

## 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 \$61,900,000 for procuring two sets of mobile x-ray vehicle scanning system for the Customs and Excise Department.

#### PROBLEM

The existing manual form of inspections by Customs at container cargo terminals cannot cope with the increased container throughput.

#### PROPOSAL

2. The Commissioner of Customs and Excise, with the support of the Secretary for Security, the Secretary for Commerce and Industry and the Secretary for the Treasury, proposes to procure two sets of mobile x-ray vehicle scanning system (MXRVS), at a cost of \$61,900,000, for the Ship Search and Cargo Command (SSCC) to enhance the detection capability of Customs inspections at the container cargo terminals.

#### JUSTIFICATION

##### *Problems encountered*

3. The increase in container throughput over the years has made it more onerous for Customs and Excise Department (C&ED) to detect smuggling activities. Container throughput increased by 11.7% from 16.21 million TEU (Twenty-foot container Equivalent Unit) in 1999 to 18.10 million TEU in 2000,

/though .....

though the increase levelled off in 2001 with an annual throughput of 17.82 million TEU recorded. We anticipate that the container throughput will rise again when the global economy picks up and with the Mainland's accession to the World Trade Organisation.

4. Smuggling methods have greatly diversified, and include mixing contraband among general cargoes, and concealing contraband in false or concealed compartments or in the innermost part of a container. Articles smuggled include vehicles, vehicle parts, optical disc mastering and replication equipment, pirated discs, narcotics, dutiable cigarettes, video equipment, fireworks, ammunition, articles bearing false trademark or false origin declaration, and illegal immigrants.

5. At present, SSCC officers conduct inspections of containers manually, and have to unload and sometimes unpack the cargoes for inspection. Where it is necessary to search the inner part of a container, Customs officers have to go through the time-consuming process of unloading and loading all cargoes in the container. This approach is inefficient, causing delay and inconvenience to traders and undermining C&ED's ability to provide a speedy cargo clearance service.

#### ***The proposed mobile x-ray vehicle scanning system***

6. To overcome the above problems and to enhance SSCC's detection capability, we propose to procure two MXRVSs for the Command. An MXRVS can scan a fully loaded or oversized container of up to 13.7 metres in length without the need to unload and unpack the cargoes. Through the x-ray image, officers can detect whether there are any irregularities, and decide whether to release or search the container. SSCC manpower can hence focus on more detailed examination of consignments assessed to be of high risk or on those areas where suspected articles are located.

7. The use of MXRVSs will therefore lead to faster cargo clearance for traders. Also, since manpower will focus on consignments assessed to be of higher risk in the preliminary screening, the detection rate of smuggling is expected to increase.

Encl. 1 8. The system has proved to be effective in detecting smuggling through the use of containers. From August 2001 to May 2002, the existing two MXRVSs helped in the seizure of \$82 million worth of contraband and the arrest of 16 persons. Enclosure 1 is a list of significant cases detected with the assistance of the systems.

9. The proposed systems are popular in our neighbouring cities. Mainland customs authorities are using similar systems in Guangzhou, Santou and Nanhai and are procuring more for other cities. Malaysia has also introduced similar systems since February 2002. In May 2002, delegations from Singapore and Thailand visited us to study the operation of our existing system; both delegations are proposing to purchase similar systems.

10. Since we conduct cargo clearance at various locations in the Territory as well as the container terminals at Kwai Chung and Tsing Yi, we propose to procure two additional sets of MXRVS. One will be deployed at Kwai Chung and Tsing Yi and the other will be flexibly deployed to other locations for cargo clearance duty at the request of consignees.

## FINANCIAL IMPLICATIONS

### Non-recurrent expenditure

11. We estimate that the proposal will entail a total non-recurrent expenditure of \$61,900,000, made up as follows -

	<b>\$'000</b>
(a) Two sets of MXRVS	45,500
(b) Spares, maintenance tools and communication equipment	5,000
(c) Supporting services	1,400
(d) Civil and builder's works	500
(e) Project management fee	4,300
(f) Contingency	5,200
<b>Total</b>	<b>61,900</b>

12. As regards paragraph 11(a), the expenditure of \$45,500,000 is for the procurement of two sets of MXRVS consisting of vehicle chassis, x-ray machine, computer system, mechanical system, air-conditioning system and power generator. The air-conditioning system is necessary for the cooling of the MXRVS during operation. The cost also includes sea freight and insurance to cover risk of damage during delivery.

13. As regards paragraph 11(b), the expenditure of \$5,000,000 is for the procurement of initial spares, maintenance tools and testing equipment for meeting subsequent maintenance need, for example, x-ray generation tubes, x-ray detector modules, and hydraulic systems spare parts which are essential to the functionality of the systems when the component parts become unserviceable. These spare parts are proprietary products and usually require long lead time to deliver.

14. As regards paragraph 11(c), the expenditure of \$1,400,000 is for supporting services including operational and maintenance training, manuals, as well as expenses for overseas inspection and testing.

15. As regards paragraph 11(d), the expenditure of \$500,000 is for civil and builder's work including the provision of back-up electricity power supply to the scanners.

16. As regards paragraph 11(e), the expenditure of \$4,300,000 is for project management fee payable to the Electrical and Mechanical Services Trading Fund (EMSTF) for detailed system design, preparation of tender specification and documentation, evaluation of tenders, contract administration, testing, commissioning and monitoring of warranty services of the equipment. The fee is about 8.3% of the estimated total contract sum for the system as given in paragraphs 11(a) to (c). This charging rate is about half of the normal 16%, and reflects the experience gained from the previous similar purchase as well as efficiency savings of the EMSTF.

17. As regards paragraph 11(f), the expenditure of \$5,200,000 represents a 10% contingency on the cost items set out in paragraphs 11(a) to (d).

18. The estimated cash flow is as follows -

	<b>\$'000</b>
2002-2003	2,800
2003-2004	51,060
2004-2005	8,040
<b>Total</b>	<b>61,900</b>

### **Recurrent expenditure**

19. We estimate that additional recurrent expenditure is \$5,620,000 per annum, as set out below -

	<b>2003-04 (March 2004) \$'000</b>	<b>2004-05 and onwards \$'000</b>
(a) Fuel	88	1,052
(b) Repair and maintenance	-	4,555
(c) Electricity and specialised equipment services	1	13
<b>Total</b>	<b>89</b>	<b>5,620</b>

20. As regards paragraph 19(a), the annual expenditure of \$1,052,000 is for the fuel consumption of the two MXRVs.

21. As regards paragraph 19(b), the annual expenditure of \$4,555,000 is for procuring repair and maintenance service after the warranty period.

22. As regards paragraph 19(c), the annual expenditure of \$13,000 is for the electricity consumption of the two MXRVs 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.

/23. ....

23. C&ED has found savings to absorb 50% of the annual recurrent expenditure, amounting to \$2,810,000, within its existing resources. We will include sufficient provision to cover the remaining requirement in the future Estimates of Expenditure. In addition, C&ED will require additional manpower of four Senior Customs Officers and eight Customs Officers with a notional annual mid-point salary cost of \$2,610,960 and a full annual average staff cost of \$4,507,152 to operate the systems. C&ED will absorb this additional staff requirement from within its existing resources.

### **Implementation Plan**

24. We plan to implement the proposal according to the following schedule -

<b>Activity</b>	<b>Target completion date</b>
Design and specification preparation	November 2002
Tendering exercise and evaluation	April 2003
Manufacturing, factory acceptance test and system delivery	January 2004
Training, testing and commissioning	March 2004

### **CONSULTATION WITH LEGISLATIVE COUNCIL PANEL**

25. We consulted the Legislative Council Panel on Security in January 2002 by circulation of an information paper and Members raised no objection to the funding proposal.

### **BACKGROUND INFORMATION**

26. The MXRVS is a fully mobile and self-contained system which can be operated at any location with sufficient working space. It is an ideal solution when inspection space is limited. It comprises an x-ray generator, a boom, a folded-up detector arm and a control room, all mounted on a truck. The photograph at Enclosure 2 shows the appearance of an existing system. It can scan container trucks with a dimension up to 4.5 metres in height and 2.6 metres in width and is capable of storing and retrieving images of the objects scanned for future reference.

Encl. 2

27. ....

27. With a commitment of \$67,930,000 approved by the Finance Committee in December 1998, C&ED procured two sets of MXRVS which have been brought into operation at the boundary control points since August 2001. One MXRVS has been on loan to the SSCC since August 2001 on a temporary basis for a trial run to help monitor the recent trend of 'human cargo' smuggling. The systems have proved to be highly effective in detecting smuggling.

28. The deployment of the system from the boundary control points to SSCC is a temporary arrangement. As soon as the procurement of the systems for the SSCC is supported, the system will be returned to the boundary control points. By early 2003 when the installation work of the fixed x-ray systems at Lok Ma Chau control point is completed, each land boundary control point will have its own x-ray vehicle scanning system.

-----

Security Bureau  
June 2002

**List of significant cases detected with the assistance of existing MXRVSs**  
**(August 2001 to May 2002)**

<b>Date</b>	<b>Seizure</b>	<b>Seizure value (HK\$ million)</b>	<b>Duty potential (HK\$ million)</b>	<b>Person arrested</b>
21-08-2001*	cigarettes	5.77	3.31	Nil
08-09-2001	shoes and garments	3.3	-	1
11-10-2001*	cigarettes	5.74	3.27	Nil
11-10-2001	hard disks	4.31	-	1
11-10-2001*	left-hand-driven vehicles	0.4	-	7
13-10-2001*	cigarettes	2.64	1.37	Nil
08-11-2001	hard disks	1.33	-	1
19-11-2001	heroin	0.96	-	1
21-11-2001	hard disks	1.79	-	1
30-11-2001*	cigarettes	15	8.85	Nil
07-12-2001	hard disks	1.38	-	1
11-12-2001*	heroin	16.8	-	Nil
12-12-2001	hard disks	4.92	-	1
21-12-2001*	cigarettes	6.15	3.27	Nil
21-01-2002	mobile phones, garment etc.	6.16	-	1
22-01-2002*	cigarettes	4.80	2.57	Nil
15-05-2002	computer parts, mobile phones accessory	0.59	-	1
<b>Total</b>		<b>82.04</b>	<b>22.64</b>	<b>16</b>

**Remarks**

\* Cases detected by MXRVS on loan to SSCC.



**Enclosure 2 to FCR(2002-03)27**



An existing MXRVS

