

## **Panel on Security of the Legislative Council**

### **Measures to Ease Passenger Congestion at Boundary Control Points**

#### **INTRODUCTION**

This paper informs Members of the current traffic situation at the five land boundary control points at Lo Wu, Lok Ma Chau, Hung Hom, Man Kam To and Sha Tau Kok. It also gives an account of measures taken to cope with the service demand and improve services for passengers, particularly at Lo Wu and Lok Ma Chau.

#### **CURRENT SITUATION**

##### **Land Boundary Control Points**

2. Cross-boundary passenger and vehicular traffic has sustained significant growth in the past few years. The annual growth rate of passengers has jumped to double-digit since 1996. The patronage has increased from 49.85 million in 1995 to 101.71 million in 2000, representing an increase of 104 %. The annual vehicular traffic has also increased by 32.6 % from 8.47 million to 11.23 million over the same period. Detailed statistics are at Annex.

##### *Lo Wu*

3. The Lo Wu Control Point operates daily from 0630 to 2330 hours. It is the busiest control point in Hong Kong accounting for approximately 85% of total cross-boundary passenger. A double-digit annual growth rate has been registered in recent years, with passenger traffic springing from 43.3 million (a daily average of 118,630) in 1995 to 86.5 million (a daily average of 236,263) in 2000. Currently the average passenger figures stand at the level of 221,000 for weekdays and 268,000 for weekends and holidays, but goes up to 300,000 on festive days. Double-digit growth is likely to persist in the years ahead.

### *Lok Ma Chau*

#### *Passenger traffic*

4. The operating hours of Lok Ma Chau Control Point for passenger traffic are from 0700 to 2200 hours. The passenger traffic patronage has increased rapidly in recent years, especially after the introduction of shuttle bus service in March 1997. Passenger traffic increased from 2.51 million (a daily average of 6,874) in 1995 to 5.04 million (a daily average of 13,818) in 1997 and further up to 10.96 million (a daily average of 29,938) in 2000, representing an increase of 337% over that of 1995. A double-digit growth in passenger traffic is expected.

#### *Vehicular Traffic*

5. Lok Ma Chau operates round the clock for goods vehicles and from 0700 hours to 2200 hours for private cars and coaches. Vehicular traffic grew from 4.5 million (a daily average of 12 323) in 1995 to 7.6 million (a daily average of 20 810) in 2000, with goods vehicles making up 80% of total vehicular movements. It is the busiest vehicular control point, accounting for 68% of cross-boundary vehicular traffic. It is expected that vehicular traffic will also continue with a double-digit growth.

### *Hung Hom*

6. Hung Hom, operating between 0730 and 2100 hours, deals with eight pairs of through trains running daily between Hong Kong and the Mainland with a full-loading capacity of 8,364 passengers. Service demand has been stable over the years. In 2000, the average daily patronage was 5,517.

### *Man Kam To*

7. Man Kam To operates from 0700 to 2200 hours for both passengers and vehicles. There has been no significant increase in passenger traffic over the years. The average number of passengers per day is between 2,300 and 2,800. Vehicular traffic remains at a daily average of 6,900 to 8,400.

### *Sha Tau Kok*

8. Sha Tau Kok operates from 0700 and 2000 hours for both passengers and vehicles. Given its remote location, service demand from passengers and vehicles has been moderate. The average number of passengers per day is between 3,000 to 3,400 while vehicular traffic remains at a daily average of 1,900 to 2,400.

### **Cross Boundary Ferry Service**

9. Cross-boundary passenger ferry service is provided at the China Ferry Terminal in Tsimshatsui and the Hong Kong Macau Ferry Terminal in Central. The former operates between 0600 and 2200 hours and the latter operates 24 hours a day. At present, there are six operators providing 70 departures every day to various ports in the Guangdong Province. The average daily cross-boundary ferry patronage dropped slightly in 1999, but it seemed to have stabilised at around 17,000 in 2000. In view of intense competition from the more convenient road-based cross-boundary transport modes and the railway, it is expected that there should not be any problem for the existing terminals to cope with the demand for cross-boundary ferry service in the foreseeable future.

### **MEASURES IMPLEMENTED/PLANNED TO IMPROVE FACILITIES AND SERVICES AT LO WU AND LOK MA CHAU**

10. In view of the huge traffic demand at Lo Wu and Lok Ma Chau, priority attention has been given to enhance passenger/vehicular flow at these two control points.

#### **Lo Wu**

##### *Improvement works at Lo Wu Terminal*

11. Improvement works have recently been carried out at the Lo Wu Terminal to expand its throughput and queuing area. These include –

- a) construction of a pair of escalators linking up the Arrival and Departure Halls of the Terminal to enable contra-flow operation to cope with the dominant passenger flow (i.e. use

of counters at the Arrival Hall for departure clearance, and vice versa) when necessary;

- b) conversion of immigration counters at the Departure Hall (except the 12 counters for contra-flow operation) from side-facing to front-facing, thus enlarging the queuing areas and increasing the accommodation capacity;
- c) installation of eight additional immigration counters in the Departure Hall to enhance the handling capacity;
- d) widening of the passageway across the Departure Hall to enable orderly passenger flows during busy hours; and
- e) modification of the immigration counters at the Resident Arrival Hall to facilitate easier fetching and returning of travel documents hence minimizing fatigue of staff and improving the passenger clearance efficiency.

12. After completion of the improvement works in December 1999, there are 92 and 76 immigration counters at the Resident Arrival Hall and the Departure Hall of Lo Wu respectively. With the operation of the contra-flow scheme, the number of departure counters can be increased from 76 to 116 or the number of arrival counters from 92 to 104 when circumstances require.

13. Further improvements works at the Lo Wu Terminal are being considered. These include –

- a) Replacing four escalators with high speed escalators and adding a new escalator at the entrance of the Arrival Hall near the footbridge to smooth out the flow of inbound passengers. Works are being planned for completion in mid-2003; and
- b) Replacing the existing 40 turnstile type ticket gates with flap gates to improve passage. Works will be completed by mid-2003.

*Increasing Manpower Resources*

14. Given the shortage of immigration staff, the counter facilities at Lo Wu have not been fully utilized to achieve the maximum throughput capacity. Assuming that the handling capacity at the Shenzhen side can match and adequate manpower is provided to operate the counters fully, the handling capacity of Lo Wu can cope with an average passenger flow of 400,000 passengers per day. Immigration Department's request for additional manpower is now being processed.

*Enhancing East Rail Service*

15. To cope with increasing service demand, KCRC will expand passenger capacity of the East Rail by –

- a) upgrading its signaling system from Automatic Train Protection to Automatic Train Operation (targeted for completion by end 2002) which will increase the frequency from 24 to 27 trains per hour per direction; and
- b) procuring and putting into service by phases eight new 12-car trains from 2001 to 2002. The first train will be put into service in the summer of 2001.

**Lok Ma Chau***Expansion project*

16. Following the completion of the Phase I expansion project with the number of kiosks increased from 14 pairs to 24 pairs in December 1999, the Phase II construction works commenced in December 2000 and was scheduled to complete by 2003. The passenger processing terminal will be expanded and the total number of clearance counters will be increased from 28 to 38. Hence, the corresponding handling capacity will be increased from a daily average of 25,000 to 35,000 passengers. A total of 26 additional posts will be created to cope with the increased workload.

17. Phase II improvement works also include the following –
- a) all the existing counters, kiosks and the processing hall will be refurbished by phases to tie in with the newly constructed extension of the passenger terminal;
  - b) the number of alighting and boarding bays will be increased from 128 to 200;
  - c) public toilets and other peripheral facilities will be constructed;
  - d) x-ray machines will be installed for inspection of container vehicles; and
  - e) northbound flyover will be constructed to segregate goods vehicles from passenger vehicles at the approach to the boundary bridge.

*Segregation of private car traffic*

18. With an upsurge of 76% in private car traffic from a daily average of 1,700 in December 1998 to 3,000 in December 2000, designated kiosks for private cars with “Hong Kong residents only” or “drivers only” has been implemented since 7 February 2001 in order to help alleviate traffic congestion during peak hours.

*Enhancing Lok Ma Chau-Huanggang Shuttle Bus Service*

19. The Lok Ma Chau-Huanggang shuttle bus service operates from 0700 to 2130 hours, providing service between San Tin in Yuen Long and the Huanggang Control Point on the Mainland side via the Lok Ma Chau Control Point. The fleet size and service schedule are subject to mutual agreement between the Hong Kong and Mainland authorities. The average daily patronage increased from 8,200 in 1998 to 13,700 in 2000.

20. The shuttle bus service has a maximum carrying capacity of about 1,100 passengers per hour at present. To cope with increasing demand, the operator will replace part of its fleet with larger vehicles

before mid-2001. This will improve the maximum capacity of the shuttle bus service by 18% to about 1,300 passengers per peak hour. Subject to the provision of additional clearance facilities, there is scope for further expanding the service as necessary.

## **OTHER MEASURES**

### **Adoption of Information Technology**

21. Subject to funding approval by the Legislative Council, new smart ID cards will be issued from mid-2003 by phases over a period of four years. The smart card storing biometrics of the holder will provide the foundation for implementing an Automated Passenger Clearance (APC) System at control points. The APC system may be implemented after a considerable number of new ID cards are in circulation. With the system in place, an officer can oversee several clearance counters in the clearance process. It is envisaged that the overall passenger throughput can be improved and that demand for staff growth can be contained.

### **Setting up New Boundary Control Points**

22. Assuming a 10% annual passenger/vehicular traffic growth, it is anticipated that both Lo Wu and Lok Ma Chau will reach their handling capacity in about five years despite implementation of improvement measures mentioned above. New boundary control points are needed to cope with the long-term cross-boundary traffic demand. Planning work for two new cross-boundary control points are in progress.

#### *Sheung Shui to Lok Ma Chau Spur Line*

23. Under the Spur Line Project, a new boundary control point for rail passengers with an initial handling capacity of around 150,000 will be set up in the new terminal at Lok Ma Chau. The project programme is under review in the light of Director of Environmental Protection's rejection of KCRC's Environmental Impact Assessment report on the Spur Line under the Environmental Impact Assessment Ordinance. Construction will start upon completion of the statutory processes.

*Shenzhen-Hong Kong Western Corridor (SWC) and the Deep Bay Link (DBL) Project*

24. The SWC is a proposed vehicular bridge crossing connecting North-Western New Territories with Shekou of Shenzhen. After landing at Ngau Hom Shek, SWC will be connected to the DBL, and further to Yuen Long Highway and the proposed Route 10. The designed handling capacity for Stage I of SWC/DBL is 42,000 daily. We are liaising with the Mainland authorities on the implementation arrangements and the project programme.

Security Bureau  
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**Passengers Statistics at the Cross-boundary Control Points**

| YEAR                                | LO WU (LW)               |            | HUNG HOM (HH)         |            | LOK MA CHAU (LMC)       |            | MAN KAM TO (MKT)      |            | SHA TAU KOK (STK)     |            | TOTAL                     |            |
|-------------------------------------|--------------------------|------------|-----------------------|------------|-------------------------|------------|-----------------------|------------|-----------------------|------------|---------------------------|------------|
|                                     | Passenger Traffic        | % Increase | Passenger Traffic     | % Increase | Passenger Traffic       | % Increase | Passenger Traffic     | % Increase | Passenger Traffic     | % Increase | Passenger Traffic         | % Increase |
| <b>1995</b>                         | 43,299,785<br>(118,630 ) | N/A        | 2,119,905<br>(5,808 ) | N/A        | 2,509,140<br>(6,874 )   | N/A        | 1,004,528<br>(2,752 ) | N/A        | 919,479<br>(2,519 )   | N/A        | 49,852,837<br>(136,583 )  | N/A        |
| <b>1996</b>                         | 47,976,070<br>(131,082 ) | 10.8%      | 1,808,551<br>(4,941 ) | -14.7%     | 3,121,357<br>(8,528 )   | 24.4%      | 967,087<br>(2,642 )   | -3.7%      | 1,024,428<br>(2,799 ) | 11.4%      | 54,897,493<br>(149,993 )  | 10.1%      |
| <b>1997</b>                         | 56,296,232<br>(154,236 ) | 17.3%      | 1,551,440<br>(4,251 ) | -14.2%     | 5,043,603<br>(13,818 )  | 61.6%      | 928,970<br>(2,545 )   | -3.9%      | 1,097,129<br>(3,006 ) | 7.1%       | 64,917,374<br>(177,856 )  | 18.3%      |
| <b>1998</b>                         | 66,105,559<br>(181,111 ) | 17.4%      | 1,445,725<br>(3,961 ) | -6.8%      | 7,521,761<br>(20,608 )  | 49.1%      | 834,724<br>(2,287 )   | -10.1%     | 1,119,591<br>(3,067 ) | 2.0%       | 77,027,360<br>(211,034 )  | 18.7%      |
| <b>1999</b>                         | 77,193,998<br>(211,490 ) | 16.8%      | 1,773,397<br>(4,859 ) | 22.7%      | 9,181,205<br>(25,154 )  | 22.1%      | 948,058<br>(2,597 )   | 13.6%      | 1,175,787<br>(3,221 ) | 5.0%       | 90,272,445<br>(247,322 )  | 17.2%      |
| <b>2000</b>                         | 86,472,363<br>(236,263 ) | 12.0%      | 2,019,115<br>(5,517 ) | 13.9%      | 10,957,405<br>(29,938 ) | 19.3%      | 1,017,145<br>(2,779 ) | 7.3%       | 1,243,368<br>(3,397 ) | 5.7%       | 101,709,396<br>(277,895 ) | 12.7%      |
| <b>1995-2000<br/>5 years growth</b> |                          | 99.7%      |                       | -4.8%      |                         | 336.7%     |                       | 1.3%       |                       | 35.2%      |                           | 104.0%     |

Figures in brackets denote the daily average.

**Vehicular Statistics at the Cross-boundary Control Points**

| YEAR                                | LOK MA CHAU (LMC)      |            | MAN KAM TO (MKT)      |            | SHA TAU KOK (STK)   |            | TOTAL                   |            |
|-------------------------------------|------------------------|------------|-----------------------|------------|---------------------|------------|-------------------------|------------|
|                                     | Vehicular Traffic      | % Increase | Vehicular Traffic     | % Increase | Vehicular Traffic   | % Increase | Vehicular Traffic       | % Increase |
| <b>1995</b>                         | 4,498,016<br>(12,323 ) | N/A        | 3,318,964<br>(9,093 ) | N/A        | 648,716<br>(1,777 ) | N/A        | 8,465,696<br>(23,194 )  | N/A        |
| <b>1996</b>                         | 4,987,471<br>(13,627 ) | 10.9%      | 3,226,850<br>(8,817 ) | -2.8%      | 697,923<br>(1,907 ) | 7.6%       | 8,912,244<br>(24,350 )  | 5.3%       |
| <b>1997</b>                         | 5,729,895<br>(15,698 ) | 14.9%      | 3,076,314<br>(8,428 ) | -4.7%      | 704,700<br>(1,931 ) | 1.0%       | 9,510,909<br>(26,057 )  | 6.7%       |
| <b>1998</b>                         | 6,506,951<br>(17,827 ) | 13.6%      | 2,525,133<br>(6,918 ) | -17.9%     | 740,644<br>(2,029 ) | 5.1%       | 9,772,728<br>(26,775 )  | 2.8%       |
| <b>1999</b>                         | 6,622,164<br>(18,143 ) | 1.8%       | 2,843,325<br>(7,790 ) | 12.6%      | 862,317<br>(2,363 ) | 16.4%      | 10,327,806<br>(28,295 ) | 5.7%       |
| <b>2000</b>                         | 7,616,568<br>(20,810 ) | 15.0%      | 2,726,169<br>(7,449 ) | -4.1%      | 883,463<br>(2,414 ) | 2.5%       | 11,226,200<br>(30,673 ) | 8.7%       |
| <b>1995-2000<br/>5 years growth</b> |                        | 69.3%      |                       | -17.9%     |                     | 36.2%      |                         | 32.6%      |

Figures in brackets denote the daily average.