MAINTENANCE AND IMPROVEMENT OF SCHOOL PREMISES FOR AIDED SCHOOLS

Executive Summary

- 1. As at 31 December 2022, there were 844 aided schools in Hong Kong. The Education Bureau (EDB), headed by the Secretary for Education, is responsible for implementing maintenance and improvement projects approved under non-recurrent Government subventions of school premises of aided schools. For repair items each costing \$3,000 or more for primary schools and special schools, or \$8,000 or more for secondary schools, schools may submit Major Repairs (MR) applications and Emergency Repairs (ER) applications to EDB to carry out the required repair works. EDB awards term consultancy agreements to Term Consultants (TCs) and maintenance term contracts to Maintenance Term Contractors (MTCs) to handle applications and to deliver maintenance and improvement works under MR projects, ER projects and other improvement projects. In the financial years from 2017-18 to 2021-22, 4,186 MR projects and 34,991 ER projects were approved, and expenditure of \$5,018.2 million and \$1,837.8 million respectively had been incurred.
- 2. In the period from 2017 to 2021, the Government launched various improvement programmes for the school premises of aided schools. Up to 31 March 2022, the three improvement programmes that had incurred the largest amount of expenditures were Additional Air-conditioning Installation for Schools (3,815 projects were approved and a total expenditure of \$695.1 million had been incurred), Time-limited Minor Works Programme (FUS) (748 projects were approved and a total expenditure of \$427.9 million had been incurred) and Improvement programme for "Matchbox-style schools" (26 projects were approved and a total expenditure of \$106.9 million had been incurred). The Audit Commission (Audit) has recently conducted a review of EDB's work on maintenance and improvement of school premises for aided schools.

Contract management

3. Room for improvement in conducting Comprehensive Site Checks (CSCs). Audit reviewed the 8,601 CSCs conducted in the period from January 2021 to

September 2022 and noted that: (a) for some sub-regions, the numbers of works orders checked were less than the requirements; (b) of the 1,567 notifications issued by EDB to TCs on unsatisfactory cases, TCs submitted their replies for 1,128 (72%) cases with delays. The average delay was 90 days, ranging from 1 to 476 days. Up to 31 October 2022, TCs had not yet submitted their replies for 253 (16%) cases, which were already overdue for 12 to 634 days; and (c) 2,666 (31%) of the 8,601 CSCs were conducted after the completion of the works, contrary to EDB's guidelines. The delays between the date of completion and date of CSCs ranged from 1 to 963 days (averaging 82 days) (para. 2.3).

- 4. improvement conducting Room for in **Technical** Assurance Audits (TAAs). Audit reviewed 7,157 works orders with TAAs conducted in the period from 1 January 2021 to 15 December 2022 and noted that: (a) EDB had not promulgated guidelines on when TAAs should be completed after the completion of works. On average, EDB took 156 days to complete TAAs after completion of works; and (b) of the 1,002 works orders with responses from TCs on observations identified in TAAs due for submission, many were submitted after the due date or were not yet submitted. As at 15 December 2022, TCs submitted their responses for 354 (35%) works orders 1 to 462 days (averaging 58 days) later than the stipulated time of 14 calendar days, and TCs had not submitted their responses to EDB for 29 (3%) works orders. The responses for the 29 works orders were overdue for 3 to 275 days (para. 2.6).
- 5. Room for improvement in conducting Quality Assurance Audits (QAAs). Audit noted that projects were not selected for QAAs according to the requirement stipulated in the guidelines which was effective since August 2020 (i.e. one completed project should be selected every two months) or the target promulgated in January 2022 (i.e. three completed projects should be selected every two months): (a) in the 17-month period from August 2020 to December 2021, 1 project was selected for QAA; and (b) in the 5-month period from January 2022 to May 2022, 3 projects were selected for QAAs (all 3 were selected in January 2022) (paras. 2.8 to 2.10).
- 6. **Delays in submission of dimension books by MTCs.** MTCs are required to submit a dimension book for each works order to TCs within 90 days after the certified completion date of the works order. According to EDB, if MTCs fail to submit the dimension books on or before the due date, EDB will claw back all or part of the interim payments made. The payments clawed back will be released to MTCs

upon submission of the outstanding dimension books. Audit noted that of the 28,426 works orders that were certified completed in the period from 1 January 2020 to 30 June 2022, the dimension books of 8,308 (29%) were submitted late. The average delay was 71 days, ranging from 1 to 661 days. In all the 10 delay cases reviewed by Audit, the clawbacks were made long after the due dates for dimension book submission, ranging from 498 to 695 days (averaging 568 days) after the due dates and after MTCs had submitted the outstanding dimension books. In 7 (70%) of the 10 cases, the clawbacks and the releases of payment clawed back were made on the same day, and in 1 (10%) of the 10 cases, the release of clawback was made before the interim payments had actually been clawed back (paras. 2.12 to 2.15).

7. Room for improvement in conducting customer satisfaction surveys. TCs are required to conduct quarterly customer satisfaction surveys for every school in their regions and submit quarterly customer satisfaction reports to EDB. Audit reviewed the four surveys conducted in the period from March 2021 to February 2022 and noted that the response rates were on the low side, ranging from 7% to 38% (averaging 18%). Furthermore, TCs are required to visit and contact schools who gave unsatisfactory ratings in the surveys and submit reports of the visits and the proposed improvement actions to be taken to EDB. There was no documentary evidence showing that TCs had complied with the requirements for 7 (28%) of the 25 schools that gave unsatisfactory ratings for the quarter from September to November 2021 (para. 2.19).

Major Repairs projects

- 8. Need to review the thresholds of minimum repairs cost under MR projects and ER projects. According to the regulations of MR projects and ER projects, schools cannot apply for repair items costing less than \$3,000 for primary schools and special schools, and less than \$8,000 for secondary schools. Audit noted that these thresholds had not been reviewed or revised at least for more than 13 years since April 2009 and EDB had no information on how these thresholds were derived, the rationale behind the setting of two different thresholds, and when these thresholds were last reviewed or revised (para. 3.6).
- 9. **Different recommendations given for similar applications.** In May 2020, EDB issued guidelines stating that schools should consider adding a lid for squat-type toilets or replacing them with pedestal toilets. Audit noted that TCs gave different assessments on similar MR applications for 51 works items of replacement of the

squat-type toilets in the 2021-22 MR cycle. Of the 51 works items, 6 (12%) were assessed by TCs as ER items instead of MR items, 26 (51%) were rated as repair items which were essential and were approved as MR items (i.e. carried out one year after the applications were submitted) and 19 (37%) were rated as desirable repair items or improvement items. Of these 19 items, 6 (32%) were rejected by EDB. However, there was no documentary evidence indicating the reasons for the difference in the assessments of these 51 works items (paras. 3.9 and 3.11).

- 10. Need to improve repairs for defective fire doors. Audit noted a case where fire doors with safety concerns were handled as MR instead of ER. Moreover, there was no documentary evidence showing that TC had provided justifications for replacing the two wooden fire doors by stainless steel doors, which were more expensive than wooden fire doors. In another case, although there were major differences between the seriousness of the defects described by the school and the assessment results of TC on the defective fire doors, TC did not document the details of the defects to repudiate the seriousness of the defects described by the school (para. 3.14).
- 11. Room for improvement in documentation regarding project completion dates. Audit examined 40 works orders issued by TCs to MTCs for MR cycles from 2020-21 to 2022-23 and found that for 37 (93%) works orders, the target completion dates set were later than the project completion dates agreed with the schools as recorded in EDB's computer system by 31 to 227 days (averaging 123 days). According to EDB, for these 37 works orders, the TCs concerned had verbally agreed the revised project completion dates with the schools. Audit noted that for 30 (81%) of the 37 works orders, there was no documentary evidence: (a) showing the factors accounting for the difference between the target completion dates set by TCs for the works orders and the original project completion dates agreed with the schools; and (b) showing that the revised target completion dates of the works orders were agreed with the schools (paras. 3.19 to 3.21).
- 12. Need to closely monitor asbestos-containing materials (ACMs) remaining in some school premises. In 2005, the Government completed an exercise to remove all ACMs with imminent risk to public health from school premises. In June 2006, EDB informed the Panel on Education of the Legislative Council that the remaining ACMs in school premises were in good conditions and of insignificant risk to public health, and it intended to complete the removal of all ACMs from all school premises by the end of the 2011/12 school year. In 2014, EDB found that ACMs still existed

in 14 schools and requested them to engage registered asbestos consultants to investigate the conditions of ACMs in their school premises every two years. In some cases, the consultants identified damages in the building elements of school premises covering ACMs, which might cause possible leakages of ACMs. Up to January 2023, ACMs still existed in the school premises of 11 (79%) of the 14 schools (paras. 3.30, 3.31 and 3.33).

Manner. Starting from 1 January 2022, all primary and secondary schools must display national flag on each school day and conduct a national flag raising ceremony in each week. Audit noted that schools with only one flagpole which had become inoperable needed to rely on movable flagpoles to meet the requirements because requests for repairing defective flagpoles as MR would only be carried out in the following MR cycle. Furthermore, schools should display the regional flag alongside the national flag if there were adequate flagpoles. Based on the results of the review conducted in 2021, EDB launched a special improvement works programme in 2021-22 covering 42 selected schools to help them to install new flagpoles. Of the 82 approved applications for flagpoles installations in the 2022-23 MR cycle, the installation works for 22 (27%) had not yet been completed up to 18 November 2022 (paras. 3.36, 3.38 and 3.39).

Emergency Repairs projects

- 14. **Need to consolidate ER requests as far as practicable.** Audit examined the ER requests recommended for repairs in the period from 2019-20 to 2021-22. Audit noted that there were more than 6,000 ER requests each year and some schools needed frequent ER works. Audit reviewed the ER requests and noted that there were cases where repairs were requested separately within a short period of time and were carried out under separate projects. Such requests could have been consolidated and covered by one single works project to minimise disturbance to the schools and to improve economy and efficiency of the repairs (paras. 4.3 and 4.4).
- 15. Some schools need assistance to determine if works required is within ER ambit. Audit analysed the ER requests submitted by schools in the period from 2019-20 to 2021-22, and noted that a considerable percentage (ranging from 17% to 25%) of ER requests submitted were not recommended for repairs. Audit examined 20 ER requests submitted by schools in 2021-22 which were not recommended for repairs, and found that 10 (50%) requests were clearly not within the ambit of ER

projects. Of the 10 requests, the estimated costs of repair items in 5 (50%) requests were much below the thresholds of ER projects (see para. 1) and the repair items in 5 (50%) requests were not of ER nature (paras. 4.8 and 4.9).

- 16. Need to expedite finalisation of ER reports. In September 2020, EDB set a target of 15 days for TCs to finalise their ER reports after the date of first submission. Audit examined the ER reports finalised in the period from 2019-20 to 2021-22 and noted that long time was taken to finalise the ER reports. The time taken ranged from 0 to 442 days, averaging 32 days. Furthermore, in the six-month period from October 2021 to March 2022, EDB returned 4,073 ER reports submitted by TCs for their revisions. Audit found that 3,042 (75%) ER reports were returned to TCs for revisions because of missing or incorrect necessary information in the ER reports (paras. 4.14 and 4.15).
- 17. *ER requests not followed up within stipulated time*. The time for conducting site visits, completing temporary repairs and completing final repairs for the three categories of ER requests are stipulated in the maintenance term contracts. In the period from 2019-20 to 2021-22, many ER requests were not followed up by MTCs within the stipulated time: (a) site visits for 2,762 (10%) of 28,346 ER requests; (b) temporary repairs for 614 (3%) of 20,956 ER requests; and (c) final repairs for 9,887 (48%) of 20,437 ER requests (paras. 4.18 and 4.19).

Improvement programmes

18. Need to provide assistance to matchbox-style schools before reprovisioning. As at 31 December 2022, there were 23 matchbox-style schools. In 2017, EDB commenced an improvement programme to address the common problems of matchbox-style schools premises, which was completed in 2019. Audit noted that some common problems of the schools (e.g. inadequate space for the schools' operations) were not covered by the improvement works completed in 2019. These schools needed to be reprovisioned or expanded in order to fully address the issues of insufficient space and facilities in the long run. In the six-year period from 2017 to 2022, 19 matchbox-style schools applied for reprovisioning and only 5 (26%) of their applications were successful (paras. 5.3, 5.5, 5.6, 5.8 and 5.9).

- 19. *Incorrect information communicated to schools*. According to the meeting minutes of two meetings held in May 2021 on two MR projects and three meetings held in May 2022 on three MR projects between EDB, schools and the TC, schools were advised of incorrect information relating to applications for repairs or replacement of air-conditioning systems. The incorrect information might have misled schools into giving up submitting MR applications or ER applications for repairing or replacing the air-conditioning systems installed in the eligible facilities under "Additional Air-conditioning Installation for Schools" (paras. 5.14 and 5.15).
- Need to provide assistance to schools on applications for repairs or replacement of air-conditioning systems. Audit examined 10 MR applications submitted in the 2021-22 MR cycle. In 3 (30%) applications, the TCs considered that the schools' requests for repairing or replacing air-conditioning systems were of ER nature and advised the schools to submit their applications as ER requests if necessary. Submission of requests as MR applications or as ER applications would bring about different results. For ER projects, applications can be made anytime during the year and the works are required to be completed at a maximum of 12 calendar days. For MR projects, applications can only be made at the beginning of every financial year. There was a need for EDB to provide assistance to schools on applications for repairs or replacement of air-conditioning systems (e.g. by providing examples of approved MR projects and approved ER projects of repairs or replacement of air-conditioning systems) (paras. 5.18, 5.20 and 5.21).
- 21. Need to draw experience from air-conditioning system repair or replacement projects. In the period from March 2017 to June 2022, EDB identified 28 cases of air-conditioning system repair or replacement projects with workmanship issues. In various quarterly meetings between EDB and TCs, EDB brought the cases to the attention of TCs and urged them to exercise prudence in conducting their site inspections for early identification of irregularities on site and early rectification of unsatisfactory works (para. 5.22).
- 22. Need to ensure feasibility study reports of improvement projects include all important project information. For items approved under FUS, TCs submit feasibility study reports, which include key project information (e.g. estimated costs of the works items) to EDB. Different TCs included different information in their feasibility study reports. Audit examined 30 feasibility study reports of FUS projects conducted in the period from 2020-21 to 2021-22, and noted that some important project information (e.g. project completion dates agreed with schools, details of

materials to be used and related cost estimates) was not included in 19 (63%) feasibility study reports (paras. 5.30 and 5.31).

Audit recommendations

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

Contract management

- (a) in conducting CSCs, ensure that:
 - (i) the number of works orders checked is not less than the requirement;
 - (ii) TCs submit in a timely manner their replies on the arrangement to rectify the unsatisfactory areas; and
 - (iii) CSCs are conducted before the works are completed (para. 2.17(a));
- (b) promulgate guidelines on the timeliness of completing TAAs after completion of works (para. 2.17(b));
- (c) for works orders with observations identified in TAAs, ensure that TCs submit responses to EDB on the follow-up actions in a timely manner (para 2.17(c));
- (d) select projects for QAAs according to the Guidelines on Spot Checks and endeavour to achieve the target promulgated in January 2022 (para. 2.17(d));
- (e) ensure that dimension books are submitted and interim payments are clawed back in a timely manner, and releases of clawbacks are made after interim payments have actually been clawed back (para. 2.17(e));

- (f) consider using electronic means to facilitate schools in submitting customer satisfaction survey questionnaires (para. 2.26(a));
- (g) ensure that TCs visit the schools who have given unsatisfactory ratings in the surveys at the soonest time, and submit to EDB reports of the visits and the proposed improvement actions to be taken (para. 2.26(b));

Major Repairs projects

- (h) review whether it is justified to set two different thresholds for the applications for repairs submitted by primary and special schools and those by secondary schools, and consider setting a single threshold for applications submitted by all types of schools (para. 3.16(a) and (b));
- (i) ensure that justifications are provided by TCs for making different recommendations for similar applications (para. 3.16(d));
- (j) ensure that fire doors with safety concerns are repaired as soon as possible, and TCs provide detailed information of their assessments on fire door repairs applications (para. 3.16(e));
- (k) improve the documentation regarding project completion dates (para. 3.27(a));
- (l) ensure that prompt actions are taken to follow up possible leakages of ACMs identified in asbestos investigations (para. 3.34(a));
- (m) ensure that flagpoles repairs are carried out in a timely manner and consider stepping up efforts to assist schools in installing additional flagpoles (para. 3.41(a) and (b));

Emergency Repairs projects

(n) consolidate ER requests into one single works project as far as practicable (para. 4.11(a) and (b));

- (o) provide assistance to schools to help them have a clear understanding on the ambit of ER projects (para. 4.11(d));
- (p) help TCs submit all necessary and accurate information in ER reports (para. 4.21(a));
- (q) ensure that follow-up actions for ER requests are completed by MTCs within the stipulated time (para. 4.21(b));

Improvement programmes

- (r) explore the way forward to help matchbox-style schools deal with the issues of insufficient space and facilities (para. 5.10);
- (s) ensure that the information relating to applications for repairs or replacement of air-conditioning systems are communicated to schools accurately (para. 5.24(a));
- (t) provide assistance to schools on applications for repairs or replacement of air-conditioning systems (para. 5.24(b));
- (u) draw experience from the air-conditioning system repair or replacement projects (para. 5.24(c)); and
- (v) ensure that the feasibility study reports of improvement projects include all important project information (para. 5.33(b)).

Response from the Government

24. The Secretary for Education agrees with the audit recommendations.