

# Report No. 44 of the Director of Audit — Chapter 3

## MAINTENANCE AND REFURBISHMENT OF GOVERNMENT BUILDINGS AND FACILITIES

### Summary

1. The Property Services Branch of the Architectural Services Department (ArchSD) is responsible for planning and implementing maintenance works for government buildings and facilities. In 2004-05, the estimated expenditures are \$476 million for repairs and general maintenance, \$1,132 million for refurbishment and planned maintenance, and \$600 million for minor building works.

#### Refurbishment and minor building works

2. *New refurbishment works.* Refurbishment works include replacing and/or renewing deteriorated building elements and facilities. In the Annual Estimates exercise, the ArchSD compiles a refurbishment programme, based on items identified in its surveys, for bidding for funds. The Audit Commission (Audit) found that many proposed new refurbishment items were not implemented as planned. In 2002-03, 230 (51%) items (with forecast expenditure of \$340 million) of the 454 proposed new items were not implemented. In 2003-04, 182 (65%) items (with forecast expenditure of \$192 million) of the 281 proposed new items were not implemented. *Audit has recommended that the Director of Architectural Services should critically review the effectiveness of the existing measures for identifying refurbishment works needed for implementation in the ensuing financial year for the purpose of bidding for funds.*

3. *New minor building works.* Minor building works include alteration, improvement and fitting-out works. In the Annual Estimates exercise, the ArchSD calls for bids from user departments for items to be funded. To ascertain the progress of implementation, Audit examined those items with estimates of more than \$10 million. There were 30 such items in 2002-03 and 42 items in 2003-04. Audit found that many of the items proposed by the user departments were not implemented as planned. In 2002-03, 27 (90%) items (with forecast expenditure of \$113 million) of the 30 proposed new items were not implemented. In 2003-04, 33 (79%) items (with forecast expenditure of \$117 million) of the 42 proposed new items were not implemented. *Audit has recommended that the Director of Architectural Services should critically assess minor building works proposals to ascertain whether they are ready for implementation in the ensuing financial year for the purpose of bidding for funds.*

## **Term contracts for maintenance works**

4. Audit examined the management, measurement, and payment for the works orders issued by the ArchSD under ten maintenance term contracts and seven design-and-construct term contracts, covering different geographical areas. Audit selected works orders from five on-going contracts and twelve previous contracts (the contract periods of which for issuing works orders had ended). The major findings are described in paragraphs 5 to 12 below.

## **Management of works orders**

5. ***Works orders not yet completed after the target completion dates.*** Audit found that, as at early October 2004, there were many works orders not yet completed, although the target completion dates had elapsed (3,825 works orders for the ten maintenance term contracts, and 492 works orders for the seven design-and-construct term contracts). *Audit has recommended that the Director of Architectural Services should critically review the reasons for the delay in completing works orders and take appropriate measures to speed up the progress.*

6. ***Works period overrun.*** For works orders costing \$50,000 or more with certified completion date after 31 March 2003, Audit found that there was a high percentage of the works orders with overrun of 180 days or more. The percentage was 27% for the maintenance term contracts, and 30% for the design-and-construct term contracts. Some of the overruns were due to insufficient coordination between the ArchSD and the user departments in determining the works periods. *Audit has recommended that the Director of Architectural Services should strengthen the ArchSD's control procedures and consult with user departments on the period allowed for completion to avoid delay to completion of works orders.*

7. ***Granting of extension of time.*** In most of the extension of time (EOT) applications, the contractors cited generalities rather than specific reasons for the overruns. In most cases, there was no documentation of the assessments by the project officers of the EOTs to be granted. *Audit has recommended that the Director of Architectural Services should tighten the ArchSD's procedures of granting EOTs to contractors to ensure that assessments of the EOTs granted are properly carried out and the justifications are documented.*

8. ***Works period overrun not fully covered by EOTs or liquidated damages.*** Audit noted that there were 511 works orders (of which 265 had been finalised) with overrun periods not fully accounted for by the EOTs granted and/or by the liquidated damages

imposed. *Audit has recommended that the Director of Architectural Services should critically assess whether the unaccounted for works period overruns of the 511 works orders are delays attributable to the contractors, and impose liquidated damages as appropriate.*

9. ***Assurance on quality of maintenance works.*** A Technical Assurance Audit Team of the ArchSD carries out technical assurance checks on maintenance works. Audit reviewed the technical assurance reports on two maintenance term contracts, on which the ArchSD's Technical Assurance Audit Team had conducted independent checks in early 2004. Audit noted that all of the checks were conducted after the completion of the works. *Audit has recommended that the Director of Architectural Services should carry out technical assurance audits covering the following critical work stages: (a) during the works periods; (b) right after completion; and (c) right after the expiry of the defects liability period.*

#### **Measurement and payment for works orders**

10. ***Cost estimates of works orders.*** Interim payments are made based on the cost estimates of works orders. When the final claimed value of a works order deviates significantly from the estimate, the computer system generates an outsized claim report. Audit examined the daily outsized claim reports for the quarter ended 30 June 2004. Audit noted that the percentages of works orders with estimates deviating significantly from the claimed values were high, particularly for works orders over \$50,000 and for those of the design-and-construct term contracts. Further analysis revealed that, for most of the 20 works orders selected for detailed audit examination, the requisite review and revision of the estimates were not carried out, as and when necessary. *Audit has recommended that the Director of Architectural Services should strengthen the ArchSD's control procedures to ensure that the estimates of works orders are critically reviewed and, where appropriate, revised before the certification of interim payments, and on completion of the works orders.*

11. ***Overdue/late submission of dimension books.*** In order to claim final payments, the contractor has to submit dimension books within 90 days of completion of the works for checking by the ArchSD. Late submission of dimension books would affect the ArchSD in performing proper checking on the works done. For 73,657 works orders completed before 1 April 2004, Audit noted that there had been delays in the submission of the dimension books for 41,518 (56.4%) works orders and, as at early October 2004, the contractors had not yet submitted the dimension books for 1,859 works orders. *Audit has recommended that the Director of Architectural Services should: (a) critically review the reasons for the delay in the submission of dimension books by contractors and take follow-up actions promptly; and (b) in the event that the contractors fail to submit the dimension books, consider valuing the works in accordance with the provision of the contracts.*

12. *Long time taken in checking contractors' claimed values and agreeing on tentative offer.* A batch payment system is used for processing the completed works orders for final payments. The works orders are batched and sample checked by the ArchSD for accuracy of the measurements in the dimension books submitted by the contractor. According to the ArchSD computer manuals, the time required from the production of a batch list to the generation of a tentative offer on final payment (which includes checking the sampled works orders and adjusting the dimension books) ranges from 30 to 96 days. The contractor is required to signify his agreement to the tentative offer, or to notify the ArchSD of his disagreement within the stipulated period of time. Audit examined the 288 batches of works orders finalised in August 2004. For 70 (24%) batches, the ArchSD took more than 300 days to complete the checking and agree on the tentative offers. *Audit has recommended that the Director of Architectural Services should: (a) ensure that the checking and adjustment of dimension books are promptly completed; and (b) strictly enforce the condition of contract to ensure that contractors notify the ArchSD of any disagreements over the tentative offers within the stipulated period of time.*

#### **Response from the Administration**

13. The Administration has accepted the audit recommendations.

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