For discussion **FCR(2009-10)17**
on 22 May 2009

ITEM FOR FINANCE COMMITTEE

HEAD 186 – TRANSPORT DEPARTMENT
Subhead 603 Plant, vehicles and equipment
New Item "Replacement of Specialised Vehicles for the Tsing Ma Control Area"

Members are invited to approve a new commitment of $39.025 million to replace 11 specialised vehicles for the Tsing Ma Control Area.

PROBLEM

We need to replace 11 specialised vehicles in the Tsing Ma Control Area (TMCA) as they are approaching the end of their economic serviceable life after over ten years of service.

PROPOSAL

2. The Commissioner for Transport, with the support of the Secretary for Transport and Housing, proposes to replace the following 11 specialised vehicles at an estimated cost of $39.025 million –

Type	Quantity
Heavy recovery vehicle	1
Medium recovery vehicle	3
Special tractor	3
Trailer-mounted bowser	4

JUSTIFICATION

3. At the annual vehicle inspection in 2008 by the Electrical and

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Mechanical Services Department, the 11 specialised vehicles mentioned above purchased in 1997 or 1998 were assessed to be approaching the end of their serviceable life. Their replacement is called for to ensure safe, efficient and effective functioning of the TMCA. Having regard to the lead time required for the procurement and delivery of such specialised vehicles, we need to commence the procurement exercise in 2009-10 for completion by May 2011. If they were not replaced in time, the overall recovery efficiency in the TMCA would be hampered. The functions of the 11 vehicles are as follows –

(a) Heavy and medium recovery vehicles

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. The proposed replacement will ensure that the overall efficiency for vehicle recovery in the TMCA will not be hampered.

(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. Replacement of the three special tractors as proposed will ensure the efficiency of incident clearance and fire fighting operations on the bridges in the TMCA.

(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 a water pump, a fire hose, a water spray nozzle and a quick pump drive unit for efficient fire-fighting. Replacement of the four trailer-mounted bowsers as proposed will ensure the efficiency of fire fighting operations on the bridges of the TMCA.

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 operators to ensure efficient and effective

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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.

5. As the vehicles proposed to be replaced are all of Euro I vehicles (except the trailer-mounted bowsers which have no engine), their timely replacement is also conducive to improving the environment. The specialised vehicles to be procured would be of Euro V standard.

FINANCIAL IMPLICATIONS

Non-recurrent Expenditure

6. We estimate the cost of the proposed replacement of the 11 specialised vehicles to be $39.025 million, with the 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**

7. On paragraph 6(a)(i) above, the estimated cost of $5 million is for procuring one heavy recovery vehicle, installed with a hydraulic lifting boom and an under lift, dual deck winches on rear body and a winch at the front bumper.

8. On paragraph 6(a)(ii) above, the estimated cost of $12 million is for procuring three medium recovery vehicles, each installed with a hydraulic lifting boom and an under lift and a winch.

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9. On paragraph 6(a)(iii) above, the estimated cost of $9 million is for procuring three special tractors, each fitted with a hydraulic turntable enabling it to turn 360 degrees at a fixed spot.

10. On paragraph 6(a)(iv) above, the estimated cost of $8 million is for procuring four trailer-mounted bowsers, each installed with a water pump and a water spray nozzle, and a quick pump drive unit for fire-fighting.

11. Regarding paragraph 6(b) above, the estimated cost of $1.625 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 TMCA contractors on the operation and maintenance of the specialised vehicles.

12. We intend to phase the expenditure as follows –

Year	**$ million**
2009-10	1.625
2010-11	31.000
2011-12	6.400
Total	39.025

Recurrent Expenditure

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

Impact on fees and charges

14. Under the current policy, the toll charges are set to recover the operating cost as well as the return on the capital employed of the Lantau Link[1], while other charges (e.g. removal fee or escort fee) are set on a full cost recovery

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[1] The Lantau Link, comprising mainly the Tsing Ma Bridge, the Ma Wan Viaduct and the Kap Shui Mun Bridge, is the part of the TMCA where toll charges are required to be paid.

basis for the entire TMCA. Accordingly, the depreciation cost of the proposal will be taken into account in setting the toll and other charges of the TMCA in future. Nevertheless, the estimated impact is immaterial as the estimated depreciation cost of the vehicles for the Lantau Link will only be $2.2 million per annum which represents 0.8% of the total expenditure of the Lantau Link.

IMPLEMENTATION PLAN

15. We plan to commence the proposed replacement of the 11 vehicles in June 2009 for completion by May 2011. 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 Enclosure.

Encl.

PUBLIC CONSULTATION

16. We issued an information paper on the present proposal to the Legislative Council Panel on Transport on 20 April 2009. Members had no comment on the proposal.

BACKGROUND

17. We have been monitoring the conditions of specialised vehicles deployed to the TMCA and replacing progressively those that are approaching the end of their serviceable life. In May 2007, the Finance Committee (FC) approved the replacement of five specialised vehicles, 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 FC 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[2].

Transport and Housing Bureau
May 2009

[2] The FC approved in June 2008 the replacement of a total of 17 specialised vehicles at an estimated cost of $88.9 million. Apart from 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.

Enclosure to FCR (2009-10)17

Replacement of 11 Specialised Vehicles for the Tsing Ma Control Area

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