

## ITEM FOR FINANCE COMMITTEE

### CAPITAL WORKS RESERVE FUND HEAD 708 – CAPITAL SUBVENTIONS AND MAJOR SYSTEMS AND EQUIPMENT

#### Marine Department

#### New Subhead “Replacement of Sailing Information Display Systems at Cross-boundary Ferry Terminals”

Members are invited to approve the creation of a new commitment of \$24.3 million for replacing the Sailing Information Display Systems at the Macau Ferry Terminal and China Ferry Terminal.

#### PROBLEM

The Sailing Information Display Systems (SIDS) at the two cross-boundary ferry terminals are operating well beyond their serviceable life of 10 years. The aging of the systems has led to an increase in their fault rates, hence undermining the terminals' services to passengers and the general public.

#### PROPOSAL

2. The Director of Marine, with the support of the Secretary for the Environment, Transport and Works, proposes to replace the SIDS at the Macau Ferry Terminal (MFT) in Sheung Wan and China Ferry Terminal (CFT) in Tsim Sha Tsui at an estimated cost of \$24.3 million.

#### JUSTIFICATION

3. The two cross-boundary ferry terminals play an important role in facilitating cross-boundary passenger movement. Over the past few years, their passenger throughput has continued to rise. In 2004, their total throughput was over 19 million, representing a substantial increase over the throughput of 16 million in 1999.

4. The SIDS at the two cross-boundary ferry terminals provide up-to-date information on ferry services, including the arrival and departure schedules and the berths for embarkation and disembarkation. The existing systems have been in use since the opening of the MFT and CFT in 1985 and 1988 respectively, and most of the core components (e.g. the single board controllers and flap units of the flap board display system in the MFT and the display units of the old-generation Light Emitting Diode (LED) display board system in the CFT) are now operating beyond their normal serviceable life. The systems are beyond economic repair and it is not cost-effective to maintain them.

5. We propose to replace the systems for the following reasons -

- (a) ***Improve the reliability of dissemination of ferry service information to passengers.*** Availability of accurate, prompt and uninterrupted sailing information at the two ferry terminals is essential to passengers. As the systems grow old, there has been an increase in their downtime and in the number of faults. In 2004, the number of such incidents was 1 048, which was 36% higher than that in 2003. We expect that the fault rate will continue to increase. In addition, maintenance of the existing systems has become increasingly difficult as the core components are of old design and have become obsolete. The maintenance contractor has encountered increasing difficulties in procuring replacement parts. Replacing the systems would enhance the reliability of the information disseminated and improve services to passengers.
- (b) ***Enrich the content of the information disseminated.*** The existing systems display only ferry schedules and berths for embarkation and disembarkation. We consider it desirable to include other travel-related information such as weather conditions, typhoon news or other important messages. Similar information is already displayed at the Hong Kong International Airport and many bus terminals and railway stations.
- (c) ***Upgrade the systems' capability to store and analyse data.*** The existing systems do not support data storage and data analysis. Analyses such as frequency of sailings to various ports are carried out on an ad hoc basis. We consider it desirable to include data storage and analysis functions in the systems to facilitate monitoring of the ferry services and projection of future demand, etc. The data storage and analysis functions would be designed in such a way that the proposed replacement systems, with appropriate addition or modification of hardware/software, would be able to process additional amount and types of data in the future.

6. We propose to replace the display units, data input, processing and transfer components, and signal control equipment of the existing systems. At the terminals' entrances, a new generation LED main display board, which could display text and graphics of different formats, will be put up. The existing black and white sailing information monitors and the old-generation LED monitors at the passenger waiting areas at the MFT and CFT respectively will be replaced by Plasma and Liquid Crystal Display (LCD) panels to improve the quality of the images. Similar display systems are already in use at the Hong Kong International Airport and at various land control points.

7. The data input, processing and transfer components, as well as the signal control equipment will need to be replaced as the existing equipment will not be compatible with the new display systems. The serviceable life of the new SIDS is about 10 years.

8. The equipment of the existing SIDS, once removed, will be of no resale value and very few components can be recycled. The contractor of the project would be responsible for the disposal of the equipment. Disposal of some of the components, such as some computer boards and monitors, may be of environmental concern. The contractor will be required to follow the relevant requirements and procedures in disposing them. Other components will be disposed in the normal manner.

## FINANCIAL IMPLICATIONS

### Non-recurrent Cost

9. The estimated non-recurrent cost of the project is \$24.3 million (\$12.4 million for the MFT and \$11.9 million for the CFT). A breakdown of the cost is set out below -

	<b>MFT</b> (\$ million)	<b>CFT</b> (\$ million)	<b>Total</b> (\$ million)
(a) Equipment/software provision and installation	8.0	7.6	15.6
(b) System testing and commissioning	0.4	0.4	0.8
(c) Building services works	1.5	1.5	3.0

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(d)	Electrical and Mechanical Services Trading Fund (EMSTF) project management charges	1.5	1.4	2.9
	Sub-total	11.4	10.9	22.3
(e)	Contingency	1.0	1.0	2.0
	<b>Total</b>	12.4	11.9	24.3

10. On paragraph 9(a), the estimate of \$15.6 million is for the procurement and installation of control equipment and application software, LED displays, Plasma/LCD displays, video/line amplifier, functional spare units, consoles and cabinets, etc.

11. On paragraph 9(b), the estimate of \$0.8 million is for system testing and commissioning, training of operating staff and preparation of documentation such as the operating menu for the systems.

12. On paragraph 9(c), the estimate of \$3 million is for building services works associated with the installation of the new systems such as replacement of old cable trunks and adjustment of wall partitions to fit the new equipment.

13. On paragraph 9(d), the estimate of \$2.9 million is for the project management charges payable to the EMSTF. The EMSTF will be responsible for the system design, preparation of tender specifications, tender documentation and assessment, contract administration, as well as monitoring of the installation, testing and commissioning of the systems.

14. On paragraph 9(e), the estimate of \$2 million represents a 10% contingency on the cost items set out in paragraphs 9(a) to (c).

15. The estimated cash flow requirement of the project is as follows -

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<b>Financial Year</b>	<b>\$ million</b>
2005-06	1.0
2006-07	5.0
2007-08	11.6
2008-09	6.7
Total	<u>24.3</u>

### **Recurrent Cost**

16. Since this is a replacement project, there will not be any additional recurrent cost.

### **Impact on Fees and Charges**

17. The impact of the proposal on the fees relating to the two cross-boundary ferry terminals will be negligible.

### **IMPLEMENTATION PLAN**

18. The proposed replacement project is scheduled to start in late 2005 and will be completed in about 34 months. We plan to implement the proposal according to the following schedule -

<b>Activity</b>	<b>Target completion date</b>
Detailed design and preparation of tender	December 2005
Tendering	February 2006
Tender evaluation and placing order	May 2006
Final design	July 2006
Equipment delivery at MFT	December 2006
Equipment installation and commissioning at MFT	October 2007
Equipment delivery at CFT	September 2007
Equipment installation and commissioning at CFT	July 2008

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**BACKGROUND INFORMATION**

19. We issued an information paper on the present proposal to the Legislative Council Panel on Transport on 20 May 2005. Members noted the proposal and have not raised any questions at the Panel meeting on 27 May 2005.

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Environment, Transport and Works Bureau  
June 2005