

## **ITEM FOR FINANCE COMMITTEE**

### **HEAD 31 - CUSTOMS AND EXCISE DEPARTMENT Subhead 603 Plant, vehicles and equipment**

Members are invited to approve a new commitment of \$67,930,000 for procuring two mobile X-ray vehicle scanners for the Customs and Excise Department.

#### **PROBLEM**

Customs inspections at boundary control points (BCPs), currently conducted manually, lack modernized equipment to cope with the increasing cross boundary vehicular traffic.

#### **PROPOSAL**

2. The Commissioner of Customs and Excise (C of C&E), with the support of the Secretary for Security, the Secretary for Trade and Industry and the Secretary for the Treasury, proposes to procure two mobile X-ray vehicle scanners (MXRVs) at a non-recurrent cost of \$67,930,000 to enhance the detection capability of Customs inspections.

#### **JUSTIFICATION**

3. There has been a steady increase in cross boundary vehicular and passenger traffic between the Mainland and the Hong Kong Special Administrative Region over the years. The daily average number of vehicles processed at the three BCPs at Lok Ma Chau (LMC), Man Kam To (MKT) and Sha Tau Kok (STK) has increased by about 28% in the last five years (from 20 288 in 1993 to 26 053 in 1997). The majority of these vehicles are 16-ton medium sized goods vehicles and 20/40/45-foot container trucks.

4. The increase in cross boundary traffic has made it more onerous for the Customs and Excise Department (C&ED) to detect the increased smuggling activities. Analysis of detected cases has also revealed that the method of smuggling has greatly diversified, including concealment inside chassis, spare tyres, fuel tanks, truck doors, false compartments or mixed among general cargoes. The seizures include stolen vehicles, mastering and replication equipment, pirated discs, narcotics, dutiable cigarettes, firearms, ammunition and other contrabands.

5. At present, Customs officers at the BCPs conduct inspections of the vehicles manually, based on their experience and intelligence received. To facilitate the search, they have to unload and sometimes unpack the cargoes for inspection. Where there is a need to conduct a detailed check or thorough search on the inner portion of the cargo compartment of a fully loaded goods vehicle, Customs officers have to go through the laborious and time-consuming process of unloading and loading of all cargoes on board. This is not only inefficient, but also causing considerable delay and inconvenience to the legitimate traders.

6. To overcome the above problems and to enhance the detection capability of Customs inspections at the land BCPs, C of C&E considers it necessary to use X-ray equipment to assist in the search of vehicles. In respect of LMC, he plans to include two sets of fixed vehicle X-ray inspection systems in the capital works project for the expansion of kiosks and facilities at the LMC Control Point. We will submit the LMC Control Point expansion project to the Public Works Subcommittee for consideration and approval in 1999, with a view to completing the project by 2002.

7. As regards MKT and STK, due to the lack of land space at these two Control Points to accommodate the fixed vehicle X-ray inspection system, C of C&E proposes to procure one MXRVS for each of these BCPs. The MXRVSS are capable of imaging loaded vehicles without unloading and unpacking the cargoes. The X-ray images will give useful indications to Customs officers as to whether the vehicle under inspection is carrying suspicious articles. This will enable the release of unsuspected vehicles quickly without unloading and unpacking the cargoes, thus facilitating legitimate trading activities. Existing manpower can be deployed to concentrate their efforts on searching suspected vehicles and those areas where suspected articles are located. In addition, the MXRVS is able to store records of the X-ray images. The Customs officers can retrieve and compare the images of the same vehicle and of the same type of cargoes on its previous cross boundary trips. This will greatly facilitate Customs officers in identifying concealed compartments and suspicious cargoes.

8. Subject to Members’ approval of this proposal, the MXRVSSs could be made available to the C&ED in October 2000. To prevent smugglers from evading X-ray examination by using the LMC Control Point following implementation of “natural streaming” (please see paragraph 23 below), the Department would initially deploy these mobile scanners for use at the LMC, MKT and STK BCPs on a random basis until the two fixed X-ray inspection systems earmarked for the LMC Control Point come into operation in 2002. Thereafter, they will service the MKT and STK BCPs.

**FINANCIAL IMPLICATIONS**

**Non-recurrent expenditure**

9. C of C&E estimates that the proposal will entail a total non-recurrent expenditure of \$67,930,000, made up as follows -

	<b>\$’000</b>
(a) Two MXRVSSs	50,400
(b) Spares, maintenance tools and communication equipment	2,566
(c) Supporting services	1,400
(d) Project management fee	6,888
(e) Civil and builder's works	500
(f) Contingency	6,176
<b>Total</b>	<b>67,930</b>

10. The estimated cashflow is as follows -

	<b>\$’000</b>
1999-2000	4,919
2000-2001	59,635
2001-2002	3,376
<b>Total</b>	<b>67,930</b>

11. As regards paragraph 9(a), the cost of \$50,400,000 is for the procurement of two mobile X-ray scanners, including two vehicles, two X-ray machines and the supporting power generators, air conditioning and lighting facilities. The cost also includes sea freight and insurance to cover any risk of damage during delivery.

12. As regards paragraph 9(b), the cost consists of \$2,500,000 for the procurement of initial spares and maintenance tools for the two MXRVSs and \$66,000 for the procurement of portable radio transceivers for communication amongst operators of the scanners and other staff at the BCPs.

13. As regards paragraph 9(c), the cost of \$1,400,000 is for the supporting services including operational and maintenance training as well as design and documentation.

14. As regards paragraph 9(d), the cost of \$6,888,000 is for the project management fee payable to the Electrical and Mechanical Services Trading Fund (EMSTF) for the procurement of the two scanners. EMSTF will be responsible for preparing tender specification, issuing tender, evaluating the proposals submitted from potential suppliers and testing of the equipment. We estimate the amount of project management fee required on the basis of the prevailing rates charged by the EMSTF. We set out at Enclosure 1 details of the calculation.

Encl. 1

15. As regards paragraph 9(e), the cost of \$500,000 is for the civil and builder's works at MKT and STK Control Points to provide back-up electricity power supply to the scanners.

16. As regards paragraph 9(f), the cost of \$6,176,000 represents a 10% contingency on the cost items set out in paragraph 9(a) to (e).

### **Recurrent expenditure**

17. C of C&E estimates that annual recurrent expenditure is as follows -

/(a) .....

	<b>2001-02 \$'000</b>	<b>2002-03 and onwards \$'000</b>
(a) Fuel	2,623	2,623
(b) Repair and maintenance	-	5,000
(c) Electricity and specialised equipment services	12	12
<b>Total</b>	<b>2,635</b>	<b>7,635</b>

18. As regards paragraph 17(a), the annual expenditure of \$2,623,000 is for the fuel consumption of the two MXRVs.

19. As regards paragraph 17(b), the annual expenditure of \$5,000,000 is for the expenses payable to the EMSTF for providing repair and maintenance service after the warranty period.

20. As regards paragraph 17(c), the annual expenditure of \$12,000 is for the electricity consumption of the two scanners and for the expenses payable to the Office of the Telecommunications Authority for service charge on the assignment and protection of radio frequencies of the portable radio transceivers.

### **Implementation Plan**

21. C of C&E plans to implement the proposal according to the following schedule -

<b>Activity</b>	<b>Target completion date</b>
(a) Design and specification preparation	April 1999
(b) Tendering exercise and evaluation	September 1999
(c) Manufacturing and testing of the two scanners	September 2000
(d) Delivery of the two scanners	October 2000

**/BACKGROUND .....**

**BACKGROUND INFORMATION****The MXRVS**

Encl. 2 22. The MXRVS is the most advanced mobile X-ray system in the world. It is a completely self-contained and mobile system comprising an X-ray generator, a boom, a folded-up detector arm and a control room mounted on a truck. It can scan vehicles with the dimension up to 70 feet in length, 14 feet in height and 8.5 feet in width (please see Enclosure 2). The MXRVS is capable of storing and retrieving images of the objects scanned for future reference. The US Customs has been using this system since its introduction into the commercial market in October 1997.

**"Natural Streaming"**

23. We introduced Phase I of the "Natural streaming" in October 1998 whereby goods vehicles designated to cross the boundary at MKT and STK Control Points are allowed to use the LMC Control Point after the closing of MKT and STK Control Points during the night. In future, upon full implementation of "Natural streaming", goods vehicles holding a Closed Road Permit will be allowed to cross the boundary at any of the three Control Points at any time of the day. We will decide on the timing for full implementation of "Natural streaming" after the review of Phase I of the scheme.

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Security Bureau  
November 1998

**Calculation of the Electrical and Mechanical Services Trading Fund  
(EMSTF) Project Management Fee**

**A. Project cost**

<b>Item</b>	<b>Amount (\$)</b>
1. Two mobile X-ray vehicle scanners	50,400,000
2. Initial spares and maintenance tools	2,500,000
3. Supporting services	1,400,000
<b>Total</b>	<b>54,300,000</b>

**B. EMSTF Project Management Fee**

<b>Project value</b>	<b>Charging rate</b>	<b>Amount (\$)</b>
On the first \$400,000	25.0%	100,000
On the next \$1,600,000	20.0%	320,000
On the next \$13,000,000	16.5%	2,145,000
Remainder of the project value \$39,300,000	11.0%	4,323,000
<b>Total</b>		<b>6,888,000</b>

