirements under various government regulations and circulars, including the Stores and Procurement Regulations (SPRs) and Works Technical Circulars. Audit notes that there is room for improvement in ensuring compliance with such requirements (see paras. 2.30 to 2.40).

Need to consult FSTB earlier regarding extra-contractual settlement of claims

2.30 According to the SPRs, if a department proposes to vary the terms of a contract (including extra-contractual settlement of claims), it shall seek agreement of the relevant authority (as specified in the SPRs) on the proposed variation and seek

its prior agreement to the strategy or bottom line for the contract negotiation (Note 14).

2.31 Regarding the extra-contractual settlement of claims with Contractor A involving a settlement sum of \$273 million, the approving authority as specified in the SPRs is the Permanent Secretary for Financial Services and the Treasury (Treasury). In December 2010, the HyD had obtained the FSTB's prior agreement to a strategy and bottom line for proceedings in Arbitration A. While pending the FSTB's agreement to a revised strategy and bottom line for proceedings in Arbitration A submitted by the HyD in June 2012, the HyD discussed with Contractor A and reached a non-committal consensus (which was subject to the Government's internal approval and the execution of a formal settlement agreement) to settle all the disputes under Contract A at an extra-contractual settlement sum of \$273 million in July 2012. Audit noted that the HyD had not sought the FSTB's prior agreement to the strategy or bottom line for negotiation before discussing with Contractor A and reaching such consensus.

2.32 In giving its approval for the settlement of the disputes under Contract A in October 2012 (see para. 2.11), the FSTB said that:

- (a) the HyD's arrangement for seeking the FSTB's approval (i.e. entered into negotiation with Contractor A in the course of the arbitration proceedings and agreed on a settlement sum without alerting the FSTB in advance) was not entirely satisfactory. It would have been better had the HyD alerted or consulted the FSTB earlier. This could help avoid a potentially embarrassing situation where the FSTB did not support the settlement or the proposed settlement figure agreed between the HyD and Contractor A; and
- (b) for similar situation in future, the HyD should alert or consult the FSTB in advance.

Note 14: *This SPR requirement prevailing at the time of processing the extra-contractual settlement of disputes under Contract A in 2012 (2010 version of SPRs) remained unchanged as of February 2018.*

Administration of Contract A

2.33 In Audit's view, the HyD needs to strictly follow the SPR requirements for contract negotiation and seek the relevant authority's prior agreement to the strategy or bottom line for the contract negotiation before entering into negotiation with contractors or consultants in future.

Need to timely conduct post-completion review

2.34 According to Environment, Transport and Works Bureau Technical Circular (Works) No. 26/2003 on "Post-completion Review on Major Consultancy Agreements and Major Works Contracts under Public Works Programme":

- (a) a post-completion review is a useful project management tool and shall be conducted upon the substantial completion of a major consultancy agreement or a major works contract on projects under the Public Works Programme;
- (b) as a broad guideline, post-completion reviews are generally not warranted for consultancy agreements and works contracts of a project which has a total cost less than \$500 million or of a project which does not involve complicated technical and management issues; and
- (c) upon the completion of a post-completion review, the department shall prepare a report documenting all concerned issues, findings, conclusions and recommendations for future reference by the department.

2.35 Furthermore, according to the guidance notes promulgated in the Technical Circular:

- (a) indicators that a project involves complicated issues may include, among others, project involving a claim of a substantial sum, say over \$1 million;
- (b) a post-completion review should be carried out within a reasonable period, say six months, after the substantial completion of a consultancy agreement or a works contract; and
- (c) in case there are on-going disputes with the service providers, it may be more appropriate to defer the review until the disputes are settled.

2.36 The disputes with Contractor A and Consultant X were settled in October 2012 and November 2016 respectively, and subsequently Consultancy X was completed in January 2017. However, as of November 2017, more than six months after the completion of Consultancy X, the HyD had not conducted post-completion reviews for Contract A and Consultancy X.

2.37 Upon Audit's enquiry, in December 2017, the HyD said that:

- (a) as there were disputes of claims with Contractor A and Consultant X, the post-completion reviews for the consultancy agreement and the major works contracts under the project were deferred; and
- (b) a single holistic post-completion review for Contract A and Consultancy X would be carried out soon and targeted to be completed in early 2018.

2.38 In the event, the post-completion review was completed in January 2018 (Note 15), one year after the completion of Consultancy X. According to the HyD:

- (a) by the time all disputes under the project had been settled in November 2016 to enable the conduct of post-completion review, the project had been commissioned for about eight years; and
- (b) as most of the personnel involved in the project had already left, a longer period of time had been taken to retrieve the necessary information for conducting a proper post-completion review.

2.39 As a post-completion review is a useful project management tool, the HyD needs to take measures to ensure the timely conduct of post-completion reviews on major consultancy agreements and major works contracts in future.

Note 15: *According to the post-completion review, in general, the Sha Tin Section was a successful infrastructure project which had been properly controlled.*

Audit recommendations

- 2.40 **Audit has *recommended* that the Director of Highways should:**
- (a) **strictly follow the SPR requirements for contract negotiation and seek the relevant authority's prior agreement to the strategy or bottom line for the contract negotiation before entering into negotiation with contractors or consultants in future; and**
 - (b) **take measures to ensure the timely conduct of post-completion reviews on major consultancy agreements and major works contracts in future.**

Response from the Government

2.41 The Director of Highways agrees with the audit recommendations. He has said that the HyD will:

- (a) continue to strictly follow the SPR requirements for contract negotiation and seek the relevant authority's prior agreement to the strategy or bottom line for the contract negotiation before entering into negotiation with contractors or consultants in future; and
- (b) remind its staff to continue to arrange with consultants and contractors to timely conduct post-completion reviews on major consultancy agreements and major works contracts in future.

PART 3: ADMINISTRATION OF CONTRACT B AND CONTRACT C

3.1 This PART examines the administration of Contract B by the HyD and Contract C by the CEDD, focusing on:

- (a) cost increase of tunnelling works under Contract B (paras. 3.5 to 3.19);
- (b) prolongation costs under Contract B (paras. 3.20 to 3.26); and
- (c) provision of facilitation works under Contract C (paras. 3.29 to 3.41).

Contract B

3.2 Contract B was a remeasurement contract covering the construction of a 2.1 km long dual three-lane EN Tunnel (see Photograph 2) and associated works, including the construction of:

- (a) four associated tunnel buildings including the North and South Portal Buildings of EN Tunnel, the Ventilation Building at Tai Po Road and the Administration Building at the Toll Plaza; and
- (b) a footbridge and associated canopy, a toll collector passageway, and all other roadworks and finishing works at the Toll Plaza.

Photograph 2

EN Tunnel



Source: HyD records

3.3 The HyD awarded Contract B to Contractor B in September 2003 at a contract sum of \$1,836 million. The works commenced in October 2003 with a contract period of about 49 months. Consultant X was the Engineer responsible for supervising the contract works. In the event, the contract works were completed in February 2009 (including the establishment works — see Note 1 to para. 1.3), about 15 months (461 days) later than the original completion date of November 2007. Of the 461 days, EOTs of 186 days in total owing to inclement weather were granted to Contractor B according to the terms of Contract B for completing various sections of works under Contract B. The account of Contract B was finalised in November 2012 and the total contract expenditure was \$2,317.1 million (see Table 8).

Table 8

**Total contract expenditure of Contract B
(November 2012)**

Particulars	Amount (\$ million)	Amount (\$ million)
1. Contract works completed	1,954.5	
2. Payment for contract price fluctuation (Note 1)	182.1	
3. Alternative-design works completed under SA6 (Note 2)	19.4	
4. Alternative-design works completed under SA7 (Note 3)	13.6	
Total works completed		2,169.6
Payments for settling contract claims		
5. Claims for prolongation costs (see paras. 3.20 to 3.24)	137.5	
6. Other claims (Note 4)	10.0	
Total claims		147.5
Total contract expenditure		2,317.1

Source: Audit analysis of HyD records

Note 1: Of the \$182.1 million payment for contract price fluctuation, \$9.5 million was provision for price fluctuation adjustments included in the original contract sum.

Note 2: In October 2007, the HyD and Contractor B entered into SA6, under which Contractor B's alternative design and construction of a retaining wall and box culvert at a fixed cost of \$19.4 million would replace the corresponding contract works of \$22.7 million, with a saving of \$3.3 million.

Note 3: In October 2007, the HyD and Contractor B entered into SA7, under which Contractor B's alternative design and construction of noise barrier foundations at a fixed cost of \$13.6 million would replace the corresponding contract works of \$17.4 million, with a saving of \$3.8 million.

Note 4: Other claims mainly included costs relating to E&M procurement and engineering works (\$3.7 million), and disposal of rock (\$3.5 million).

Administration of Contract B and Contract C

Cost increase under Contract B

3.4 As shown in Table 8, the total contract expenditure of Contract B was \$2,317.1 million, representing an increase of \$481.1 million (26%) over the original contract sum of \$1,836 million (see para. 3.3). Audit noted that \$431.3 million (90%) of the increase was attributed to three items (see Table 9). In particular, tunnelling works (\$121.2 million) and prolongation costs (\$137.5 million) accounted for \$258.7 million (54%) of the increase.

Table 9
Cost increase under Contract B
(November 2012)

Item	Amount		
	Under Contract B (a) (\$ million)	After remeasurement (b) (\$ million)	Increase (% of total increase) (c) = (b) – (a) (\$ million)
(a) Tunnelling works	611.8	733.0	121.2 (25%)
(b) Prolongation costs	—	137.5	137.5 (29%)
(c) Contract price fluctuation	9.5	182.1	172.6 (36%)
(d) Others	1,214.7 (Note 1)	1,264.5	49.8 (10%) (Note 2)
Total	1,836.0	2,317.1	481.1 (100%)

Source: *Audit analysis of HyD records*

Note 1: *Others comprised the following items: (a) construction of buildings (\$348.5 million); (b) preliminaries (\$217.2 million — including, for example, temporary site office accommodation, provision of land transport and computer facilities, and general site clearance); (c) earthworks, slopeworks, noise barriers, retaining structures, landscape and finishing works and other roadworks (\$189.4 million); (d) site safety and staff-related items (\$82.0 million — including, for example, employees' compensations); (e) E&M works (\$76.2 million); (f) toll related works and computer system (\$64.0 million); (g) drainage, sewerage and waterworks (\$35.1 million); (h) miscellaneous (\$13.4 million); and (i) contingency (\$188.9 million).*

Note 2: *It is the net amount of cost increases and savings on various items, including payment for Employees' Compensation Insurance Premium, site clearance, and construction of portal buildings and toll booths, after remeasurement of their actual quantities.*

Cost increase of tunnelling works under Contract B

3.5 Based on Consultant X's assessment, the cost of tunnelling works under Contract B had increased by \$121.2 million (see Table 9 in para. 3.4). Audit notes that there is room for improvement in contract management work on this area (see paras. 3.6 to 3.18).

Discrepancy between contract clause and contract drawing in Contract B

3.6 Under Contract B:

- (a) a Particular Specification (PS — Note 16) clause on tunnelling works required that a layer of smoothing shotcrete (Note 17) should be applied to bare rock surfaces, fibre reinforced shotcrete surfaces and any surface which, in the opinion of the Engineer, might cause puncturing of the geotextile or waterproof membrane, and that the surface of the smoothing shotcrete should be between 30 millimetres (mm) and 100 mm outside the extrados of the permanent concrete lining of EN Tunnel (i.e. the thickness of the smoothing shotcrete should be between 30 mm and a maximum of 100 mm); and
- (b) in a contract drawing showing the details of permanent concrete lining and temporary support layer (Note 18), the thickness of the temporary support layer was shown as 170 mm from the permanent concrete lining, and this

Note 16: *Each contract will require a different set of PS clauses (which amplify and modify the General Specification for Civil Engineering Works) to suit its own circumstances. The General Specification for Civil Engineering Works lays down the quality of materials, the standards of workmanship, the testing methods and the acceptance criteria for civil engineering works undertaken for the Government.*

Note 17: *The smoothing shotcrete refers to the application of a separate treatment on top of a surface in order to ensure that the geotextile or waterproof membrane is not damaged.*

Note 18: *According to a PS clause on tunnelling works of Contract B, prior to the installation of the permanent geotextile membranes and concrete lining, any remaining bars, nuts, faceplates and grout pipes protruding from the rock should be embedded in temporary sprayed concrete or smoothing shotcrete (temporary support layer).*

Administration of Contract B and Contract C

temporary support layer also included the smoothing shotcrete layer specified in the PS clause mentioned in (a) above.

3.7 Before commencing the works on application of smoothing shotcrete layer, Contractor B clarified with Consultant X the minimum thickness of smoothing shotcrete. In response, Consultant X requested Contractor B to refer to the contract drawing (see para. 3.6(b)) showing the details. Contractor B contended that the thickness of the smoothing shotcrete to be measured was 170 mm as shown on the contract drawing and made a claim for the costs of performing the smoothing shotcrete.

3.8 According to Consultant X's assessment on Contractor B's contention:

- (a) as the contract drawing did not show a demarcation for the smoothing shotcrete layer and the temporary support layer, there was a discrepancy in the thickness of smoothing shotcrete required between the contract drawing (i.e. 170 mm) and the PS clause (i.e. 100 mm at maximum). If the smoothing shotcrete was to be applied to bare rock surfaces, the thickness should have to be 170 mm. It was agreed that the 170 mm smoothing shotcrete was an omitted BQ item and a correction to the BQ was needed to ascertain the value of works actually carried out according to Contract B; and
- (b) in the excavation of EN Tunnel, the perimeter drill holes were set out 170 mm from the permanent concrete lining in order to comply with the contract drawing. It was therefore considered that the thickness of the smoothing shotcrete should have been 170 mm in order to comply with the details shown on the contract drawing.

In the event, according to the HyD, the thickness of smoothing shotcrete measured 170 mm and it paid \$43.7 million to Contractor B for the works item omitted in the BQ and subsequently measured according to the terms of Contract B.

3.9 According to the Project Administration Handbook for Civil Engineering Works issued by the CEDD, the documents forming a contract must be scrutinised for comprehensive coverage, accuracy and consistency with one another before tenders are invited. Audit noted that there was a discrepancy in the thickness of smoothing shotcrete requirement between the contract clause (i.e. 100 mm at maximum) and the contract drawing (i.e. 170 mm). In Audit's view, in preparing documents for a works contract in future, the HyD needs to take measures to strengthen the checking of consistency between contract clauses and contract drawings.

Unclear contract clauses for measurement of tunnelling works

3.10 A PS clause on tunnelling works of Contract B required the adoption of controlled blasting techniques (which include presplitting (Note 19) or smooth blasting (Note 20)) for the formation of the tunnel perimeter. BQ items for excavation in tunnel were included in Contract B and measured in accordance with the SMM for Civil Engineering Works (Part V Section 18: Tunnelling — hereinafter referred to as SMM Section 18) as amended by the Particular Preambles (Note 21) under Contract B.

3.11 Contractor B contended that:

- (a) presplitting and smooth blasting were items required to be measured separately by reference to a section of SMM for Civil Engineering Works

Note 19: *According to a report issued by the Geotechnical Engineering Office of the CEDD, presplitting is a blasting method under which a single line of lightly charged drillholes along line of final face simultaneously detonated before the main bulk blast.*

Note 20: *According to a report issued by the Geotechnical Engineering Office of the CEDD, smooth blasting is a blasting method under which a single line of lightly charged drillholes along line of final face simultaneously detonated after the main bulk blast.*

Note 21: *The SMM for Civil Engineering Works lays down the method and criteria for the measurement of civil engineering works undertaken for the Government. Any methods of measurement which are not in accordance with or included in the SMM for Civil Engineering Works shall be stated in a Particular Preamble to the BQ.*

Administration of Contract B and Contract C

(Part V Section 7: Earthworks — hereinafter referred to as SMM Section 7); and

- (b) since the item coverage for excavation in tunnel as set out in SMM Section 18 as amended by the Particular Preambles did not specifically identify or describe presplitting or smooth blasting, there was an omission of a BQ item for presplitting or smooth blasting in the BQ for excavation in tunnel.

Hence, Contractor B made a claim for the costs of performing controlled blasting for the formation of the tunnel perimeter which had not been specified as a BQ item.

3.12 According to Consultant X's assessment on Contractor B's contention:

- (a) the original extent of work covered by the tunnel excavation item in SMM Section 18 did not include controlled blasting;
- (b) the item coverage of excavation in SMM Section 7 should apply to that of excavation in tunnel in SMM Section 18 (Note 22). Nevertheless, the item coverage of excavation in SMM Section 7 did not include controlled blasting and, accordingly, the item coverage of excavation in tunnel in SMM Section 18 could be construed as not including controlled blasting;
- (c) for the avoidance of doubt, it would be desirable to introduce Particular Preambles to expand the item coverage for excavation in tunnel in SMM Section 18 to cover the works (i.e. controlled blasting); and
- (d) it was considered that controlled blasting of presplitting or smooth blasting was an item of works omitted to be measured in the BQ and the value of works actually carried out should be ascertained according to Contract B.

Note 22: *According to the SMM for Civil Engineering Works, if any item coverage includes reference to work which is the subject of item coverages elsewhere in the SMM for Civil Engineering Works, then the combined item coverages shall apply.*

Administration of Contract B and Contract C

In the event, according to the HyD, the HyD paid \$54.6 million to Contractor B for its claims for the works item omitted in the BQ and subsequently measured according to the terms of Contract B.

3.13 Regarding the PS clause on tunnelling works, Audit noted that, in vetting the draft tender documents of Contract B, the HyD had raised comments on such PS section as follows:

- (a) the PS on earthworks and tunnelling works were not well organised, for example, the requirements on blasting had been scattered in different PS clauses and sections of the tender document; and
- (b) there might be ambiguity in demarcation in the tender document between excavation under PS on earthworks and excavation under PS on tunnelling works.

3.14 In response, Consultant X advised that:

- (a) the blasting requirements had been consolidated wherever possible. It should be noted that distinct requirements had to be laid out in several sections; and
- (b) the demarcation between the PS on earthworks and the PS on tunnelling works was evident from the contract drawings.

3.15 According to the HyD:

- (a) it had provided comments on the tender documents prepared by Consultant X relating to presplitting or smooth blasting for the tunnelling works; and
- (b) Consultant X had subsequently included the relevant controlled blasting requirements in the PS on tunnelling works.

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3.16 In the event, in assessing Contractor B's claim, the HyD considered that there were uncertainties in determining the scope of coverage for excavation in tunnel for the presplitting or smooth blasting which had not been expressly specified in the Particular Preambles. Audit considers that, in preparing documents for a works contract in future, the HyD needs to strengthen the vetting of tender documents regarding contract clauses for the measurement of works (e.g. for tunnelling works).

3.17 Audit noted that, in February 2010 (after the awards of Consultancy X and Contract B in July 1999 and September 2003 respectively), the CEDD amended the Project Administration Handbook for Civil Engineering Works concerning preparation of BQ as follows:

- (a) all works items should be included in the BQ and omitted items should be minimised as far as practicable;
- (b) the BQ should undergo a checking process to ensure the completeness and accuracy of the BQ and elimination of major errors; and
- (c) the above measures would facilitate competitive tendering, reduce resources for valuation of omitted items and minimise the disputes arising from the valuation of omitted items.

Audit considers that the HyD needs to take measures to ensure compliance with these requirements.

Audit recommendations

3.18 **Audit has recommended that the Director of Highways should, in preparing documents for a works contract in future:**

- (a) **take measures to strengthen the checking of consistency between contract clauses and contract drawings;**
- (b) **strengthen the vetting of tender documents regarding contract clauses for the measurement of works (e.g. for tunnelling works); and**

- (c) **take measures to ensure compliance with the requirements for preparation of BQ as stated in the Project Administration Handbook for Civil Engineering Works.**

Response from the Government

3.19 The Director of Highways agrees with the audit recommendations. He has said that the HyD will remind its staff and consultants to continue to strictly follow the requirements as stated in the Project Administration Handbook for Civil Engineering Works for BQ preparation work in future.

Prolongation costs under Contract B

3.20 Prolongation cost is generally the time related cost (e.g. the costs of a contractor's site establishment, site overheads and general plant) that is typically affected by a delay to the critical path of construction works. The Engineer for the contract would only take into account those EOTs relevant to the claim concerned in the assessment of prolongation cost according to the terms of the contract. Based on Consultant X's assessment, the HyD paid \$137.5 million to Contractor B for settling claims for prolongation costs (see Table 10).

Administration of Contract B and Contract C

Table 10

Prolongation costs under Contract B

Section of works	EOT awarded (Day)	Prolongation cost (\$ million)
(a) All works (excluding E&M) in Butterfly Valley	331	19.6
(b) All works (excluding E&M) in EN Tunnel	114	14.9
(c) All works (excluding E&M) in ventilation adit and site	116	3.1
(d) All works (excluding E&M) in Toll Plaza	46	3.5
(e) All works (excluding E&M) in Sha Tin Heights Portal Buildings	277	7.8
(f) E&M works to whole site (Note 1)	347	44.1
(g) Core — staff (Note 2)	347	44.5
	Total	137.5

Source: Audit analysis of HyD records

Note 1: Prolongation cost relating to “E&M works to whole site” mainly included staff costs, site expenses, head office overheads and sub-contractors’ costs incurred for EOTs of 347 days awarded.

Note 2: Prolongation cost relating to “Core — staff” included staff costs for overall supervision and general administration incurred for EOTs of 347 days awarded.

3.21 As shown in Table 10:

- (a) sections (a) to (e) were works excluding E&M works, whereas section (f) was E&M works at the whole site (divided into different portions of works areas). For each portion of works area, as the E&M works (i.e. section (f)) were carried out after the substantial completion of sections (a) to (e), any delay in completing sections (a) to (e) would have a direct impact on the progress of section (f). In addition, section (g) would be affected by the

Administration of Contract B and Contract C

overall delay of the works in sections (a) to (f) as it was related to staff costs for the overall supervision and general administration; and

- (b) as a result, the delay in sections (a) to (e), particularly sections (a) and (b) which involved main works, had a direct impact on sections (f) and (g).

Audit noted that the EOTs of 331 days awarded for the section of works in Butterfly Valley (section (a)) were due to additional works to cope with actual site conditions, and the EOTs of 114 days awarded for the section of works in EN Tunnel (section (b)) were due to additional ground investigation works. Audit notes that there is room for improvement in conducting more thorough preliminary site investigations with a view to incorporating more accurate information on site conditions for design and tender purposes (see paras. 3.22 to 3.25).

Scope for conducting more thorough preliminary site investigations

3.22 At the tender stage of Contract B, drawings showing the ground investigation information obtained at the design stage would be provided to tenderers for reference upon request. During the construction stage, Contractor B found that:

- (a) the design of works at a slope (Slope A) at Butterfly Valley (see section (a) in Table 10 in para. 3.20) had to be revised to include additional slope stabilisation works in order to cope with actual site conditions;
- (b) owing to the additional slope stabilisation works to Slope A, the installation of watermains on Slope A was required to be realigned to cope with the actual topographical conditions, and had to be carried out on a steeper slope. Contractor B asserted that this made the works more difficult, which was not anticipated by him at the time of tender;
- (c) the additional slope stabilisation works to Slope A and the realignment of watermains on Slope A delayed the commencement of watermain installation; and
- (d) the additional slope stabilisation works to Slope A also had a knock-on effect on subsequent works, including the construction of box culvert, a retaining wall and roadworks.

Administration of Contract B and Contract C

In the event, Consultant X assessed that Contractor B was entitled to the award of a prolongation cost of \$19.6 million for the EOTs of 331 days.

3.23 In addition, Contractor B contended that it was beyond his reasonable contemplation at the time of tender that additional ground investigation and stabilisation works to another two slopes located in the vicinity affected by the blasting works of EN Tunnel (see section (b) in Table 10 in para. 3.20) had to be carried out before obtaining a blasting permit from the Geotechnical Engineering Office of the CEDD. In the event, Consultant X assessed that Contractor B was entitled to the award of a prolongation cost of \$14.9 million for the EOTs of 114 days.

3.24 Audit noted that total prolongation costs of \$34.5 million (\$19.6 million + \$14.9 million) were awarded under Contract B due to EOTs (331 and 114 days for two sections of works respectively) for additional works at the three slopes arising from actual site conditions undetected in earlier site investigations (see paras. 3.22 and 3.23). In Audit's view, there is merit for the HyD and its consultants to conduct more thorough preliminary site investigations for works at critical locations with a view to incorporating more accurate information on site conditions for design and tender purposes as far as practicable.

Audit recommendation

3.25 **Audit has recommended that the Director of Highways should consider conducting more thorough preliminary site investigations for works at critical locations with a view to incorporating more accurate information on site conditions for design and tender purposes as far as practicable.**

Response from the Government

3.26 The Director of Highways agrees with the audit recommendation. He has said that:

- (a) the HyD will continue to conduct thorough site investigations as far as practicable with a view to incorporating comprehensive and adequate information for design and tender purposes;

- (b) there is, however, practical limit on the extent of site investigation works that can be done at the design stage for a particular project due to many constraints, particularly when the concerned site areas have not been possessed at that stage;

- (c) for example, ground investigations at the design stage could only practically be carried out at isolated locations in civil engineering projects where the land is government land and accessible. The area covered would usually be very small when comparing with the size of the site. The ground conditions could only be predicted by interpolation or extrapolation based on the information obtained in the site investigation as well as adjacent existing boreholes. The accuracy of the predicted outcome would depend a lot on the uniformity of the ground which can often be quite variable. Where there is an abrupt change in the ground conditions between the boreholes, the accuracy of the prediction would inevitably be affected; and

- (d) indeed, in the Central Kowloon Route (connecting the West Kowloon reclamation and the proposed Kai Tak Development) project, the HyD will carry out extensive horizontal directional coring to obtain more accurate information in advance of the tunnel construction works.

Contract C

3.27 Contract C was a remeasurement contract covering the construction of a 1 km long dual three-lane STH Tunnel (see Photograph 3), a 0.6 km long dual two-lane tunnel approach road in Tai Wai and its slip roads, and noise barriers and noise enclosures on the approach road and its slip roads. The HyD entrusted such works to the CEDD for implementation.

Photograph 3

STH Tunnel



Source: HyD records

3.28 The CEDD awarded Contract C to Contractor C in November 2002 at a contract sum of \$1,073.8 million. The works commenced in November 2002 with a contract period of about 54 months. The original contract completion date was May 2007, which was extended to June 2008 under an SA (see Note 26 to para. 3.35(b)). Consultant Y was the Engineer responsible for supervising the contract works. In the event, the contract works were completed in September 2008 (including the establishment works — see Note 1 to para. 1.3), about three months (84 days) later than the extended completion date. EOTs of 84 days were granted to Contractor C mainly due to the extended facilitation works provided to the HyD contractors. The account of Contract C was finalised in October 2010 and the total contract expenditure was \$1,199.6 million (see Table 11).

Administration of Contract B and Contract C

Table 11

**Total contract expenditure of Contract C
(October 2010)**

Particulars	Amount (\$ million)	Amount (\$ million)
1. Contract works completed	818.0	
2. Payment for contract price fluctuation (Note 1)	128.6	
3. Alternative-design works completed under SA8 to SA11 (Note 2)	234.5	
4. Deletion of a section of works and re-sequence of certain works under SA12 and SA13 (Note 3)	(2.6)	
5. Extended facilitation works provided under SA14 (see paras. 3.33 to 3.37)	15.1	
Total works completed		1,193.6
Payment for settling contract claim		
6. Claim related to extended maintenance of a temporary access road		6.0
Total contract expenditure		1,199.6

Source: Audit analysis of CEDD records

Note 1: Of the \$128.6 million payment for contract price fluctuation, \$5 million was provision for price fluctuation adjustments included in the original contract sum.

Note 2: Between September 2003 and March 2005, the CEDD and Contractor C entered into SA8 to SA11, under which Contractor C's alternative designs and construction of works items (i.e. a temporary access road, slip road bridges, site formation, and noise mitigation measures) at a fixed cost of \$234.5 million in total would replace the corresponding contract works of \$250 million in total, with a saving of \$15.5 million in total.

Note 3: Contractor C proposed to delete a section of works and re-sequence certain works under Contract C to optimise the operations and save costs. The CEDD accepted Contractor C's proposal and entered into SA12 and SA13 with Contractor C in March and September 2005 respectively, under which a section of works would be deleted and certain works would be re-sequenced, and Contractor C would pay the Government a lump sum amount of \$2.6 million in total.

Provision of facilitation works under Contract C

3.29 The scope of works entrusted to the CEDD included civil engineering works (implemented under Contract C) but not E&M works and TCS System works as these works had to be performed by the HyD contractors under Contracts B and D respectively. After the substantial completion of certain sections of works in Contract C, the HyD contractors' follow-on works (including the E&M works under Contract B and the TCS System works under Contract D) would commence in the respective site areas. Contractor C would provide the necessary facilitation works (e.g. temporary ventilation and lighting) to enable the HyD contractors to carry out follow-on works at the site areas of such sections for a period of nine months (facilitation period). Contractor C would continue to complete the remaining works of Contract C at the same time.

Shortened facilitation period arising from an error in drafting of Contract C

3.30 According to the CEDD, three sections of works (namely Sections 1, 2 and 3) in Contract C for which the HyD contractors' follow-on works and Contractor C's facilitation works were most critically required (hereinafter referred to as critical sections of works). Sections 1, 2 and 3 comprised works relating to northbound tube of STH Tunnel, southbound tube of STH Tunnel and cross passages, and noise enclosure of approaches respectively. The facilitation period was governed by two separate clauses of Contract C, as follows:

- (a) **Clause A.** Facilitation works should be provided for a period of nine months after the three critical sections of works had been substantially completed; and
- (b) **Clause B.** Facilitation works would only be required up to the completion of a specific section of works (namely Section 4, which was the last section of works for Contract C before the start of establishment works — see Note 1 to para. 1.3) or such earlier date as instructed.

3.31 Audit noted that:

- (a) based on Clause A, the 9-month facilitation period for the three critical sections of works would commence on 2 October 2005 (i.e. the original substantial completion date of the three sections under Contract C) and end on 2 July 2006 (Note 23);
- (b) based on Clause B, the facilitation period would end on 17 May 2006, which was the original completion date of Section 4 under Contract C;
- (c) in July 2006, in discussing the time programmes for facilitation periods under Contracts B, C and D, the CEDD informed the HyD that due to a processing error during the drafting of Contract C, Clauses A and B did not match one another, and Clause B took precedence over Clause A in case of discrepancies; and
- (d) the original facilitation period end dates for the three critical sections of works would be 17 May 2006, resulting in a shorter facilitation period of about 7.5 months (from 2 October 2005 to 17 May 2006) instead of the agreed duration of 9 months.

3.32 According to the Project Administration Handbook for Civil Engineering Works, the documents forming a contract must be scrutinised for comprehensive coverage, accuracy and consistency with one another before tenders are invited. Audit considers that the processing error could have been avoided with more diligence and care. In Audit's view, in preparing documents for a works contract in future, the CEDD needs to take measures to ensure that contract clauses for time programmes (e.g. for facilitation works) are carefully checked to ensure their accuracy and consistency.

Note 23: *After contract commencement, the commencement date and end date of the facilitation period would be revised if the original completion date of the section concerned is extended.*

Scheduled periods for facilitation works in Contracts B, C and D deviated from agreed period

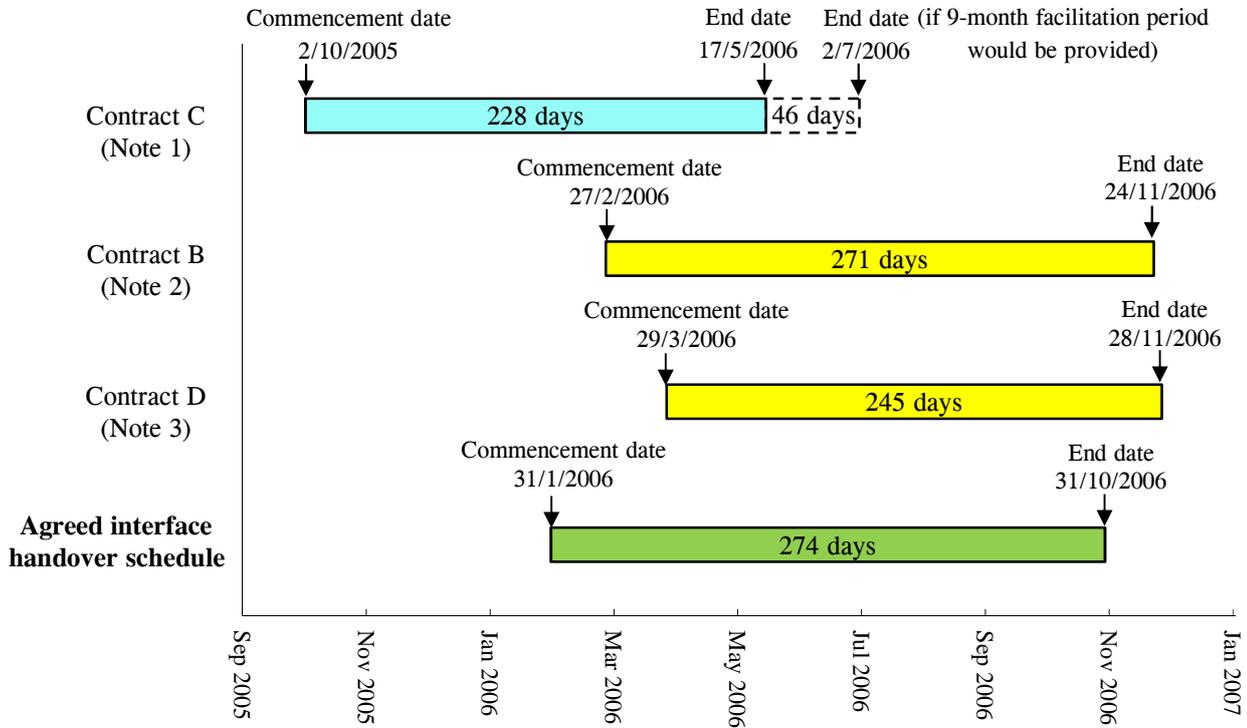
3.33 During the detailed design stage, the CEDD and the HyD discussed the construction interface between the civil engineering works under Contract C and the HyD contractors' follow-on works under Contracts B and D, and agreed an interface handover schedule for different sections of works under Contract C in late 2001. The CEDD and the HyD then proceeded to finalise the design and tender of the respective contracts.

3.34 According to the interface handover schedule agreed between the CEDD and the HyD in late 2001, the facilitation periods for the three critical sections of works were the same (i.e. from 31 January 2006 to 31 October 2006). However, Audit noted that:

- (a) for the three critical sections of works under Contract C, the scheduled facilitation periods in Contract C and the scheduled site access periods in Contracts B and D (which specified the time of the facilitation works provided under Contract C for the access to Contract C's site areas by Contractors B and D to carry out follow-on works) deviated from the agreed schedule. The scheduled periods for facilitation works in each contract for Section 1 are summarised in Figure 3;

Figure 3

Scheduled periods for facilitation works in Contracts B, C and D for Section 1



Legend:

- Shortened facilitation period due to CEDD's processing error in drafting contract clauses of Contract C (see para. 3.31)
- Facilitation period not scheduled in Contract C
- Access to Contract C's site areas to carry out follow-on works as scheduled in Contracts B and D
- Agreed interface handover schedule

Source: Audit analysis of CEDD and HyD records

Note 1: Under Contract C, Sections 1 to 3 had the same facilitation period from 2 October 2005 to 17 May 2006 (see para. 3.31(d)).

Note 2: Under Contract B, the site access periods for Sections 2 and 3 were from 27 February to 24 November 2006, and from 29 March to 24 November 2006 respectively.

Note 3: Under Contract D, the site access periods for Sections 2 and 3 were from 30 March to 28 November 2006, and from 11 December 2005 to 12 August 2006 respectively.

Administration of Contract B and Contract C

- (b) for Contract C (awarded in November 2002):
 - (i) according to the CEDD, in order to meet the agreed interface handover dates, it had included floats in various sections of works of Contract C to allow for possible delays that might arise from unforeseen poor ground conditions in the tunnel works. Therefore, the scheduled facilitation period commencement dates for Sections 1 to 3 were about four months earlier than the agreed interface handover date of 31 January 2006; and
 - (ii) Audit noted that the reason for the scheduled facilitation period for Sections 1 to 3 ending before the agreed end date of 31 October 2006, resulting in a shorter facilitation period of about 7.5 months instead of the agreed duration of 9 months, was due to the CEDD's processing error in drafting contract clauses (see paras. 3.30 and 3.31); and
- (c) for Contracts B and D (awarded in September 2003 and October 2004 respectively), according to the HyD's advice in February 2018:
 - (i) it had included floats between the agreed interface handover date and the scheduled site access period commencement dates in Contracts B and D to cater for the potential delays in Contract C. Therefore, the scheduled site access period commencement dates for Sections 1 to 3 were later than the agreed interface handover date of 31 January 2006; and
 - (ii) counting from the contractual access dates to Contract C's site areas under Contracts B and D, the site access periods under these two contracts were less than nine months in order to tally with the agreed 9-month facilitation period as provided for under Clause A of Contract C (see para. 3.30(a)). Since most of the site access dates scheduled in Contracts B and D commenced later than the agreed date (i.e. 31 January 2006), the scheduled site access periods would end on 24 and 28 November 2006 in Contracts B and D respectively, about one month later than the agreed end date (i.e. 31 October 2006) of provision of facilitation works by Contractor C.

Administration of Contract B and Contract C

3.35 In the event, Contractor C provided facilitation works for Sections 1 to 3 to the HyD contractors for a 21-month period from 3 December 2005 to 31 August 2007 (Note 24) due to various reasons (e.g. inclement weather and delay of works of the HyD contractors, and re-sequencing of certain works in Contract C (see Note 3 to Table 11 in para. 3.28)). Of the 21-month facilitation period provided by Contractor C:

- (a) about 9 months (from 3 December 2005 to 4 September 2006 — Note 25) were for facilitation works under Contract C;
- (b) about 10 months (from 5 September 2006 to 30 June 2007 — Note 26) were related to a supplementary agreement (SA14) entered into between the CEDD and Contractor C to extend the provision of facilitation works to the HyD contractors at an amount of \$15.1 million; and
- (c) 2 months (from 1 July to 31 August 2007) were related to a variation order issued by the CEDD (pursuant to the option available under SA14) for a further extension of the duration of facilitation works at an amount of \$2.6 million.

3.36 The specification of consistent periods in providing and requiring facilitation works in Contracts B, C and D is important as it would enable Contractors B, C and D to plan their works programmes and the time needed, and would help minimise the risk of claims from the contractors. Audit noted that the CEDD and the HyD had included floats in the three contracts to allow buffers between interfacing dates to cater for the potential delays in Contract C. However, after taking into account the floats, the scheduled periods for facilitation works in Contracts B, C and D deviated from the agreed interface handover schedule (see para. 3.34). As far as could be ascertained, there was no documentation showing that the CEDD and

Note 24: *The facilitation period commencement dates for Sections 1 to 3 were 18 January 2006, 20 January 2006 and 3 December 2005 respectively, while the end dates were the same on 31 August 2007.*

Note 25: *Under Contract C, the facilitation periods for Sections 1 to 3 were from 18 January to 4 September 2006, from 20 January to 4 September 2006, and from 3 December 2005 to 2 September 2006 respectively.*

Note 26: *The completion date of Contract C was extended to June 2008 under SA14 after taking into account the 1-year establishment period starting from July 2007.*

Administration of Contract B and Contract C

the HyD had made subsequent revision to the agreed schedule. Audit considers that, in preparing documents for a works contract involving interface with other contracts (e.g. facilitation works) in future, the CEDD and the HyD need to take measures to ensure that the time programmes for interface works in all contracts concerned are carefully checked to ensure consistency.

3.37 In this connection, Audit notes that according to the Project Administration Handbook for Civil Engineering Works issued by the CEDD, for multi-contract projects, those parts of tender documents delineating the split of the works, particularly the drawings and BQ, should be carefully checked to ensure consistency and that there is no omission or duplication of works at the interface. In Audit's view, there is merit for the CEDD to consider including a requirement in the Handbook that, for multi-contract projects, the time programmes for interface works in all contracts concerned should be carefully checked to ensure consistency.

Audit recommendations

3.38 **Audit has *recommended* that the Director of Civil Engineering and Development should:**

- (a) **in preparing documents for a works contract in future, take measures to ensure that contract clauses for time programmes (e.g. for facilitation works) are carefully checked to ensure their accuracy and consistency; and**
- (b) **consider including a requirement in the Project Administration Handbook for Civil Engineering Works that, for multi-contract projects, the time programmes for interface works in all contracts concerned should be carefully checked to ensure consistency.**

3.39 **Audit has *recommended* that, in preparing documents for a works contract involving interface with other contracts (e.g. facilitation works) in future, the Director of Civil Engineering and Development and the Director of Highways should take measures to ensure that the time programmes for interface works in all contracts concerned are carefully checked to ensure consistency.**

Response from the Government

3.40 The Director of Civil Engineering and Development agrees with the audit recommendations in paragraphs 3.38 and 3.39.

3.41 The Director of Highways agrees with the audit recommendation in paragraph 3.39. He has said that the HyD will remind its staff and consultants, in preparing tender documents, to continue to carefully check that the time programmes for interface works in all contracts involving interfaces with other contracts are consistent in future.

PART 4: USAGE AND MANAGEMENT OF SHA TIN SECTION

4.1 This PART examines the usage and management of Sha Tin Section, focusing on:

- (a) usage of Sha Tin Section (paras. 4.2 to 4.9); and
- (b) management of performance of operator for Tsing Sha Control Area (paras. 4.10 to 4.41).

Usage of Sha Tin Section

Study relating to Sha Tin Section

4.2 In January 2017, the TD commenced a consultancy study (toll rationalisation study) on the rationalisation of traffic distribution of the three road harbour crossings (i.e. Cross Harbour Tunnel, Eastern Harbour Crossing and Western Harbour Crossing) and the three land tunnels between Kowloon and Sha Tin (i.e. Lion Rock Tunnel, Tate’s Cairn Tunnel, as well as EN Tunnel and STH Tunnel of Sha Tin Section — Note 27) in a holistic manner (Note 28). The aim of the study is to formulate various proposals to influence the choice of motorists through raising and lowering the tolls of different tunnels in order to rationalise traffic distribution among the six tunnels. According to the TD, it has been supporting the THB on the toll rationalisation study and the target is to finalise the proposals for briefing LegCo Panel on Transport by mid-2018.

Note 27: *As EN Tunnel and STH Tunnel are connected by a toll plaza between them and cannot be used separately, they are counted as one land tunnel in the study.*

Note 28: *According to the TD, owing to the geographical locations of the tunnels, there is a natural “pairing effect” on the use of the three road harbour crossings and the three land tunnels. For example, the majority of the cross-harbour road traffic coming through Lion Rock Tunnel prefers Cross Harbour Tunnel. Similar tendencies are also observed in the eastern areas (pairing Tate’s Cairn Tunnel and Eastern Harbour Crossing), and in the western areas (pairing EN Tunnel and STH Tunnel of Sha Tin Section and Western Harbour Crossing). Noting this pairing effect, the TD commenced the toll rationalisation study of these six tunnels in a holistic manner.*

Usage and management of Sha Tin Section

4.3 In November 2017, the THB and the TD informed LegCo Panel on Transport of the preliminary findings of the toll rationalisation study, including traffic conditions of the three land tunnels between Kowloon and Sha Tin (see para. 4.2). According to a traffic survey conducted in March and April 2017 under the study, the weekday peak-hour traffic demands for Lion Rock Tunnel and Tate's Cairn Tunnel exceeded their respective design capacities, resulting in long traffic queues on their connecting roads, while EN Tunnel and STH Tunnel of Sha Tin Section was not congested during weekday peak hours (see Table 12).

Table 12

**Weekday peak-hour traffic conditions
at tunnels between Kowloon and Sha Tin
(March and April 2017)**

Particulars	Lion Rock Tunnel	Tate's Cairn Tunnel	EN Tunnel and STH Tunnel of Sha Tin Section
Tunnel length	1.4 km	4 km	EN Tunnel: 2.1 km STH Tunnel: 1 km
Tunnel design capacity per hour for one-way	2,600 vehicles	2,600 vehicles	4,700 vehicles
<i>Average weekday traffic demand per hour</i>			
AM peak hours (southbound) (% of tunnel design capacity)	3,500 vehicles (135%)	3,600 vehicles (138%)	3,700 vehicles (79%)
PM peak hours (northbound) (% of tunnel design capacity)	3,800 vehicles (146%)	3,200 vehicles (123%)	3,000 vehicles (64%)
<i>Average length of traffic queue</i>			
AM peak hours (southbound)	1.8 km	1.9 km	No observable queue
PM peak hours (northbound)	1.5 km	1.2 km	No observable queue
<i>Time for crossing the tunnel (Note)</i>			
AM peak hours (southbound)	17 minutes	26 minutes	5 minutes
PM peak hours (northbound)	13 minutes	14 minutes	5 minutes

Source: TD records

Note: It represented the time required to travel from the end of traffic queue to the exit portal of the tunnel.

Usage and management of Sha Tin Section

Need to make better use of spare capacity of Sha Tin Section

4.4 In 2002, the THB informed LegCo that the construction of Sha Tin Section of Route 8 was needed to alleviate the traffic congestion at the then existing road links between Kowloon and Sha Tin, in particular Lion Rock Tunnel and Tate's Cairn Tunnel (see para. 1.4(a)). However, Audit noted that as of April 2017, during weekday peak hours, EN Tunnel and STH Tunnel of Sha Tin Section still had spare capacity while Lion Rock Tunnel and Tate's Cairn Tunnel had exceeded their respective design capacities. As shown in Table 12 in paragraph 4.3, in the AM peak hours, EN Tunnel and STH Tunnel were at 79% of their tunnel design capacity with no observable traffic queue, while Lion Rock Tunnel and Tate's Cairn Tunnel reached 135% and 138% of their respective tunnel design capacities and with traffic queues of 1.8 km and 1.9 km respectively. Audit also noted that since commissioning of Sha Tin Section in March 2008, the TD had not conducted any specific study or review on its road usage until January 2017 when it commenced the toll rationalisation study (see para. 4.2). According to the TD, although no specific study on the road usage of Sha Tin Section had been conducted, it had been monitoring the traffic condition thereat.

4.5 In Audit's view, the TD needs to explore measures to make better use of the spare capacity of EN Tunnel and STH Tunnel of Sha Tin Section (e.g. whether enhancement of the connecting roads to the two tunnels is needed) to alleviate the traffic congestion at the existing road links between Kowloon and Sha Tin, in particular Lion Rock Tunnel and Tate's Cairn Tunnel. The TD also needs to keep under review the progress of the toll rationalisation study with a view to meeting the target of finalising the proposals for the rationalisation of traffic distribution among the six tunnels, including the three land tunnels between Kowloon and Sha Tin, for briefing LegCo Panel on Transport by mid-2018 (see para. 4.2).

Need to keep under review bus and minibus services passing through Sha Tin Section

4.6 As of December 2017, there were 23 franchised bus routes and no public light bus (i.e. minibus) route passing through Sha Tin Section (i.e. EN Tunnel and STH Tunnel) of Tsing Sha Highway. In this connection, Audit noted that:

Usage and management of Sha Tin Section

- (a) as reflected by the analysis of franchised bus and public minibus routes passing through the three tunnels between Kowloon and Sha Tin as of December 2017 (see Table 13), only 5 franchised bus routes passing through EN Tunnel and STH Tunnel provided whole-day services, whereas there were 21 and 23 franchised bus routes with whole-day services passing through Lion Rock Tunnel and Tate's Cairn Tunnel respectively; and

Table 13

**Franchised bus and public minibus routes
passing through tunnels between Kowloon and Sha Tin
(December 2017)**

Particulars	Lion Rock Tunnel	Tate's Cairn Tunnel	EN Tunnel and STH Tunnel
(a) Number of franchised bus routes			
(i) whole-day services	21	23	5
(ii) peak-hour services	10	28	15
(iii) mid-night services	6	1	2
(iv) special-day services (Note)	6	1	1
Total	43	53	23
(b) Number of public minibus routes			
(i) peak-hour services	1	—	—
(ii) mid-night services	7	—	—
Total	8	—	—

Source: Audit analysis of TD records

Note: The bus routes passing through Lion Rock Tunnel and Tate's Cairn Tunnel provided services only on horse-racing days, while the bus route passing through EN Tunnel and STH Tunnel provided services only on the occasions of Ching Ming Festival and Chung Yeung Festival.

- (b) from time to time, Members of the Sha Tin District Council had requested the TD to better utilise Tsing Sha Highway and introduce new bus routes passing through Sha Tin Section. As an example, at the meeting of the Traffic and Transport Committee of the Sha Tin District Council held in

Usage and management of Sha Tin Section

July 2017, District Council Members requested improvement of bus services (e.g. extending the peak-hour services of certain bus routes to whole-day services, and increasing the bus frequency of certain bus routes) for better utilising Tsing Sha Highway to alleviate the traffic congestion at Lion Rock Tunnel and Tate's Cairn Tunnel. In addition, a trade association had requested the TD to open up EN Tunnel to red minibuses (Note 29).

4.7 According to the TD, when considering the introduction of a new bus or green minibus route, it will take into account a basket of factors, including the existing public transport network, service levels of existing public transports, passenger demands and the expected financial viability of the proposed new route. In view of the spare capacity of Sha Tin Section (i.e. EN Tunnel and STH Tunnel) of Tsing Sha Highway (see Table 12 in para. 4.3), and District Council Members' and the trade association's requests for bus and minibus services passing through Tsing Sha Highway (see para. 4.6(b)), Audit considers that the TD needs to keep under review the bus and minibus services passing through Sha Tin Section and the factors for introduction of new services with a view to enhancing the services for better utilisation of this road section.

Audit recommendations

- 4.8 **Audit has recommended that the Commissioner for Transport should:**
- (a) **explore measures to make better use of the spare capacity of EN Tunnel and STH Tunnel of Sha Tin Section (e.g. whether enhancement of the connecting roads to the two tunnels is needed) to alleviate the traffic congestion at the existing road links between Kowloon and Sha Tin, in particular Lion Rock Tunnel and Tate's Cairn Tunnel;**
 - (b) **keep under review the progress of the toll rationalisation study with a view to meeting the target of finalising the proposals for the rationalisation of traffic distribution among the six tunnels, including the three land tunnels between Kowloon and Sha Tin, for briefing LegCo Panel on Transport by mid-2018; and**

Note 29: *As of December 2017, red minibuses were not allowed to pass through EN Tunnel and STH Tunnel.*

- (c) **keep under review the bus and minibus services passing through Sha Tin Section and the factors for introduction of new services as stated in paragraph 4.7, with a view to enhancing the services for better utilisation of this road section.**

Response from the Government

4.9 The Commissioner for Transport agrees with the audit recommendations. She has said that the TD will balance the factors for introduction of new services as stated in paragraph 4.7. In 2018-19 Bus Route Planning Programmes, the TD has proposed seven improvement items for bus routes passing through Sha Tin Section, which are now undergoing consultation of District Councils.

Management of performance of operator for Tsing Sha Control Area

MOM of TSCA

4.10 According to the THB, for effective and efficient traffic control and incident management, Sha Tin Section and Tsing Yi Section form one single control area (i.e. TSCA). The Government enacted the Tsing Sha Control Area Ordinance for the MOM of the TSCA in June 2007 (which came into operation in March 2008). Since commissioning of Sha Tin Section in March 2008, the MOM of the TSCA has been outsourced to an operator through open tender. The TD awarded the current MOM contract in June 2013 to an operator at a fixed lump-sum management fee of \$964.4 million (Note 30) for six years from 19 September 2013 to 18 September 2019. The operator is responsible for the proper MOM of the TSCA, including ensuring safe and efficient traffic movement, collecting tolls and fees, regulating and controlling vehicular and pedestrian traffic, managing and patrolling the area, and removing any vehicle or thing causing obstruction.

Note 30: *Out of the total management fee of \$964.4 million, \$704.4 million (73%) relating to operation and maintenance works (including E&M works but excluding highway facilities maintenance works) is funded under TD departmental vote, and \$260 million (27%) relating to highway facilities maintenance works is funded under HyD departmental vote.*

Usage and management of Sha Tin Section

4.11 *Monitoring operation of TSCA.* The government departments responsible for monitoring the operation of the TSCA are as follows:

- (a) according to the Tsing Sha Control Area Ordinance, in relation to a breach of a management agreement for the MOM of the TSCA, the Commissioner for Transport is the relevant authority where the breach relates to the management or operation of the TSCA, and the Director of Highways is the relevant authority where the breach relates to the maintenance of the TSCA;
- (b) according to the TD's Controlling Officer's Report, the TD is responsible for handling the tendering of management contracts for a number of government transport infrastructure and services (including the TSCA), and for overseeing and monitoring the performance of the contractors that operate and maintain these transport infrastructure and services; and
- (c) according to the current MOM contract for the TSCA, a Government Monitoring Team (GMT — Note 31), comprising officers from the TD, the HyD, the EMSD and the ArchSD, is responsible for monitoring the TSCA operator's performance.

4.12 *Staff manning level requirement.* According to the current MOM contract for the TSCA:

- (a) the operator shall at all times during the term of the contract provide and maintain sufficient number of competent personnel at all levels for safe, effective and efficient MOM of the TSCA in accordance with the staff plan specified in the contract;

Note 31: *According to the current MOM contract for the TSCA, the Government may from time to time appoint a GMT to be responsible for monitoring the operator's performance.*

- (b) if the operator fails to employ the required number of staff at certain ranks, the operator shall pay the Government, as LD (Note 32), the sum for shortfall of staff at each rank to be calculated on the basis of the number of man-days or working hours of shortfall and the amount of monthly basic salary or hourly rate at each rank specified in the contract (Note 33); and
- (c) the operator is required to maintain a total manning level of 483 staff working in different areas, including operations, highway maintenance, E&M services, building maintenance, and administration and support services.

Responsibilities of GMT members not clearly set out

4.13 The maintenance responsibilities of the operator are set out in the TSCA MOM contract (Note 34). According to the TD, the GMT members (see para. 4.11(c)) monitor the performance of the operator under their respective purview, and their respective responsibilities are as follows:

Note 32: *According to the TD: (a) in order to ensure efficient and safe operation of the TSCA, the TSCA operator needs to deploy sufficient frontline staff who are critical in carrying out the routine operations and maintenance duty in the TSCA (e.g. incident handling and maintenance of E&M systems); and (b) therefore, LD are imposed in the current MOM contract for any staff shortfall in the ranks of frontline operational and maintenance staff.*

Note 33: *In May 2013, after selection of the successful tenderer for the MOM contract of the TSCA as recommended by the Tender Assessment Panel (comprising officers from the TD, the HyD, the EMSD and the ArchSD), the Central Tender Board informed the TD that sanctions should be imposed if the operator failed to comply with its committed minimum manpower level, with a view to conveying a clear message that the operator had to fully comply with the contract requirements and address its inadequacies as soon as possible. The TD, after obtaining the agreement of the selected tenderer, included sanction clauses relating to LD for staff shortfall in the MOM contract for the TSCA.*

Note 34: *According to the TD, the maintenance responsibilities of the operator are set out in Schedules I and III of the TSCA MOM contract, as follows: (a) Schedule I provides clear descriptions of major buildings, structures, facilities and equipment to be managed, operated and maintained by the operator; and (b) Schedule III defines clearly the requirements of scheduled maintenance works to be performed by the operator for buildings, structures, facilities and equipment.*

Usage and management of Sha Tin Section

- (a) the TD oversees daily operation, traffic and incident management;
- (b) the HyD oversees the maintenance of bridges, viaducts and tunnel structures;
- (c) the EMSD oversees the maintenance of all E&M systems and equipment (Note 35); and
- (d) the ArchSD oversees the maintenance of building structures.

4.14 However, Audit noted that the respective responsibilities among the GMT members were not specified in the TSCA MOM contract or documented in other records. In Audit's view, the TD, in collaboration with other GMT members, needs to set out clearly the responsibilities of each member in monitoring the TSCA operator's performance.

Manning level requirements for some types of staff not monitored

4.15 According to the TD, for different types of staff specified in the TSCA MOM contract (see para. 4.25), the GMT members are responsible for monitoring the staff manning level and imposing LD for any staff shortfall (see Table 14).

Note 35: *According to the EMSD, its responsibilities in monitoring the TSCA operator's performance are explicitly stated in the service level agreement between the TD and the EMSD, which includes provision of monitoring services in relation to the E&M systems.*

Table 14

Monitoring of staff manning level for TSCA

Type of staff	Department responsible for	
	monitoring staff manning level	imposing LD for any staff shortfall
(a) Operations staff	TD	TD
(b) E&M staff	EMSD	TD
(c) Highway maintenance staff	HyD	HyD
(d) Administrative and supporting staff	TD	Not subject to LD
(e) Building maintenance staff	ArchSD	TD

Source: TD records

4.16 Audit noted that, as of December 2017:

- (a) the EMSD and the HyD had taken measures to monitor the manning level of E&M staff and highway maintenance staff under their respective purview;
- (b) while the TD had monitored the manning level of operations staff, it had not monitored that of administrative and supporting staff since the commencement of the MOM contract for the TSCA in September 2013; and
- (c) the manning level of building maintenance staff had not been monitored since the commencement of the MOM contract for the TSCA in September 2013 as there was no established monitoring mechanism.

4.17 Regarding administrative and supporting staff, in response to Audit's enquiry in January 2018, the TD advised Audit in February and March 2018 that:

Usage and management of Sha Tin Section

- (a) for contract management, the TD had all along adopted a two-pronged approach in monitoring performance of the contractor/operator, namely input-oriented approach and performance-oriented approach, depending on the nature of the work, as follows:
 - (i) under the input-oriented approach, the TD set the minimum manning level requirement for frontline staff who were critical to the safe and efficient operation of the TSCA, and had been taking various measures (e.g. surprise check and record checking) to ensure that the TSCA operator complied with the relevant requirement; and
 - (ii) under the performance-oriented approach, the TD measured the level and standard of core services, such as rescue/recovery operations (e.g. time to respond to an incident and remove a breakdown vehicle) and environmental control standards for tunnels (e.g. air quality and visibility). As for other non-core services, such as catering and accounting services, the operator was allowed to use its expertise and resources as necessary to enhance operation efficiency and effectiveness;
- (b) the TD regularly checked the services provided by administrative and supporting staff, including cleansing services and catering provisions to staff;
- (c) submission of human resources/financial information as prepared by the administrative and supporting staff of the operator was found to be in order; and
- (d) the operator was not required to submit the manning level of these staff to the TD as the TD was satisfied with the performance/services provided.

4.18 Regarding building maintenance staff, in response to Audit's enquiry in January 2018, the TD and the ArchSD advised Audit in February 2018 that:

- (a) as the respective responsibilities among the GMT members were not specified in the TSCA MOM contract or documented in other records, nor was there any documentation showing that the TD (being the contract

administrator) had requested the ArchSD to provide any input in this area, the operator's manning level of building maintenance staff during the current contract period had yet to be fully checked upon Audit's enquiry in January 2018; and

- (b) after Audit's enquiry, the TD and the ArchSD had worked together, and the ArchSD had carried out checking on the operator's shortfall of building maintenance staff subject to LD and informed the TD of the findings. The information on staff shortfall for those staff not subject to LD was not yet available as submission of staff manning level was pending from the operator.

4.19 The MOM contract for the TSCA specified the staff manning level requirement which included administrative and supporting staff under the TD's purview. Although the TD had monitored the service level of the TSCA operator on provision of administrative support (see para. 4.17), it had not monitored the manning level of administrative and supporting staff. In Audit's view, given that the manning level of administrative and supporting staff is a contract requirement, the TD needs to take measures to ensure that the TSCA operator complies with the manning level requirement in the MOM contract for all staff under its purview, including the administrative and supporting staff. Audit also considers that the TD, in collaboration with the ArchSD, needs to take timely actions to monitor the building maintenance staff manning level of the TSCA operator.

Performance reports on TSCA operator not prepared by all GMT members

4.20 The GMT, comprising officers from the TD, the HyD, the EMSD and the ArchSD, is responsible for monitoring the TSCA operator's performance. Audit noted that, as of December 2017:

- (a) the TD and the EMSD had prepared quarterly performance reports to assess the performance of the operator. The EMSD had also submitted its reports to the TD for information; and
- (b) there was no documentation showing that the HyD and the ArchSD had prepared performance reports on the operator's performance under their

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respective purview (see para. 4.13), and that the TD had required them to provide such reports.

4.21 In February and March 2018, the HyD, the ArchSD and the TD informed Audit that:

HyD

- (a) under the current TSCA MOM contract arrangement, the HyD was not required to carry out independent performance assessment on the operator;

ArchSD

- (b) the ArchSD would provide technical advice to the TD (being the contract administrator) as and when requested, and would not assess the performance of the operator directly;

TD

- (c) the HyD held monthly highway maintenance meetings with the TSCA operator and would alert/discuss with the TD any special maintenance issues (such as security enhancement) when necessary;
- (d) the operator submitted monthly maintenance reports for the ArchSD's review and the ArchSD would discuss with the TD any critical building maintenance issues (such as replacement of building facilities) when necessary;
- (e) the HyD and the ArchSD were members of the tender assessment board for MOM contracts and had provided technical inputs for aspects under their respective purview in the tender assessment; and
- (f) therefore, the HyD and the ArchSD had been monitoring the performance of the TSCA operator while the TD was well aware of such arrangement as well as the key maintenance issues under the respective purview of the HyD and the ArchSD even though the TD had not required them to provide the performance reports.

4.22 According to the SPRs, departments shall evaluate the performance of their contractors at least once every six months until completion of the contract for contracts lasting more than one year. Audit considers that the HyD and the ArchSD, being the GMT members, need to evaluate the performance of the TSCA operator in the area of work under their respective purview at least once every six months, and inform the TD of the assessment results. Audit also considers that the TD, being the contract administrator, needs to keep under review the TSCA operator's performance as assessed by other GMT members for overseeing the overall performance of the operator and providing reference for evaluating its future bids of government MOM contracts.

Need to clearly define staff manning level requirement in tender documents and MOM contracts

4.23 Out of the total manning level of 483 staff under the TSCA MOM contract (see para. 4.12(c)), 80 staff are "leave relief" staff (Note 36). According to the TD, provided that the TSCA operator could deploy sufficient and competent manpower to each of the required duty shifts, the manning level requirement for "leave relief" staff is included in the contract for reference purpose only. In substance, the operator is required to deploy a total of 403 staff (483 staff – 80 staff), of which 343 staff are subject to LD for any shortfall (Note 37). The staff manning level requirement for the TSCA is shown in Table 15.

Note 36: *According to the TD, the manning level for "leave relief" staff represents the number of staff desirable to be employed for the purpose of replacement of staff working on a shift in rest/sudden leave.*

Note 37: *Under the TSCA MOM contract, for staff working on shifts, the manning level requirement includes the number of staff for "AM shift", "PM shift", "night shift" and "leave relief". According to the TD: (a) LD are only applicable to staff subject to LD for any shortfall and deployed in the required duty shifts (i.e. "AM shift", "PM shift" and "night shift") but not the "leave relief" staff; (b) whenever there is a staff shortfall in a required duty shift, the TSCA operator will suitably deploy replacement staff through offering overtime or "leave relief" staff to fill the vacancy; (c) in case the vacancy in the required duty shift cannot be filled, LD will be imposed if the staff is subject to LD for any shortfall; and (d) LD are imposed in the current MOM contract for any staff shortfall in the ranks of frontline operational and maintenance staff (see Note 32 to para. 4.12(b)).*

Table 15

**Staff manning level requirement for TSCA
(September 2013 to September 2019)**

Particulars	Staff		Total (c) = (a) + (b) (No.)
	subject to LD for any shortfall (a) (No.)	not subject to LD for any shortfall (b) (No.)	
	<i>Manning level requirement per MOM contract</i>		
Manning level per contract	420	63	483
“Leave relief” staff	77	3	80
<i>Manning level per TD requirement</i>			
Required manning level	343	60	403

Source: Audit analysis of TD records

Remarks: According to the TD, the manning level requirement for “leave relief” staff is for reference purpose only. Therefore, in substance, the operator is required to deploy a total of 403 staff, which is equal to the manning level requirement per contract minus the number of “leave relief” staff.

4.24 Audit notes that the TD considers that the manning level requirement for “leave relief” staff in the MOM contract is for reference purpose only (see para. 4.23). However, there was no specification in the tender documents or the MOM contract stating that the manning level requirement for “leave relief” staff was for reference purpose only. In Audit’s view, the TD needs to clearly specify whether the staff manning level requirement is for mandatory compliance by operators or for reference purpose in future tender documents and MOM contracts.

Staff manning level requirement not met

4.25 According to the TD, the operator is required to deploy a total of 403 staff, of which 343 staff are subject to LD for any shortfall (see para. 4.23). The staff manning level requirement for the TSCA by types of staff is shown in Table 16.

Table 16

**Staff manning level requirement for TSCA by types of staff
(September 2013 to September 2019)**

Type of staff	Manning level per MOM contract (a) (No.)	“Leave relief” staff per MOM contract (b) (No.)	Required manning level per TD (c) = (a) – (b) (No.)	Staff		Required manning level per TD (f) = (d) + (e) (No.)
				Subject to LD for any shortfall (d) (No.)	not subject to LD for any shortfall (e) (No.)	
Operations staff	263	67	196	186	10	196
E&M staff	140	13	127	122	5	127
Highway maintenance staff	44	—	44	34	10	44
Administrative and supporting staff	31	—	31	—	31	31
Building maintenance staff	5	—	5	1	4	5
Total	483	80	403	343	60	403

Source: Audit analysis of TD records

4.26 According to the TD, the TSCA operator was not able to continuously maintain the required staff manning level since the commencement of the contract in September 2013 and, as a mitigation measure, had arranged its staff to work overtime to fill the vacancies as far as possible. According to the HyD, for highway maintenance staff, the staff shortfall problem mainly occurred in the first contract year when the operator had difficulties in recruiting new staff, and the shortfall problem had been significantly improved thereafter. Based on the GMT members’ records as of December 2017, Audit findings on the staff shortfall problem of the operator for

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the period from January to September 2017 (Note 38) are shown in Table 17 and the details are given in paragraph 4.27.

Table 17

**Staff shortfall of TSCA operator from January to September 2017
(December 2017)**

Type of staff	Staff subject to LD		Staff not subject to LD	
	Manning level per TD requirement (No.)	Actual staff shortfall on average (No.)	Manning level per TD requirement (No.)	Actual staff shortfall on average (No.)
Operations staff	186	—	10	—
E&M staff	122	24	5	—
Highway maintenance staff	34	1	10	—
Administrative and supporting staff	—	—	31	(Note)
Building maintenance staff	1	(Note)	4	(Note)
Total	343		60	

Source: Audit analysis of records of TD, EMSD, HyD and ArchSD

Note: As of December 2017, information on the operator's compliance with the manning level requirement for administrative and supporting staff (see para. 4.16(b)) and building maintenance staff (see para. 4.16(c)) was not available. In February 2018, the TD and the ArchSD informed Audit that: (a) for building maintenance staff subject to LD and administrative and supporting staff, there was no staff shortfall from January to September 2017 (see para. 4.28); and (b) for building maintenance staff not subject to LD, the information on staff shortfall was not available as submission of staff manning level was pending from the operator (see para. 4.18(b)).

Note 38: As of December 2017, the TD and the EMSD had ascertained and the TD had imposed LD on the operator for the periods from September 2013 to February 2014, and from January to September 2017, while the HyD had ascertained and imposed LD for the period from September 2013 to November 2017. In order to ascertain the latest position, Audit examined the staff shortfall problem for the period from January to September 2017.

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4.27 Audit found that, as of December 2017, the staff shortfall problem of the TSCA operator for the period from January to September 2017 was as follows:

- (a) **Staff shortfall subject to LD.** Out of the required manning level of 343 staff subject to LD for any shortfall (see Table 17 in para. 4.26), on average, there was a shortfall of about 25 staff (around 7% of the required level, ranging from 23 to 26 staff), with details as follows:
 - (i) for E&M staff, out of the required manning level of 122 E&M staff, on average, there was a shortfall of about 24 staff (around 20% of the required level, ranging from 22 to 26 staff). In particular, for the rank of “E&M technicians” with the required manning level of 46 staff, on average, there was a shortfall of about 16 staff (around 35% of the required level, ranging from 14 to 18 staff);
 - (ii) for highway maintenance staff, out of the required manning level of 34 staff, on average, there was a shortfall of about 1 staff (around 3% of the required level, ranging from 0 to 1 staff);
 - (iii) for building maintenance staff with the required manning level of 1 staff, information on shortfall was not available as of December 2017 (see para. 4.16(c)); and
 - (iv) according to the TD, there was no shortfall for operations staff with the required manning level of 186 staff as the operator had arranged overtime work and acting arrangements of its staff to fill the vacancies; and
- (b) **Staff shortfall not subject to LD.** Out of the required manning level of 60 staff not subject to LD for any shortfall (see Table 17 in para. 4.26):
 - (i) regarding the administrative and supporting staff with the required manning level of 31 staff, the TD had not ascertained the manning level of these staff as of December 2017 (see para. 4.16(b));
 - (ii) in general, there was no shortfall for operations staff, highway maintenance staff and E&M staff with the required manning level of 10 staff, 10 staff and 5 staff respectively; and

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- (iii) for building maintenance staff with the required manning level of 4 staff, information on shortfall was not available as of December 2017 (see para. 4.16(c)).

4.28 In February 2018, the TD and the ArchSD advised Audit that for building maintenance staff subject to LD (required manning level of 1 staff — see para. 4.27(a)(iii)), there was no staff shortfall from January to September 2017. The TD also said that for administrative and supporting staff not subject to LD (required manning level of 31 staff — see para. 4.27(b)(i)), there was no staff shortfall during the same period.

4.29 Audit noted that the staff shortfall problem for E&M staff (about 20% of the required manning level subject to LD) was more significant (see para. 4.27(a)(i)). In February 2018, the TD and the EMSD informed Audit that:

- (a) the TD and the EMSD had taken various follow-up actions on the staff shortfall problem of the TSCA operator, including imposing LD for staff shortfall (see para. 4.33(a)), requesting the operator to rectify the staff shortfall problem and reminding the operator to comply with the staff manning level requirement through regular contact with the operator (e.g. during meetings or through letters), and reflecting the staff shortfall problem in the quarterly performance reports for the operator;
- (b) the TSCA operator had, upon request of the TD and the EMSD, organised various recruitment exercises to comply with the contract requirement, and increased the basic salary and improved fringe benefit of existing staff. The operator had also attempted to relieve the staff shortfall problem through arranging overtime work to fill the vacancies and through outsourcing of works such as preventive maintenance works; and
- (c) the TD and the EMSD were well aware of the potential consequence of the staff shortfall problem and, hence, had closely monitored the service level and performance of the TSCA operator and found that the normal operation of the control area had been maintained throughout the contract period.

4.30 While actions had been taken by the TD and the EMSD in addressing the staff shortfall problem (see para. 4.29), the problem remained unsolved (shortfall of 27 E&M staff as of December 2017). In Audit's view, the TD, in collaboration with the EMSD, needs to strengthen monitoring actions to ensure that the TSCA operator fully complies with the E&M staff manning level requirement in the MOM contract.

Delay in imposing LD

4.31 According to the current MOM contract for the TSCA, the operator shall pay LD to the Government if he fails to employ the required number of staff at certain ranks (see para. 4.12(b)). LD for the shortfall of highway maintenance staff are imposed by the HyD while those of all other staff are imposed by the TD (see Table 14 in para. 4.15).

4.32 ***Methodology for calculating LD not clearly set out.*** The TD initiated action to impose LD for staff shortfall on the TSCA operator in October 2014. However, due to unclear methodology set out in the MOM contract, it took 27 months (from November 2014 to January 2017) for discussing and agreeing with the operator the methodology for calculating the amount of LD (e.g. how sick leave or annual leave would be taken into account, and whether a staff could take up the duties of two posts at the same time). According to the TD:

- (a) the MOM contract for the TSCA was the first contract imposing LD clauses against the operator;
- (b) the disagreement between the TD, the EMSD and the operator on the methodology for calculating LD took a long time to settle; and
- (c) the TD started collecting LD on E&M staff after reaching an agreement on the calculation methodology.

In the event, the HyD and the TD could only issue the first letter to the operator for imposing LD in February and May 2017 respectively.

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4.33 *Delay in imposing LD.* Audit noted that, as of December 2017:

- (a) for E&M staff, the TD had only imposed LD of about \$5.7 million in respect of the operator's staff shortfall for about 14.5 months (from 19 September 2013 to 28 February 2014, and from 1 January to 30 September 2017). However, the TD and the EMSD had not yet ascertained the amount of LD for the remaining 37 months (from 1 March 2014 to 31 December 2016, and 1 October to 31 December 2017);
- (b) for highway maintenance staff, the HyD had imposed LD of about \$1.4 million in respect of the operator's staff shortfall from 19 September 2013 to 30 November 2017;
- (c) for building maintenance staff, the manning level of such staff had not been monitored since the commencement of the TSCA MOM contract on 19 September 2013 as there was no established monitoring mechanism (see para. 4.16(c)). As a result, information on staff shortfall remained to be checked and hence no LD had been imposed up to December 2017; and
- (d) for operations staff, the TD considered that no LD were required to be imposed after checking the records submitted by the operator as the operator had arranged overtime work and acting arrangements of its staff to fill the vacancies.

4.34 In February 2018, the TD informed Audit that:

- (a) in June 2017, the TD and the EMSD had already planned to collect the outstanding LD (for over 40 months) by March 2018; and
- (b) as of February 2018:
 - (i) for E&M staff, in respect of the operator's staff shortfall for about 50.5 months from 19 September 2013 to 30 November 2017, the TD had imposed and collected LD of about \$13.3 million for about 36.5 months (from 19 September 2013 to 31 October 2015, and from 1 January to 30 November 2017). The TD and the EMSD had also ascertained the amount of LD for the remaining 14 months

(from 1 November 2015 to 31 December 2016) for which LD would be collected in March 2018; and

- (ii) for building maintenance staff, the ArchSD had ascertained that there was staff shortfall for about 6.5 months (from 1 March to 14 September 2014) and LD of about \$0.12 million would be collected by the TD in March 2018.

4.35 In Audit's view, the TD, in collaboration with the EMSD and the ArchSD, needs to take timely actions in calculating and imposing LD for the TSCA operator's shortfall of E&M staff and building maintenance staff. The TD also needs to set out clearly the methodology for calculating LD for an operator's staff shortfall in future MOM contracts.

Audit recommendations

4.36 **Audit has *recommended* that the Commissioner for Transport should:**

- (a) **in collaboration with the Director of Highways, the Director of Electrical and Mechanical Services and the Director of Architectural Services, set out clearly the responsibilities of each member of the GMT in monitoring the TSCA operator's performance;**
- (b) **take measures to ensure that the TSCA operator complies with the manning level requirement in the MOM contract for all staff under the TD's purview, including the administrative and supporting staff;**
- (c) **in collaboration with the Director of Architectural Services, take timely actions to monitor the building maintenance staff manning level of the TSCA operator;**
- (d) **keep under review the TSCA operator's performance as assessed by other GMT members for overseeing the overall performance of the operator and providing reference for evaluating its future bids of government MOM contracts;**

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- (e) clearly specify whether the staff manning level requirement is for mandatory compliance by operators or for reference purpose in future tender documents and MOM contracts;
- (f) in collaboration with the Director of Electrical and Mechanical Services, strengthen monitoring actions to ensure that the TSCA operator fully complies with the E&M staff manning level requirement in the MOM contract;
- (g) in collaboration with the Director of Electrical and Mechanical Services and the Director of Architectural Services, take timely actions in calculating and imposing LD for the TSCA operator's shortfall of E&M staff and building maintenance staff; and
- (h) set out clearly the methodology for calculating LD for an operator's staff shortfall in future MOM contracts.

4.37 Audit has *recommended* that the Director of Highways and the Director of Architectural Services should evaluate the performance of the TSCA operator in the area of work under their departments' respective purview at least once every six months, and inform the TD of the assessment results.

Response from the Government

4.38 The Commissioner for Transport agrees with the audit recommendations in paragraph 4.36. She has said that:

- (a) the TD, in collaboration with other GMT members, has consolidated a list of "GMT Members Monitoring Responsibility for TSCA", which has been attached to the current TSCA MOM contract and will also be incorporated in the next contract to be renewed in 2019;
- (b) while there were no minimum manning level requirements for administrative and supporting staff in the tender documents, the TD has started monitoring the operator's compliance with the manning level requirement for administrative and supporting staff as specified in the TSCA MOM contract;

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- (c) for building maintenance staff, the ArchSD has taken follow-up actions for the manning level requirement since the commencement of the TSCA MOM contract and will continue to monitor the manning level in this regard;
- (d) the HyD and the ArchSD will provide quarterly assessment of the TSCA operator's performance (from December 2017 onwards) on aspects under their respective purview, and provide assessment results to the TD for compilation of the overall quarterly assessment report on performance;
- (e) the TD will review whether and how to specify the manning level of "leave relief" staff and administrative and supporting staff in future MOM contracts;
- (f) during the current contract term, the TD and the EMSD will continue to monitor the manning level of E&M staff and take necessary actions timely. The TD, with the support of the EMSD, has implemented a number of measures in new MOM contracts since 2017, including introducing a rank of technical apprentice to bring new blood to the industry as well as reviewing the work experience requirement of E&M staff to suitably reflect entry requirement. The TD will also consider strengthening new contractual measures to ensure compliance with the staff manning level requirement, such as imposing additional costs on the operator for failing to meet the required manning level;
- (g) after the methodology and the calculation of LD had been settled, the TD, the EMSD and the TSCA operator have taken vigorous follow-up actions in calculating and imposing LD for the operator's shortfall of E&M staff. For building maintenance staff, the ArchSD has also taken similar follow-up actions since January 2018; and
- (h) the TSCA MOM contract was the first contract imposing LD clauses against the operator. With the experiences gained in handling LD, the TD has incorporated the refined LD calculation methodology into new tender documents and MOM contracts since 2016.

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4.39 The Director of Electrical and Mechanical Services agrees with the audit recommendations in paragraph 4.36 relating to E&M monitoring of the TSCA MOM contract.

4.40 The Director of Highways agrees with the audit recommendation in paragraph 4.37. He has said that the HyD will carry out performance assessment on the TSCA operator relating to highway maintenance on a quarterly basis, and provide assessment results to the TD for overall compilation.

4.41 The Director of Architectural Services agrees with the audit recommendation in paragraph 4.37. She has said that the ArchSD will work closely with the TD to evaluate the TSCA operator's performance on aspects under the ArchSD's purview on a quarterly basis, and to provide input to the TD for coordination and compilation of the overall quarterly performance report.

Acronyms and abbreviations

ArchSD	Architectural Services Department
Audit	Audit Commission
BQ	Bills of Quantities
CEDD	Civil Engineering and Development Department
E&M	Electrical and mechanical
EMSD	Electrical and Mechanical Services Department
EN Tunnel	Eagle's Nest Tunnel
EOT	Extension of time
FSTB	Financial Services and the Treasury Bureau
GMT	Government Monitoring Team
HyD	Highways Department
km	Kilometre
LAD	Legal Advisory Division (Works)
LCK Viaduct	Lai Chi Kok Viaduct
LD	Liquidated damages
LegCo	Legislative Council
mm	Millimetre
MOM	Management, operation and maintenance
PS	Particular Specification
SA	Supplementary Agreement
SMM	Standard Method of Measurement
SPRs	Stores and Procurement Regulations
STH Tunnel	Sha Tin Heights Tunnel
TCS System	Traffic control and surveillance system
TD	Transport Department
THB	Transport and Housing Bureau
TSCA	Tsing Sha Control Area