

## **LegCo Panel on Transport Octopus Common Ticketing System**

### **PURPOSE**

Members raised a number of questions on the details of the management and operation of the Octopus common ticketing system by the Creative Star Limited (Creative Star) (see **Annex**). This paper provides answers to questions raised by Members.

### **BACKGROUND**

2. Creative Star Limited, a limited company established under the Companies Ordinance (Cap. 32), was set up by a group of public transport operators to promote a pre-paid stored value ticketing system using contactless smart card technology. The ticketing device, the Octopus Card, was launched on 1 September 1997. Over six million cards were issued by the end of 1999. It is estimated that some 38% of all daily public transport journeys are paid with the Octopus Card.

3. In addition to MTRC, KCRC (East Rail and Light Rail), KMB, Citybus, New World First Bus and New World First Ferry, the Octopus is also used by the following public transport companies :

- (a) New Lantao Bus Co. (1973) Ltd,
- (b) Kwoon Chung Motor Bus,
- (c) Hong Kong & Kowloon Ferry Ltd,
- (d) Hong Kong University and Science Technology Bus Fleet,
- (e) Aberdeen Maxicab Services Ltd, and
- (f) Cheung Tung Maxicab.

### **CORPORATE AFFAIRS**

4. The shareholding structure of Creative Star is as follows :-

|  |       |
|--|-------|
| Mass Transit Railway Corporation         | 67.8% |
| Kowloon-Canton Railway Corporation       | 24.7% |
| Kowloon Motor Bus Company (1933) Ltd     | 3.0%  |
| Citybus Limited                          | 1.4%  |
| The Hongkong & Yaumati Ferry Company Ltd | 3.1%  |

5. The company has six functional departments covering Technical, Card Operations, Finance, Marketing, Commercial Contract/Legal and Human Resources. It now has an establishment of 81 staff.

6. Creative Star was established as a non-profitmaking entity for the promotion of the common ticketing system. The company has accumulated small losses which at the end of 1999 amounted to about \$10 million.

7. Creative Star, as a limited company established under the Companies Ordinance, is subject to the provisions of the Ordinance. In addition, the Banking Ordinance (Cap. 155) provides the Hong Kong Monetary Authority (HKMA) with the power to approve and regulate the issue of multi-purpose stored value cards. The Octopus card has been granted exemption from the need to be authorized under the Banking Ordinance. This reflects the fact that the use of the card is largely limited to transport-related payments. At present, Creative Star is required to submit financial information to HKMA on a quarterly basis. As part of the condition for exemption, HKMA has also imposed a number of restrictions on the Octopus card which include the followings :-

- (a) the core use of the card is for payment of transport services provided by its shareholders;
- (b) some non-core uses may be allowed within transport premises e.g. pay phone inside railway stations; and
- (c) the aggregate value of transactions for the non-core uses should not exceed 15% of the total value of transaction.

8. Creative Star is committed to ensuring that the public transport application of the Octopus Card is given top priority. It is also committed to ensuring that the reasonable operational demands of other non-shareholding public transport operators are met. In determining the transaction fee, Creative Star will treat these public transport modes on a consistent basis. The current policy which has already been applied to the other public transport companies listed in paragraph 3 above, is for the companies to pay for their own Octopus processing equipment and to pay a transaction fee (equals to 1% of the transaction value) to Creative Star. For other companies Creative Star intends to apply similar terms and conditions for firms within the same industry.

## **RELIABILITY OF THE OCTOPUS SYSTEM**

9. Octopus has proved to be a generally reliable ticketing system. The current daily average of unreadable cards is 0.014% against the total card population. Equipment availability has exceeded 99% (latest figure in February 2000) :-

|                   |        |
|-------------------|--------|
| Gate              | 99.79% |
| Add Value Machine | 99.06% |
| Office Processors | 99.5%  |
| Equiry Units      | 99.1%  |

10. To protect the interest of the commuters, the Octopus system is designed to deduct only the value its application is programmed to charge. According to Creative Star's last audit, error in the reconciliation between Central Clearing House settlement data and Service Provider's data is 0.0002%. In the event of a debiting device failure in a railway situation, there are alternate gates and add-value facilities for customers to use, while on buses for the rare occasion where the processing unit has failed, cash payment is available. In the case of Citybus which offers its customers an "Octopus Guarantee", if the Octopus processor is not working, a person holding an Octopus card can travel for free. It should be noted that failure of a debiting device does not cause the card to fail.

11. Creative Star does not have records of the number of incidents of incorrect fare deduction but with over 2.8 billion Octopus transactions to date the proportion of incorrect deductions is obviously extremely low. Some instances of incorrect fare deduction are not caused by card or equipment failures but rather by operators' error, for example, where an incorrect stage fare for a bus has been set. The company is aware that the bus fare processor shows the passenger the fare to be deducted but this will be very costly to install for the railway system. Customers are advised to use the Enquiry Processors located at railway stations which enable them to check details of the last 5 transactions, including dates, transport mode used and fare deducted.

## **THE OCTOPUS DEPOSIT AND AUTOPAY**

12. Creative Star has explained on a number of occasions that the \$50 deposit includes \$30 to cover the cost of the card. The balancing \$20 is reserved to cover the negative value which will be stored on the card prior to the automatic add value transaction which takes place only when the customer attempts to use his Octopus card with a zero or negative value. Creative Star believes that there are valid reasons to maintain the \$50 deposit. Any cardholder can get a refund

of the deposit by returning the card at any time they wish. Interest earned from deposits, together with fees paid by service providers utilizing the Octopus system, are used to meet the costs of establishing and operating this convenient system. As we have said earlier, Creative Star has been making a loss since the commencement of its operation.

13. Apart from the deposit, there is a \$20 processing fee for a personalised Octopus card. Personalisation offers security to the passenger. Creative Star will blacklist any reported lost/stolen card as soon as reasonably practical and guarantees that it will block the card from being used not more than 24 hours after a customer reports the loss of the card. Creative Star is responsible for any value used on the card after that time. As only one automatic add value transaction can take place on any one day, it is unlikely that a holder of a personalized card will suffer substantial loss if he reports the loss of the card in good time. The remaining value can be credited to the personalized cardholder. Personalisation cardholders may also choose to have their own photo printed on the cards.

14. At present, only Dah Sing Bank is participating in the Automatic Add Value service. Creative Star is now negotiating with other banks to adopt the service for the convenience of their account holders. Creative Star does not charge any fee for the convenience of the Automatic Add Value service.

## **ATTENDANCE**

15. Mr Rob Noble, Chief Executive Officer of Creative Star, will attend the LegCo Panel on Transport meeting on 29 March 2000 to answer any further questions which Members may wish to raise.

Transport Bureau  
23 March 2000

**Octopus Common Ticketing System**  
**Questions Raised by the LegCo Panel on Transport**  
**(29 March 2000)**

**ADMINISTRATION AND MONITORING**

- Q1 Besides buses, MTR and KCR, what other public transport service companies or commercial firms have installed or considered installing the Octopus system?
- Q2 If other public transport modes (e.g. Minibus) or commercial firms show interest in installing the Octopus system, what would be the format of the deal?
- Q3 What is the regulatory framework for the Creative Star?

**SERVICE PROVISION**

- Q4 So far how many incidents of malfunctioning of debit devices result in customers being unable to use Octopus cards? What is the failure rate of Octopus cards? Has the concerned party/parties done any work to reduce malfunctioning of debit devices and cards?
- Q5 So far, how many incidents involve incorrect deduction of fare? How many such complaints have been received by the relevant company? Are there any plans in hand to improve the existing fare debiting processors which would allow the customers to read the fare being deducted instantly via the LED display for each journey?
- Q6 Sources say Creative Star has introduced 'Personalised Octopus Card' and has launched an Automatic Add Value Service with the bank recently. Whenever the remaining value on the Personalised card cannot pay for that journey, a certain amount of money will automatically be transferred to their Octopus cards from their bank accounts to add value onto the 'Personalised Octopus Card'.

- (a) With the provision of Automatic Add Value Service via the bank account, why does CS still charge the customers with the HK\$50 deposit?
- (b) Apart from HK\$50 deposit, are there any additional charges for applying for the Personalized Octopus card/Automatic Add Value Service? If yes, why are they charged?
- (c) When the cardholder loses his Personalized card, someone who gets his lost card may use up its remaining value. Having the reloading function via Automatic Add Value Service, he will suffer more (in particular during weekends or holidays). Are there any procedures to protect the interest of cardholders?
- (d) How many banks have joined the 'Automatic Add Value Service'? Will it be extended to all banks? What is the schedule of implementation?

## **FINANCE**

- Q7 What is the organization structure of CS? As understood, CS is a non profit making company formed by different public transport service companies. What are the percentages of each shareholders? Would the government provide information on the financial status of CS from commencement (including Income & Expenditure)?
- Q8 When will CS review the policy of HK\$50 deposit?
- Q9 How would CS utilize the interest generated from the deposits?