

For information

Legislative Council Panel on Transport

Replacement of Specialised Vehicles for the Tsing Ma Control Area

PURPOSE

This paper informs Members of our proposal to replace 11 specialised vehicles for the Tsing Ma Control Area (TMCA).

BACKGROUND

2. Specialised vehicles are deployed to the TMCA to ensure safe operation and efficient incident management. In 2007, we began a programme to replace specialised vehicles that have reached or are approaching the end of their serviceable life, generally after they have been in use for over ten years. In May 2007, the Finance Committee of this Council approved the replacement of five specialised vehicles for the TMCA, including three special tractors, one double-end bus and one heavy recovery vehicle, at an estimated cost of \$18.29 million. In June 2008, the Finance Committee also approved, amongst others, the replacement of 14 specialised vehicles for the TMCA, including four heavy recovery vehicles, five medium recovery vehicles, one double-end bus, one special tractor, one trailer-mounted bowser, one tunnel washer vehicle and one bridge inspection vehicle, at an estimated cost of \$75.14 million at that time.¹

PROPOSAL

3. We propose to replace another 11 specialised vehicles of the TMCA at an estimated cost of \$39.025 million. The 11 specialised vehicles include one heavy recovery vehicle, three medium recovery vehicles, three special tractors and four trailer-mounted bowzers.

¹ The Finance Committee approved in June 2008 the replacement of a total of 17 specialised vehicles for various tolled roads and tunnels at an estimated cost of \$88.9 million. Apart from the 14 specialised vehicles in the TMCA, one jet washer for the Lion Rock Tunnel and two heavy recovery vehicles for the Aberdeen Tunnel and the Kai Tak Tunnel were included in the said funding application.

4. If the current proposal is approved, together with the replacement of the specialised vehicles approved in the past two years, a total of 30 specialised vehicles in the TMCA would have been included in the replacement programme. The condition of the remaining specialised vehicles will be closely monitored by the Electrical and Mechanical Services Department (EMSD).

JUSTIFICATION

5. At the annual vehicle inspection in 2008 by EMSD, the 11 specialised vehicles in question purchased in 1997 or 1998 were found to have reached the end of their serviceable life. Most of the spare parts of these vehicles are no longer available in the market. These aged vehicles are prone to unexpected breakdowns, which affect the operation of the TMCA in particular on vehicle recovery and fire-fighting. Their replacement is essential for the safe, efficient and effective functioning of the TMCA. Moreover, as the vehicles to be replaced are all of Euro I standard (except the trailer-mounted bowsers which have no engine), their replacement is conducive to improving the environment. The functions of the 11 vehicles are as follows -

(a) Heavy and medium recovery vehicle

A heavy recovery vehicle is used for recovery operations for heavy and medium goods vehicles, double-deck buses and container vehicles. A medium recovery vehicle is used for recovery operations of medium and light goods vehicles.

(b) Special tractor

A special tractor is fitted with a hydraulic turntable enabling it to turn 360 degrees at a fixed spot. It is used for vehicle recovery inside the lower deck of the Lantau Link which is a single-lane carriageway where vehicle u-turning and overtaking are not practical. It is also used for towing the trailer-mounted bowsers for fire fighting operations on the Lantau Link and Ting Kau Bridge where fire mains are not available.

(c) Trailer-mounted bowser

A trailer-mounted bowser is a water tank mounted on a trailer used for fire fighting operations on the Lantau Link and Ting Kau Bridge where fire mains are not available. It is installed with water pump, fire hose, water spray nozzle and quick pump drive unit for efficient fire-fighting.

6. While the management, operation and maintenance work of the TMCA has been contracted out, the Government is responsible for providing the necessary vehicles and equipment for the operator to ensure the efficiency and effectiveness in incident management as well as a smooth traffic flow in the TMCA. The Government, as the owner of the vehicles, would ensure the smooth and flexible changeover from one operator to another upon expiry or termination of a contract.

7. Except for the trailer-mounted bowsers which have no engine, all the other specialised vehicles to be procured would be of Euro V standard.

IMPLEMENTATION PROGRAMME

8. We plan to commence the proposed replacement of the 11 vehicles in the second quarter of 2009. The project will take about 24 months to complete as the vehicles have to be tailor-made according to our specifications. The detailed replacement programme is at the Annex.

FINANCIAL IMPLICATIONS

9. We estimate the cost of the proposed replacement of specialised vehicles to be \$39.025 million, with breakdown as follows -

| | Qty | Unit Cost (\$ million) | Sub-total (\$ million) | Total (\$ million) |
|------------------------------|------------|-----------------------------------|-----------------------------------|-------------------------------|
| (a) Replacement of | | | | 34.000 |
| (i) Heavy recovery vehicle | 1 | 5.000 | 5.000 | |
| (ii) Medium recovery vehicle | 3 | 4.000 | 12.000 | |
| (iii) Special tractor | 3 | 3.000 | 9.000 | |
| (iv) Trailer-mounted bowser | 4 | 2.000 | 8.000 | |

(b) Electrical and Mechanical Services Trading Fund (EMSTF) project management charges 1.625

(c) Contingency (10% of (a)) 3.400

Grand Total **39.025**

10. Regarding paragraph 9(a) above, the estimated cost of \$34 million will cover the supply, assembly, testing and commissioning, as well as operation and maintenance training for the heavy recovery vehicle, medium recovery vehicles, special tractors and trailer-mounted bowsers.

11. Regarding paragraph 9(b) above, the estimated cost of \$1.625 million is for meeting the charges of EMSTF for preparing the specifications, design and project programme; overseeing the tendering process; undertaking site inspection; supervising the installation, testing and commissioning of the system; and monitoring the defect rectification work.

12. The estimated cash flow requirement for the replacement project is as follows –

| Financial Year | \$ million |
|-----------------------|----------------------|
| 2009 - 2010 | 1.625 |
| 2010 - 2011 | 31.000 |
| 2011 - 2012 | 6.400 |
| Total | <u>39.025</u> |

13. As this is a replacement proposal, no additional recurrent cost will be incurred.

14. The cost of the proposal will be taken into account in setting the toll and other charges of the TMCA. Nevertheless, the estimated impact is immaterial.

WAY FORWARD

15. We will seek the approval of the Finance Committee on 22 May 2009 for funding the proposed replacement of the 11 specialised vehicles.

ADVICE SOUGHT

16. Members are invited to note our proposal to replace the 11 specialised vehicles for TMCA.

Transport and Housing Bureau
April 2009

Replacement of 11 Specialised Vehicles for the Tsing Ma Control Area

| | Task | Duration (months) | 2009 | | | | 2010 | | | | 2011 | | | | | |
|---|--|----------------------|------|--|------|---|------|---|------|---|------|---|------|---|--|--|
| | | | 1-6 | | 7-12 | | 1-6 | | 7-12 | | 1-6 | | 7-12 | | | |
| 1 | Tender preparation and vetting | 2 | | | ■ | | | | | | | | | | | |
| 2 | Tender invitation | 2 | | | | ■ | | | | | | | | | | |
| 3 | Tender evaluation | 4 | | | | | ■ | ■ | | | | | | | | |
| 4 | Ordering, construction, testing and delivery of vehicles | 16 | | | | | | | ■ | ■ | ■ | ■ | ■ | ■ | | |