

## **ITEM FOR FINANCE COMMITTEE**

### **HEAD 45 – FIRE SERVICES DEPARTMENT Subhead 603 Plant, vehicle and equipment**

Members are invited to approve a new commitment of \$39,690,000 for procuring three 55-metre Turntable Ladders to replace three existing 52-metre Turntable Ladders.

#### **PROBLEM**

Three 52-metre Turntable Ladders (TLs) of the Fire Services Department (FSD) (F279, F280 and F281) have reached or are approaching the end of their serviceable life. We need three replacement TLs with enhanced features to maintain the fire-fighting and rescue capabilities of FSD.

#### **PROPOSAL**

2. The Director of Fire Services, with the support of the Secretary for Security, proposes to replace three existing 52-metre TLs F279, F280 and F281 by three new 55-metre TLs with enhanced fire-fighting and rescue capabilities to meet operational requirements.

#### **JUSTIFICATION**

3. Among the three 52-metre TLs proposed to be replaced, TLs F280 and F281 were put into service in 2000 and are currently deployed at Shatin Fire Station and Kong Wan Fire Station respectively for frontline operation. TL F279 was put into use in 1999 and is currently deployed at the Driving Training School for training purpose.

4. The three TLs proposed for replacement have been in use for more than or close to their normal serviceable life of 12 years. Their performance is deteriorating. The major parts of the three TLs such as engine, gearbox and electrical controlling device are aging and require more frequent repairs and maintenance to keep them in good operating conditions. Their average annual maintenance costs have been increasing, at about \$180,000 each in 2011, which is substantially higher than the average maintenance cost of \$50,000 per TL in the fleet. It will not be cost-effective to continue with the maintenance of these three TLs. Taking into account the need for about three years to complete the necessary tendering, construction, testing and delivery procedures before commencement of service (see paragraph 13 below), we need to commence the preparation work for the replacement work now.

5. To meet the operational requirement of FSD, we propose to procure three replacement 55-metre TLs with better fire-fighting and rescue capabilities as follows –

- (a) the maximum rescue height will increase from 52 to 55 metres, enabling the TLs to reach higher for rescue operation;
- (b) a CCTV system will be installed at the rescue cage to facilitate the ladder operator to place the rescue cage in safer and more accurate positions. There is no such built-in device in the existing model; and
- (c) as compared to the existing model, the replacement TL will be equipped with a portable electricity generator to provide electricity for the operation of ladder in case of engine breakdown.

6. To make a more effective use of resources, FSD will deploy all the three new TLs for frontline operation as they have better fire-fighting and rescue capabilities. Upon commissioning of the new TLs, FSD will deploy another existing TL from frontline operation, which is still in good condition, to replace TL F279 for training purpose. This will enhance the operational efficiency of both frontline operation and training. FSD will also assess the conditions of TLs F280 and F281 with a view to considering whether to deploy them for training purpose.

## **FINANCIAL IMPLICATIONS**

### **Non-recurrent Expenditure**

7. The total non-recurrent cost of procuring three 55-metre TLs with the necessary facilities on board is estimated to be \$39,690,000. The detailed breakdown is as follows –

/(a) .....

	<b>Unit cost \$'000</b>	<b>Total cost \$'000</b>
(a) Basic vehicle	10,934	32,802
(b) Fitting-out, accessories, factory acceptance test and training, etc.	1,093	3,279
(c) Contingency (10% of items (a) and (b) above)	1,203	3,609
<b>Total :</b>	<b>13,230</b>	<b>39,690</b>

8. On paragraph 7(a) above, the estimate of \$32,802,000 is for procuring the basic vehicles as assembled units comprising the chassis, ladder, cabin and other components.

9. On paragraph 7(b) above, the estimate of \$3,279,000 is for the expenses on locker fitting-out works, training, factory acceptance test, initial spare parts, etc. The amount does not include the cost of equipment such as communication system on board, since such equipment in the existing TLs is still in serviceable condition, and can be transferred to the replacement TLs for use upon their commissioning.

10. On paragraph 7(c) above, the estimate of \$3,609,000 represents about 10 % of the contingency on the items 7(a) and (b).

11. The estimated cash flow requirement is as follows –

<b>Year</b>	<b>\$'000</b>
2012 - 13	360
2013 - 14	11,870
2014 - 15	11,070
2015 - 16	16,390
<b>Total :</b>	<b>39,690</b>

/Recurrent .....

### Recurrent Expenditure

12. FSD estimates that the total annual recurrent cost of the three new TLs will be \$210,000. The annual recurrent cost of a new TL will be roughly the same as the current average amount of \$70,000<sup>1</sup> per TL (including maintenance cost and fuel cost) in the fleet. The replacement proposal will not incur additional recurrent cost. FSD will deploy existing staff to operate the new TLs and no additional staff will be required.

### IMPLEMENTATION PLAN

13. Subject to the approval of the Finance Committee, we plan to procure the replacement vehicles according to the following schedule –

<b>Activity</b>	<b>Target completion date</b>
(a) Invitation of tender <sup>2</sup>	July 2012
(b) Evaluation of tender and award of contract	November 2012
(c) Construction, modification and delivery of sample vehicle	May 2014
(d) Testing and acceptance, training, minor modification and trial use of sample vehicle	August 2014
(e) Construction, modification and delivery of remaining vehicles	February 2015
(f) Testing and acceptance, training, minor modification and trial use of remaining vehicles	May 2015
(g) Commissioning of the vehicles	June 2015

### PUBLIC CONSULTATION

14. We consulted the Legislative Council Panel on Security on 8 May 2012. Members supported the proposal.

**/BACKGROUND .....**

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<sup>1</sup> The annual recurrent cost includes \$50,000 maintenance cost and \$20,000 fuel cost.

<sup>2</sup> As the specifications of the proposed TLs are broadly the same as that of the current 55-metre TL in FSD, the preparation of relevant tender specifications has already been completed.

**BACKGROUND**

15. TLs are frontline fire appliances, which form an integral part of the basic deployment for all No. 1 alarm fires or above. At present, FSD has 23 TLs including 15 37-metre, six 52-metre and two 55-metre ones. Their main functions are to carry out fire-fighting and rescue operations at high level and used as surveillance towers.

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Security Bureau  
May 2012