

For discussion
on 3 February 2009

Legislative Council Panel on Security

Procurement of a Mobile X-ray Vehicle Scanning System by Customs and Excise Department

Purpose

This paper seeks Members' support for the procurement of a Mobile X-ray Vehicle Scanning System (MXRVSS) by Customs and Excise Department (C&ED) to conduct cargo examination at the River Trade Terminal in Tuen Mun.

Background

2. The River Trade Terminal is a purpose-built container terminal for handling cargoes conveyed by river trade vessels plying between Hong Kong and neighbouring ports in the Mainland. Customs officers stationed at the River Trade Terminal examine, with the aid of a small X-ray checker, cargoes passing through the Terminal and the Tuen Mun Public Cargo Working Area.

The Need for Advanced Cargo Inspection Equipment

3. At present, for containers requiring more detailed inspection, customs officers at the River Trade Terminal have to unload the cargo from the containers for examination by an X-ray checker or open the cargo packages for physical examination. Where it is necessary to search the inner part of a container, a time-consuming process of unloading and re-loading all cargoes in the container is involved. On average, it takes about two to three hours to complete the examination of a 40-foot fully loaded container in this manner. This mode of operation is labour-intensive, time-consuming, less effective, and causes inconvenience to traders.

4. As a result of the rapid economic development in the Pearl River Delta, the volume of cargoes carried by river trade vessels that go through the River Trade Terminal has increased substantially. From 2000 to 2008, the container throughput at the River Trade Terminal, in terms of 20-foot equivalent units, grew from 0.98 million to 2.05 million. To cope with the rapidly increasing traffic of containerised cargoes at the River Trade Terminal, there is a pressing need to enhance C&ED's ability to provide a more speedy cargo clearance service at the Terminal.

The Proposed MXRVSS

5. An MXRVSS is a fully mobile and self-contained system for scanning containers up to 45-foot long by X-ray. It comprises an X-ray generator, a boom, a folded-up detector arm and a control room, all mounted on a truck for easy mobilisation. An MXRVSS produces radiographic images of containerised cargoes to facilitate identification of suspicious container structures and cargoes. Such images can be stored electronically for future reference (e.g. in subsequent enforcement action). The system can also readily detect hazardous radioactive substances. With the aid of an MXRVSS, a 40-foot fully loaded container can be inspected thoroughly in less than 30 minutes.

6. Since 2001, C&ED has procured a total of six sets of MXRVSS for scanning container trucks at Man Kam To Control Point, Sha Tau Kok Control Point and Shenzhen Bay Control Point as well as for scanning maritime containers at Kwai Tsing Container Terminals.

Benefits of Using MXRVSS

7. In 2008, with the aid of X-ray vehicle inspection systems¹, C&ED detected 123 smuggling cases with total seizure valued at \$297 million. The technical performance and inspection capability of MXRVSS are well proven.

¹ In addition to MXRVSS, C&ED has also installed fixed vehicle X-ray inspection systems at Lok Ma Chau Control Point and Shenzhen Bay Control Point.

8. The procurement of an MXRVSS for use at the River Trade Terminal will significantly enhance the efficiency and effectiveness of customs cargo inspection conducted at the Terminal. The inspection time for each container will be substantially reduced, and the capacity of customs cargo inspection at the River Trade Terminal will increase from six to 24 containers daily. Moreover, by analysing the radiographic images and radiation readings captured by an MXRVSS, customs officers can readily identify suspected irregularities. More accurate risk assessments will enhance customs officers' judgement in deciding whether physical examination of cargo contents is needed, thereby enhancing the department's capability of detecting contraband goods.

9. The installation of an MXRVSS will shorten shippers' queuing time for cargo examination at the River Trade Terminal. This will benefit the trade, especially the logistics industry, thereby contributing to the overall competitiveness of our ports.

Financial Implications

10. The estimated non-recurrent cost for procuring the proposed MXRVSS is \$36.952 million. A breakdown and the estimated cash flow requirements are at Annex A. The estimated additional recurrent expenditure for the proposed MXRVSS, mainly for fuel and maintenance, is \$3.1 million in a full year. C&ED will absorb the additional recurrent expenditure from within its existing resources.

Implementation Plan

11. Subject to Members' views on the proposal, we plan to seek funding approval from the Finance Committee in April 2009 with a view to commissioning the new facility at the River Trade Terminal by September 2011. The tentative implementation plan is at Annex B.

Security Bureau
Customs and Excise Department
January 2009

Procurement of an MXRVSS by C&ED

Estimated Non-recurrent Cost and Cash Flow Requirements

A. Estimated Non-recurrent Cost

Item	HK\$ million
(a) One set of MXRVSS	24.300
(b) Initial spare parts	3.159
(c) Supporting services and builder's works	1.500
(d) Contingency (10% of items (a) to (c) above)	2.896
(e) Payment to the Electrical and Mechanical Services Trading Fund for project management (16% of items (a) to (d) above)	5.097
Total	<u>36.952</u>

B. Estimated Cash Flow Requirements

Financial Year	HK\$ million
2009 - 10	0.510
2010 - 11	7.199
2011 - 12	29.243
Total	<u>36.952</u>

Procurement of an MXRVSS by C&ED

Tentative Implementation Plan

Activity	Target completion date
(a) Preparation of tender specifications	July 2009
(b) Invitation for tender	March 2010
(c) Tender evaluation and award of contract	September 2010
(d) System assembly and delivery	September 2011