

ITEM FOR FINANCE COMMITTEE

HEAD 186 – TRANSPORT DEPARTMENT

Subhead 603 Plant, vehicles and equipment

New Item “Replacement of Specialised Vehicles for Tsing Ma Control Area”

Members are invited to approve a new commitment of \$18.29 million for replacing five specialised vehicles for the Tsing Ma Control Area.

PROBLEM

We need to replace five specialised vehicles for the Tsing Ma Control Area (TMCA), which are reaching the end of their economic serviceable life after ten years of service.

PROPOSAL

2. The Commissioner for Transport, with the support of the Secretary for the Environment, Transport and Works, proposes to replace five specialised vehicles for the TMCA, comprising three special tractors, one double-end bus and one heavy recovery vehicle, at an estimated total cost of \$18.29 million to cater for the day-to-day operational needs.

JUSTIFICATION

3. The five specialised vehicles were recommended for replacement after the annual inspection in 2006 to ensure continued efficient and effective incident management in the TMCA. The recommendation was confirmed by the annual vehicle inspection conducted in February 2007. Having regard to the long lead time required for the procurement and delivery of such specialised vehicles, we need to commence the procurement exercise in 2007-08 for completion in August 2009. The functions of the five vehicles and detailed justifications for their proposed replacement are as follows –

(a) **Special tractor**

Each special tractor is fitted with a hydraulic turntable to enable it to turn 180 degrees at a fixed spot. These special tractors are used for vehicle recovery inside the lower deck of the Lantau Link, which is a single-lane carriageway where vehicle u-turn and overtaking are not possible, as well as for towing the trailer-mounted bowsers for fire fighting operations on the Lantau Link and Ting Kau Bridge where fire mains are not available. The three special tractors proposed for replacement were purchased in 1997. Having been in service for ten years, they are approaching the end of their serviceable life with functions deteriorating. If they are not replaced in time, the incident clearance and fire fighting operation time may be lengthened which would affect the smooth traffic flow in the TMCA.

(b) **Double-end bus**

Double-end buses are provided at the two ends of the lower deck of Lantau Link in a stand-by mode. When there is an emergency inside the lower deck, double-end buses would be used for evacuating vehicle or railway passengers. Double-end buses are required because the lower deck of the Lantau Link is a single-lane carriageway where vehicle u-turn and overtaking are not possible. The double-end bus proposed for replacement was purchased in 1997. It has been in service for ten years and is approaching the end of its serviceable life with functions deteriorating. If it is not replaced in time, the efficiency of evacuation and passenger safety would be undermined.

(c) **Heavy recovery vehicle**

Heavy recovery vehicles are used for vehicle recovery operations involving heavy and medium goods vehicles, double deck buses, articulated vehicles, etc. The heavy recovery vehicle proposed for replacement was purchased in 1997. It has been in service for ten years and is approaching the end of its serviceable life with functions deteriorating. If it is not replaced in time, the overall efficiency of heavy vehicle recovery would be hampered.

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

FINANCIAL IMPLICATIONS**Non-recurrent Expenditure**

5. We estimate the total cost of the proposed replacement of specialised vehicles to be \$18.29 million, with the breakdown as follows -

| | Quantity | Unit Cost (\$ million) | Total (\$ million) |
|--|-----------------|-----------------------------------|-------------------------------|
| (a) Special tractor | 3 | 2.00 | 6.00 |
| (b) Double-end bus | 1 | 6.00 | 6.00 |
| (c) Heavy recovery vehicle | 1 | 3.90 | 3.90 |
| (d) Electrical and Mechanical Services Trading Fund (EMSTF) project management charges | - | | 0.80 |
| (e) Contingency (10% of items (a) to (c) above) | - | | 1.59 |
| Total | 5 | | 18.29 |

6. On paragraph 5(a) above, the estimate of \$6.00 million is for procuring three special tractors, each fitted with a hydraulic turntable enabling it to turn 180 degrees at a fixed spot.

7. On paragraph 5(b) above, the estimate of \$6.00 million is for procuring one double-end bus with double-end truck chassis which allows dual steering on both ends and passenger entry at either end.

8. On paragraph 5(c) above, the estimate of \$3.90 million is for procuring one heavy recovery vehicle installed with a hydraulic lifting boom and an under lift, dual deck winches on the rear body and a winch at the front bumper.

9. On paragraph 5(d) above, the estimate of \$0.80 million is for payment to the EMSTF for the preparation of the tender specifications and tender documents, evaluation of the tender submissions, overseeing the vehicle procurement and delivery process, attending factory acceptance tests, undertaking inspection and commissioning tests, and providing training to the contractor managing TMCA on the operation and maintenance of the specialised vehicles.

10. On paragraph 5(e) above, the estimate of \$1.59 million represents a 10% contingency on cost items set out in paragraphs 5(a) to (c) above.

11. The estimated cash flow is as follows -

| Year | \$ million |
|--------------|--------------|
| 2007-08 | 0.40 |
| 2008-09 | 7.09 |
| 2009-10 | 10.80 |
| Total | 18.29 |

Recurrent Expenditure

12. We estimate the annual recurrent expenditure for operating and maintaining the five specialised vehicles to be \$0.22 million, which has already been covered by the fee payable to the operator of the TMCA. As it is a replacement proposal, no additional recurrent cost will be incurred.

13. The proposed replacement of the five vehicles will have minimal impact on the tolls and fees for the TMCA.

IMPLEMENTATION PLAN

14. We plan to commence the proposed replacement of the vehicles in the third quarter of 2007. The project will take about 26 months to complete as the vehicles have to be tailor-made according to the operational needs. The first 11 months are for preparatory works including drafting of tender specifications, invitation of tender and tender evaluation. The latter 15 months are for placement of order, vehicle manufacturing, testing and delivery. The procurement exercise is expected to be completed in August 2009. The detailed replacement programme is at the Enclosure.

Encl.

PUBLIC CONSULTATION

15. We have issued an information paper on the proposal to the Legislative Council Panel on Transport. Members have not raised any comment on the proposal.

/BACKGROUND

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16. The TMCA was open to traffic in 1997. After ten years of usage, five of the specialised vehicles for incident management there are due for replacement.

Environment, Transport and Works Bureau
May 2007

Replacement of Specialised Vehicles for Tsing Ma Control Area

| | Activities | Duration (months) | 2007 | | | | 2008 | | | | 2009 | | | | |
|---|--|-------------------|------|--|------|---|------|---|------|---|------|---|------|---|---|
| | | | 1-6 | | 7-12 | | 1-6 | | 7-12 | | 1-6 | | 7-12 | | |
| 1 | Drafting of tender specifications | 5 | | | ■ | ■ | | | | | | | | | |
| 2 | Tender invitation | 2 | | | | | ■ | ■ | | | | | | | |
| 3 | Tender evaluation | 4 | | | | | | ■ | ■ | | | | | | |
| 4 | Ordering, construction, testing and delivery of vehicles | 15 | | | | | | | | ■ | ■ | ■ | ■ | ■ | ■ |
