

Report No. 51 of the Director of Audit — Chapter 9

PROVISION OF PORT SERVICES

Summary

1. In 2007, some 4,800 ocean going vessels (OGVs) and 3,300 river trade vessels (RTVs) made about 228,000 visits to Hong Kong. There were also some 14,000 locally licensed vessels operating in Hong Kong waters. The Marine Department (MD) is responsible for administering port and navigational matters in Hong Kong. In the financial year 2008-09, the estimated expenditure on port services was about \$325 million. The Audit Commission (Audit) has recently conducted a review of the provision of port services.

Operation of the Vessel Traffic Centre

2. To ensure the safety and efficiency of vessel traffic, the MD's Vessel Traffic Centre (VTC) carries out traffic management and provides information to vessels. The VTC employs a computerised system to monitor vessel movements in Hong Kong waters. If a danger of collision is detected, the VTC uses its radio communication system to warn the vessels concerned.

3. *Examination of marine incidents.* Upon the occurrence of a marine incident, the VTC's Quality Assurance and Development Section (QADS) will conduct an examination to determine whether there are areas that need improvement. From 2004 to 2007, the QADS carried out examinations on 107 marine incidents. Audit found that no guidelines were laid down for conducting QADS examinations, and that there was no documentation recording the examination procedures carried out and the underlying rationale for the observations and conclusions therein. Of the 13 cases where the QADS found that there was room for improvement in the VTC's operation, Audit could not ascertain the follow-up actions taken to address the deficiencies identified in 9 cases. Audit also noted that of the 21 observations made by the QADS in the 13 cases, 19 (90%) were related to similar deficiencies (e.g. failure to give timely advice to vessels and failure to follow guidelines/procedures after incidents). *Audit has recommended that the Director of Marine should: (a) draw up guidelines for conducting QADS examinations of marine incidents; and (b) improve the VTC's operation by taking effective actions to address the deficiencies identified in QADS examinations.*

Harbour patrol operation

4. The MD's Harbour Patrol Section (HPS) and the Licensing and Port Formality Section (LPFS) conduct regular patrols and special operations to regulate sea traffic, and ensure port users' compliance with local legislation and international maritime regulations/conventions.

5. ***Compliance with operating instructions.*** According to HPS operating instructions, patrol officers on board patrol launches should report hourly to the HPS Operations Centre of their locations and activities. The supervisory officers are required to review patrol officers' log books twice a week and to conduct surprise checks and accompanying patrols. On the other hand, for the LPFS, the patrol officers are not required to report their locations and activities to the LPFS office. The supervisory officers are only required to review patrol log books once a month and are not required to carry out any accompanying patrols or surprise checks.

6. Audit examined 34 patrol log books and found that there were no entries indicating that HPS supervisory officers had carried out accompanying patrols and surprise checks, and that HPS patrol officers had hourly reported their locations and activities. Only one of the patrol log books showed that it had been reviewed once by the supervisory officer. *Audit has recommended that the Director of Marine should: (a) review the patrol launch operation with a view to improving and standardising the operating and supervisory arrangements of the HPS and the LPFS; and (b) ensure supervisory officers and patrol officers comply with laid-down operating instructions of the HPS and the LPFS.*

7. ***Use of automatic tracking devices.*** Of the 25 MD patrol launches, only five were equipped with an automatic identification system to enable supervisory officers to identify the whereabouts of the launches for monitoring purposes. *Audit has recommended that the Director of Marine should draw up an action plan for introducing automatic tracking system for patrol launches.*

8. ***Handling of prosecution cases.*** If a suspected offence is detected during regular patrols or special operations, patrol officers are required to collect evidence with a view to initiating prosecution actions. From 2004 to 2007, 169 prosecution cases were revoked. Audit's examination of a sample of 50 revoked cases found that there was room for improvement in the handling of 27 (54%) cases. Audit considers that the revocation of some of these cases might have been avoided if better training had been provided to the patrol officers concerned, and the handling of the cases had been more closely supervised. *Audit has recommended that the*

Director of Marine should: (a) take necessary follow-up action on those revoked prosecution cases which involve administrative oversight; and (b) take measures to improve the handling of prosecution cases, such as by enhancing training and supervision of patrol officers.

Maintenance of aids to navigation

9. ***Compliance with inspection schedules.*** The MD's Aids to Navigation and Mooring Unit (ANMU) is responsible for the provision and maintenance of aids to navigation. As at 31 December 2007, there were 533 aids to navigation in Hong Kong waters. In 2007, the frequency of scheduled on-site inspections of aids to navigation ranged from once a month to at least once half-yearly. However, Audit found that the frequency of on-site inspections of 179 (34%) aids to navigation was less than that scheduled. *Audit has recommended that the Director of Marine should ensure that on-site inspections of aids to navigation for maintenance are carried out in accordance with laid-down schedules.*

10. ***Availability of aids to navigation.*** According to the International Association of Marine Aids to Navigation and Lighthouse Authorities, aids to navigation with an availability below 97% should be considered substandard, and no aid should have an availability below 95%. An audit examination of the 2007 maintenance records of the MD's aids to navigation revealed that the availability of seven aids was below 97%. Four of these seven aids had an availability below 95%. *Audit has recommended that the Director of Marine should closely monitor the availability of all the aids to navigation and take actions to ensure that their availability is maintained at 97% or above.*

11. ***Recording of breakdowns of aids to navigation.*** The ANMU uses a fault report to record the information about breakdowns of aids to navigation. An audit examination of ANMU records of the 100 cases of aid to navigation breakdowns in 2006 and 2007 revealed that, in 48 (48%) cases, a fault report was not prepared. As such, the breakdown records were not readily available, and some essential information (e.g. the fault identified and the time of resuming operation) could not be found. *Audit has recommended that the Director of Marine should take measures to improve the completeness and accuracy of the recording and reporting of breakdowns of aids to navigation.*

Provision of mooring facilities

12. ***Utilisation of buoys.*** As at 31 December 2007, 31 mooring buoys and 24 anchorage areas were in operation. Buoy dues are charged on a daily basis and anchorage areas are charged on a "per 100 tons per hour" basis. In general, it would be less costly for

small and medium sized vessels to stay at anchorages instead of mooring at buoys. In 2001, the MD completed two reviews on the demand for and utilisation of buoys and anchorages. In 2003 and 2004, the MD removed 24 buoys from operation as a result of the recommendation of the reviews. However, Audit found that the utilisation of buoys in 2007 was still low. The low utilisation of buoys resulted in a deficit in operation (declining from \$15.2 million in 2003-04 to \$8.2 million in 2006-07). *Audit has recommended that the Director of Marine should closely monitor the buoy utilisation rate and re-examine whether the operation of those buoys with low utilisation should continue.*

13. ***Actions taken to revise buoy dues.*** In May 2001, after consulting shipping companies and related trade associations, the MD sought policy support from the then Economic Services Bureau for revising the charging basis for buoy dues from a daily basis to an hourly basis. In May 2003, the then Economic Development and Labour Bureau advised the MD that in view of the economic climate, the timing for introducing changes to government fees was not appropriate. It also considered that fresh consultation was needed. However, as at December 2007, no fresh consultation was carried out and the charging basis for buoy dues remained unchanged. *Audit has recommended that the Director of Marine should take measures to encourage buoy utilisation, such as reviewing the charging basis for buoy dues in consultation with key stakeholders.*

Inspection of vessels visiting Hong Kong

14. ***Inspection target not always met.*** The MD's Port State Control (PSC) Section is responsible for conducting PSC inspections on OGVs visiting Hong Kong. Since 2000, the MD has stated that its annual target is to carry out PSC inspections on 15% of the OGVs visiting Hong Kong. Audit noted that the PSC Section was not always able to meet this target. *Audit has recommended that the Director of Marine should closely monitor PSC inspections carried out on OGVs visiting Hong Kong, and ensure that the annual inspection target is met.*

15. ***Selection of OGVs for PSC inspection.*** The conducting of PSC inspections in the Asia-Pacific region is regulated by the Memorandum of Understanding on Port State Control in the Asia-Pacific Region, the Secretariat of which maintains the Asia-Pacific Computerised Information System (APCIS) to record the PSC inspections conducted by member authorities. The APCIS analyses the risk of each OGV and assigns a targeting factor value (see Appendix E of this report) to it. According to the MD's guidelines, in selecting ships for inspection, a higher priority should be given to the vessels with higher targeting factor values and also those with no APCIS record. An audit examination of the records of the PSC inspections carried out in July and August 2007 showed that, of the 64 OGVs with targeting factor values more than 100 or with no APCIS record, 37 (58%) were not inspected. The PSC Section advised Audit that

not all OGVs with high targeting factor values could be selected for inspection for reasons such as: (a) departure of vessels in early morning; (b) vessels were not in the vicinity of those selected for inspection; and (c) new ships were often without APCIS record. *Audit has recommended that the Director of Marine should improve the scheduling of PSC inspections to ensure that OGVs with high targeting factor values or those old OGVs with no APCIS record are selected for PSC inspection as far as practicable.*

16. ***Inspections not carried out for OGVs selected.*** An audit test check of the PSC inspection records in August 2007 revealed that in six cases, other OGVs were inspected instead of the originally selected ones. In two cases, there were no records indicating the criteria used by the surveyors in selecting the substitute OGVs, and the supervisory officer's approval for the substitutions. In another case, the justifications for not carrying out an inspection on the selected vessel were not recorded. *Audit has recommended that the Director of Marine should ensure that the justifications for not carrying out planned PSC inspections on OGVs are documented and approved by the appropriate authority.*

Performance measurement and reporting

17. The MD uses the level of accidents as a clear measure of performance to determine the extent to which the aims and objectives of the vessel traffic services have been met. Audit noted that some overseas port authorities had set and published performance targets to monitor and report their performance in regulating vessel movements. Audit found that the MD had not established any performance measures for monitoring and reporting its performance in its harbour patrol operation. The MD also did not have performance target for monitoring and reporting the reliability and continuity of aids to navigation. *Audit has recommended that the Director of Marine should establish additional performance measures for the provision of port services by the MD, including performance measures for: (a) the regulation of vessel movement; (b) the management of harbour patrol operation; and (c) monitoring the reliability and continuity of aids to navigation.*

Response from the Administration

18. The Director of Marine agrees with the audit recommendations.

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