

## **ITEM FOR FINANCE COMMITTEE**

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

#### **Transport Department**

#### **New Subhead “Installation of ‘Stop-and-go’ e-payment Facilities at Manual Toll Booths of Government Tolled Tunnels and Roads”**

Members are invited to approve a new commitment of \$45,530,000 to install ‘Stop-and-go’ e-payment facilities at the manual toll booths of government tolled tunnels and roads.

#### **PROBLEM**

We propose to install ‘stop-and-go’ e-payment facilities at the manual toll booths of government tolled tunnels and roads for providing an additional means of payment for motorists.

#### **PROPOSAL**

2. The Commissioner for Transport, with the support of the Secretary for Transport and Housing, proposes to install new ‘stop-and-go’ e-payment facilities at all manual toll booths of government tolled tunnels and roads at an estimated cost of \$45,530,000.

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## JUSTIFICATION

3. With the development of technology, the use of electronic payment services in retail and transport sectors is becoming popular. Introducing 'stop-and-go' e-payment facilities at the manual toll booths of government tolled tunnels and roads will benefit motorists by offering one more convenient and popular payment means for motorists. With the introduction of e-payment system, the toll collectors of tolled tunnels and roads can save the time in cash-counting and change-giving, which we believe will be conducive to traffic in the vicinities of government tolled tunnels and roads. Furthermore, motorists will enjoy the following advantages by using the contactless smart cards –

- (a) user-friendly;
- (b) no need to remove card from wallet or insert card into reader;
- (c) easy to reload value;
- (d) multi-purpose (e.g. for making public transport fare payment and retail payment);
- (e) light and handy;
- (f) no need to prepare cash for payment and change; and
- (g) time saving.

4. Under the proposal, e-payment facilities accepting contactless smart cards will be installed at a total of 72 manual toll booths<sup>Note</sup> of the seven government tolled tunnels and roads. Motorists using e-payment facilities have to stop their vehicles at the manual toll booths to pay the tolls by waving their contactless smart cards over the card reader. After installation of the new facilities, motorists may choose to pay by contactless smart cards, cash or pre-paid toll tickets.

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<sup>Note</sup> There are currently a total of 65 manual toll booths at the seven government tolled tunnels and roads. Upon the opening of Hong Kong-Zhuhai-Macau Bridge by late 2016, the existing one-way toll payment arrangement of Lantau Link will be converted to a two-way one and we will seek funding approval from the Finance Committee (FC) for installation of the relevant facilities separately. By then, there will be seven additional manual toll booths at Lantau Link which increases the number of manual toll booths at the seven government tolled tunnels and roads to 72.

5. According to the existing operation of the manual toll collection system, the toll collector has to ascertain and input the vehicle class to the control console inside the manual toll booth before the motorist settles the payment. This is to ensure that correct tolls are charged for different vehicle classes at differentially-tolled tunnels and roads and the utilisation by different vehicle classes is recorded for statistical and other purposes. It is proposed that this mode of operation be maintained at the manual toll booths to be installed with 'stop-and-go' e-payment facilities accepting contactless smart cards.

6. Currently, motorists can freely choose between two types of toll lanes, i.e. autotoll lane and manual toll lane, at the toll plazas of government tolled tunnels/roads. If the manual toll lanes are to be further divided into two types, i.e. one type for accepting cash or pre-paid toll tickets only and the other only accepting 'stop-and-go' e-payment by contactless smart cards, more lane cutting activities will be induced at the toll plazas. To avoid adverse impact on the traffic at the toll plazas and road safety, we propose to install 'stop-and-go' e-payment facilities accepting contactless smart cards at all manual toll lanes for the selection and use by motorists.

7. In recent years, there are, from time to time, public requests for installation of Octopus facilities at government tolled tunnels and roads. In respect of payment by smart cards, besides Octopus cards, there are other emerging contactless transaction payment cards in Hong Kong.

8. The Administration welcomes operators of Octopus cards and other contactless smart cards to participate in this project of providing contactless smart card e-payment facilities. We are prepared to use a common card reader or install different card readers to accommodate different contactless smart cards. Upon obtaining FC's funding approval, we will invite Expression of Interest (EOI) from prospective providers of e-payment facilities and service after which an open tender exercise will be conducted. We will select suitable providers having regard to factors such as popularity of their smart cards, equipment cost and transaction fees.

## **FINANCIAL IMPLICATIONS**

### **Non-recurrent Expenditure**

9. We estimate the capital cost of the project to be \$45,530,000, with the breakdown as follows –

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<b>Item</b>	<b>Cost (\$ '000)</b>
(a) Equipment and implementation cost	36,140
(i) Modification of manual toll collection system	10,100
(ii) Procurement of e-payment facilities	22,540
(iii) Installation of e-payment facilities	3,500
(b) Electrical and Mechanical Services Trading Fund (EMSTF) project management charges	5,780
(c) Contingency [ 10% of item (a) above ]	3,610
<b>Total</b>	<b>45,530</b>

10. Regarding paragraph 9(a) above, the estimated cost of \$36,140,000 will cover modification of the existing manual toll system at the tolled tunnels and roads as well as procurement and installation of e-payment facilities.

11. As regards paragraph 9(b) above, the estimated cost of \$5,780,000 is for meeting the charges of EMSTF for managing the project which includes preparing system specifications, designing and overseeing the tendering process; supervising the modification work of the existing manual toll system; supervising installation, testing and commissioning of e-payment facilities; and monitoring the operation of e-payment facilities and defect rectification work.

12. The estimated cash flow requirement is as follows –

<b>Year</b>	<b>\$ '000</b>
2013-14	1,000
2014-15	16,000
2015-16	18,000
2016-17	10,530
<b>Total</b>	<b>45,530</b>

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### Recurrent Expenditure

13. The above proposal will incur recurrent cost for the transaction fees charged by the card issuing companies or clearing companies which is estimated to be around \$15,000,000 per year. Such requirements will be reflected in the Estimates of relevant years.

### Impact on Fees and Charges

14. Under the existing policy, the operating cost of government tolled tunnels and roads should be recovered through the toll charges. Since the additional recurrent cost and depreciation cost of the proposal is part of the operating costs of the tolled tunnels and roads, they will be taken into account in setting the toll charges for those tolled tunnels and roads in future.

### IMPLEMENTATION PLAN

15. We plan to start the project in June 2013 for completion by May 2016. Depending on the progress of the project, it is expected that motorists would be able to use the e-payment facilities at certain tolled tunnels or roads by May 2016 or earlier. The work programme is detailed as below –

<b>Activity</b>	<b>Target completion date</b>
(a) Work on EOI invitation	August 2013
(b) Tendering exercise to select provider(s) of e-payment facilities and service	November 2013
(c) Tendering exercise to select works agent(s) to carry out modification of manual toll collection system and service integrator(s) for procurement and installation of e-payment facilities	August 2014
(d) Modification of manual toll collection system and installation of e-payment facilities	March 2016
(e) Testing and commissioning of e-payment facilities	May 2016

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## **PUBLIC CONSULTATION**

16. We consulted the Legislative Council Panel on Transport on 15 March 2013. While the Panel in general supported the proposal, a Member asked whether the traffic in the vicinities of government tolled tunnels and roads would be improved after the installation of the e-payment facilities. We believe that the introduction of 'stop-and-go' e-payment facilities will provide an additional means of payment to motorists, and time can be saved in cash-counting and change-giving, which will be conducive to the traffic in the vicinities of the tunnels and roads.

## **BACKGROUND**

17. At present, there are five government tolled tunnels (i.e. Aberdeen Tunnel, Cross-Harbour Tunnel, Lion Rock Tunnel, Shing Mun Tunnels and Tseung Kwun O Tunnel) and two government tolled roads (i.e. Lantau Link and Tsing Sha Highway). Motorists using government tolled tunnels and roads may stop their vehicles at manual toll booths to pay the tolls by means of cash or pre-paid toll tickets; alternatively, they may drive through autotoll booths without stopping and auto-pay the tolls using autotoll tags attached to the windscreen of the vehicles. With the development of technology, the use of e-payment by contactless smart cards has become increasingly popular in the retail and transport sectors. Examples include payment of public transport fares and car parking fees etc. There have been suggestions from members of the public to use contactless smart cards at tolled tunnels and roads to pay tolls. To address public requests and enhance the convenience of motorists, we propose to introduce 'stop-and-go' e-payment facilities at the manual toll booths of government tolled tunnels and roads.

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