

## Legislative Council Panel on Transport

### Procurement of Specialised Vehicles for Route 8 Control Area

#### PURPOSE

This paper informs Members of our proposal to procure 21 specialised vehicles for use in the Route 8 Control Area.

#### BACKGROUND

2. Route 8 is a new expressway under construction. It links up Tai Wai in Sha Tin with the Tsing Ma Control Area at Tsing Yi. It comprises the Sha Tin Heights Tunnel, the Eagle's Nest Tunnel, the Nam Wan Tunnel, the cable-stayed Stonecutters Bridge over the Rambler Channel and a number of viaducts and interchanges. The alignment of Route 8 is illustrated in Annex 1. On completion, Route 8 will provide additional road capacity to cope with the increasing traffic demand along Route 3 Tsing Yi and Kwai Chung sections (viz., the Cheung Tsing Highway, the Cheung Tsing Tunnel and the Tsing Kwai Highway), the Lion Rock Tunnel, the Tate's Cairn Tunnel and the Shing Mun Tunnels. Moreover, it will provide a direct road link from the Northeast New Territories to the container terminals, Lantau Island, the Airport, West Kowloon and Hong Kong Island West.

3. For more effective and efficient traffic control and incident management, Route 8 will be managed and operated as a control area. We intend to outsource the management, operation and maintenance of the Route 8 Control Area through open tendering.

#### PROPOSAL

4. To cater for the day-to-day operation and maintenance needs, specialised vehicles like recovery vehicles, tunnel wall cleansing vehicles and water tankers would be needed. We propose to purchase 21 specialised vehicles, comprising seven heavy recovery vehicles, eight medium light recovery vehicles, three tunnel wall cleansing vehicles and three water tankers at an estimated cost of **\$ 53.66 million**.

#### JUSTIFICATION

5. The 21 specialised vehicles are needed to enhance smooth traffic flow, ensure effective and efficient incident management and provide a clean road and tunnel environment to motorists. The functions of each type of specialised vehicles are as follows -

(a) Heavy Recovery Vehicles

These vehicles are for recovering and towing medium goods vehicles, heavy goods vehicles, buses, articulated vehicles or any vehicles of a permitted gross vehicle weight exceeding 5.5 tonnes.

(b) Medium Light Recovery Vehicles

These vehicles are for recovering and towing motorcycles, cars, light goods vehicles, light buses or any vehicles of a permitted gross vehicle weight up to 5.5 tonnes.

(c) Tunnel Wall Cleansing Vehicles

Route 8 comprises several tunnels i.e. the Shatin Heights Tunnel, the Eagle's Nest Tunnel and the Nam Wan Tunnel. To maintain a clean environment and to ensure a good level of illumination inside the tunnels, regular tunnel wall cleansing will be required. Due to their site-specific conditions such as the route alignment and geological factors etc, the tunnels have different design features. Hence, each tunnel will require a specific tunnel wall cleansing vehicle with tailor-made brushes to suit its specific need.

(d) Water Tankers

As no fire mains can be provided at the Stonecutters Bridge, it would be necessary to station a water tanker with a capacity of 15 000 litres at each end of the bridge to supply water for fire-fighting operations on the bridge. In addition, a spare water tanker would be needed when any of the two water tankers is under routine servicing and maintenance. To maintain the pumping equipment in good working conditions at all times, the water tankers will also be deployed in street-washing activities and fire drills.

6. The 21 specialised vehicles will be stationed at seven control points along the expressway and at the administration buildings at both ends so as to ensure the most efficient deployment. The proposed number of each type of specialised vehicles is in fact the absolute minimum, given the length of Route 8, the distribution of control points and the need for short response time in handling traffic incidents. The experiences gained in the management of the Tsing Ma Control Area and other Government tunnels have been taken into account in formulating the proposal.

7. Even though the management, operation and maintenance of the Route 8 Control Area will be undertaken by a contractor, the ownership of the vehicles will remain with the Government. This will ensure smooth and flexible changeover from one contractor to another upon expiry or termination of a contract.

## IMPLEMENTATION PROGRAMME

8. We plan to invite tenders for the specialised vehicles in September 2005. It would usually take about 12 months before delivery of the vehicles could take place. To enable the contractor to train its staff in operating the specialised vehicles prior to the commissioning of the section between Sha Tin and Cheung Sha Wan in late 2007, 13 of the vehicles (five heavy recovery vehicles, six medium light recovery vehicles and two tunnel wall cleansing vehicles) would have to be delivered in mid 2007. The remaining eight vehicles will be delivered in 2008. The procurement programme is at Annex 2.

## FINANCIAL IMPLICATIONS

9. We estimate the cost of the proposed specialised vehicles to be \$53.66 million, with the breakdown as follows -

	<b>Quantity</b>	<b>Unit Cost (\$M)</b>	<b>Total (\$M)</b>
(a) Heavy recovery vehicle	7	<b>3.90</b>	<b>27.30</b>
(b) Medium light recovery vehicle			
(i) with car carrier function	2	<b>0.95</b>	<b>1.90</b>
(ii) without car carrier function	6	<b>0.90</b>	<b>5.40</b>
(c) Water tanker	3	<b>2.85</b>	<b>8.55</b>
(d) Tunnel wall cleansing vehicle	3	<b>2.85</b>	<b>8.55</b>
(e) Electrical and Mechanical Services Trading Fund project management charge	—		<b><u>1.96</u></b>
<b>Total</b>	<b><u>21</u></b>		<b><u>53.66</u></b>

10. We estimate the annual recurrent expenditure for operating and maintaining the proposed specialised vehicles to be about \$2.77 million. It will form part of the fee to the contractor of Route 8 Control Area.

## **WAY FORWARD**

11. We will seek the approval of the Finance Committee on 10 June 2005 for funding the acquisition of the proposed 21 specialised vehicles.

## **ADVICE SOUGHT**

12. Members are invited to note and comment on our proposal to procure 21 specialised vehicles for Route 8.

Environment, Transport and Works Bureau  
May 2005

8號幹線管制區的定線及範圍  
 EXTENT AND ALIGNMENT OF ROUTE 8 CONTROL AREA



**Route 8 Control Area**  
**Programme for Procurement of Specialized Vehicles**

	Activities	Duration (months)	2005				2006				2007				2008			
			1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
1	Drawing up tender requirements and vehicle specifications	4		■														
2	Tendering	6				■												
3	Ordering, construction, testings and delivery of first batch of vehicles <sup>(Note 1)</sup>	14					■	■	■	■								
4	Operation Training	4										■						
5	Opening of the Shatin - Cheung Sha Wan section																▲	
6	Ordering, construction, testings and delivery of second batch of vehicles <sup>(Note 2)</sup>	14								■	■	■	■	■				
7	Operation Training	4														■		
8	Opening of the Cheung Sha Wan - Tsing Yi section																▲	

## Notes :

- (1) For the opening of the Shatin - Cheung Sha Wan section in late 2007, the first batch of 13 vehicles (comprising 5 heavy recovery vehicles, 6 medium light recovery vehicles and 2 tunnel wall cleansing vehicles) would have to be delivered in mid 2007.
- (2) For the opening of the Cheung Sha Wan - Tsing Yi section in mid 2008, the second batch of 8 vehicles (comprising 2 heavy recovery vehicles, 2 medium light recovery vehicles, 3 water tankers and 1 tunnel wall cleansing vehicle) would have to be delivered in early 2008.