

For discussion on  
5 May 2017

**Legislative Council Panel on Security**  
**Progress on Implementation of**  
**New Immigration Control System (ICONS)**

**Introduction**

This paper briefs Members on the latest progress of the implementation of the new computer system for control points (the Immigration Control System (ICONS)) by the Immigration Department (ImmD) and the latest operational situation of control points.

**Background**

Latest clearance situation

2. In 2016, the total number of passengers entering Hong Kong reached 148 million, which was comparable to the figure for 2015. Among them, 56.7 million trips were made by visitors to Hong Kong (a daily average of 154 800), representing a decrease of 4.5% over 2015. Out of these visitors, 75.1% were cross-boundary Mainland visitors (a daily average of 116 300), while the remaining 24.9% were other visitors (a daily average of 38 500). The daily average figures of Mainland and other visitors recorded a decrease of 6.7% and an increase of 3% over 2015 respectively. Statistics on arriving passengers in the past three years are at **Annex**.

3. In the first three months of 2017, there were 14 million visitors to Hong Kong (a daily average of 158 200), representing an increase of 3.7% over the same period last year. 75.6% of them were cross-boundary Mainland visitors (a daily average of 120 000), while the remaining 24.4% were other visitors (a daily average of 38 700). The daily average figures of Mainland and other visitors recorded representing an increase of 3.7% and 3.6% over the same period last year respectively.

4. In regard to vehicular traffic, on average 21 200 vehicles entered Hong Kong per day in 2016 (an increase of 1.9% over 2015), with 46% of them being private vehicles. In the first three months of 2017, on average 20 900 vehicles entered Hong Kong per day (an increase of 6.6% over the same period last year), with 47% of them being private vehicles.

5. To enhance the passengers handling capacity of control points with a view to coping with the heavy passenger traffic, the ImmD has implemented various measures in recent years, including the implementation of the ICONS and other measures for improving the immigration clearance procedure. The latest progress of the implementation of ICONS and other measures for improving the immigration clearance procedure by the ImmD are outlined in the following paragraphs.

### ICONS

6. In March 2010, the ImmD commissioned a consultant to conduct its third Information Systems Strategy (ISS-3) Review in order to formulate the long-term information systems strategy for the department. The ISS-3 Review recommended the ImmD to consolidate and revamp the then existing control point systems, including the Entry/Exit Processing and Records System (EXPRESS), Automated Passenger and Vehicle Clearance Systems (e-Channels), Face Recognition System and Deployment Information and Command System, into one integrated control point system, i.e. ICONS. The objective was to enhance its service quality and handling capacity, to cope with the continuous passenger growth and to tie in with the long-term business developments of all existing and new control points.

7. The Legislative Council Panel on Security considered and supported the implementation of ICONS at its meeting held on 4 December 2012. The Legislative Council Finance Committee approved a commitment of \$912,215,000 for the implementation of ICONS on 8 February 2013.

### Latest progress of the implementation of ICONS

8. The rollout of the ICONS project is divided into three phases. The first phase enhanced the then e-Channels; the second phase replaced the then EXPRESS; whereas the third phase will include the introduction of new features in relation to immigration clearance and operational support.

9. The first and the second phases of works were completed in June and October 2016 respectively, which mainly include –

- (a) upgrading and consolidating the hardware and software of the then separate control point systems, including the relevant computer equipment of the front desks and backroom services, so as to upkeep the system's service standard against the growing demand for service; and
- (b) upgrading the 437 e-Channels at control points to multi-purpose e-Channels and introducing 158 new multi-purpose e-Channels, which can be deployed to serve Hong Kong residents or enrolled visitors according to passenger traffic pattern. The works have facilitated flexible and prompt resource deployment, shortened the waiting time and enhanced the overall handling capacity of control points. Currently, on average it only takes 12 seconds for Hong Kong residents to go through the immigration clearance process via e-Channels; and 20 seconds for visitors, which is shorter than the processing time via existing traditional counters, more than doubling the handling capacity of each e-Channel per hour than that of traditional counters. As at end March 2017, a total of 595 multi-purpose e-Channels were installed in control points.

10. Various items under the third phase will be implemented progressively in 2017-18, which mainly include –

- (a) employment of the face recognition technology in conjunction with the electronic travel documents (e-TD)<sup>1</sup> to enhance clearance efficiency and improve passenger clearance. e-TDs in compliance with the requirements set out by the International Civil Aviation Organization (ICAO) have gained worldwide currency. By ImmD's estimate, over 90% of visitors will be travelling on e-TDs by 2020. e-TDs are more secured as compared with conventional travel documents, and their forgery can be identified more effectively. In addition, with a high level of accuracy, face recognition technology is mature and has been adopted by some other countries (e.g. Australia, Portugal, Germany and the United Kingdom) in their automated immigration clearance systems. In line with the global trend, the ImmD will adopt face recognition technology in immigration clearance to harness the advantages of

---

<sup>1</sup> Electronic travel documents refer to electronic passports that contain biometric information (including machine-readable face images) which are compliant with the standards set out by the International Civil Aviation Organization. These machine-readable face images may be extracted to authenticate the identity of travellers by electronic means.

e-TDs. The ImmD will adopt the technology to assist immigration officers in authenticating a visitor's identity during clearance at traditional immigration counters when they enter Hong Kong, so as to step up interception against imposters and persons with suspicious identities. For departure, the ImmD will, by phases, allow visitors aged 11 or above<sup>2</sup> holding valid e-TDs compliant with ICAO's requirements to perform self-service departure clearance through e-Channels without prior enrolment. They can complete the self-service departure clearance after having their identities authenticated by the face recognition technology at e-Channels. The project will be rolled out in all control points by phases starting from 2017, with the Hong Kong International Airport control point being the first to undergo the pilot run. The ImmD is now testing the system to ensure its reliability and smoothness when it comes into operation;

- (b) introduction of self-service kiosks for enrolment for e-Channel service, allowing frequent visitors to help themselves enrol for the service. The self-service kiosks will be installed at the designated areas of the Hong Kong International Airport; and
- (c) enhancement of internal information sharing and further automation of business processes, such as improving the provision of deployment information and command system, with a view to providing information to supervisors to deploy staff with flexibility, such that the efficiency of resource management and operations at control points can be enhanced; and facilitating supervisors to conduct record check more efficiently among ImmD's various systems, with a view to speeding up the process of case referrals.

11. To cater for long-term business development, ICONS will be fully implemented at all existing and new control points in future. The ImmD will closely monitor passenger growth and their travel patterns with a view to maintaining effective immigration control and ensuring that immigration clearance is conducted in an orderly fashion.

---

<sup>2</sup> In drawing up such age restriction, reference was made to the age restriction (must be aged 11 or above) of using e-Channels for immigration clearance by Hong Kong smart identity card holders. In fact, the existing e-Channels are designed based on the ergonomics of persons aged 11 or above.

## Other immigration convenience measures

12. Apart from upgrading its computer systems, the ImmD has also consistently improved the workflow for immigration clearance to provide more efficient and convenient immigration clearance at control points. The ImmD has entered into new arrangements for reciprocal use of automated immigration clearance service by passport holders with the Republic of Korea (since December 2013), Germany (a pilot scheme was introduced in September 2014 and the full implementation was launched in November 2014), Singapore (since September 2014) and Australia (since June 2016). The ImmD will continue to liaise with other countries and regions which have close tourism and economic ties with Hong Kong to introduce more arrangements for reciprocal use of automated immigration clearance service. We believe that this will provide greater travel convenience for people in Hong Kong and our partnering economies, thereby enhancing our economic, social and cultural ties.

13. In 2013, the ImmD launched the Hong Kong Immigration Mobile Application for Hong Kong residents and visitors to obtain information on the estimated passenger waiting time at major land boundary control points and other information, such as office hours of all immigration offices. The estimated passenger waiting time is updated about every 15 minutes as a reference for Hong Kong residents and visitors to choose a suitable land boundary control point with lighter passenger traffic or a non-peak hour for immigration clearance. As at end March 2017, around 142 200 downloads of the mobile application have been recorded.

14. The ImmD introduced non-stamping immigration clearance service for visitors and Hong Kong non-permanent residents in 2013. Under the arrangement, stamping on travel documents during arrival clearance is replaced by the issue of a landing slip bearing information such as the holders' conditions and limit of stay. When passengers depart, no slip will be issued and their travel documents will not be stamped. The measure has shortened the clearance time. To visitors who travel frequently, the measures has also minimised the inconvenience arising from the need to replace travel documents at short intervals. The measure has been very much welcomed by visitors.

15. To cope with the peak passenger traffic during festive periods, the ImmD will step up publicity to call upon all cross-boundary passengers to plan their journey early and avoid going through the immigration clearance during peak hours, and to heed radio and TV broadcasts on traffic conditions at the control points. Information about the peak hours at boundary control points are also available on ImmD's website for passengers' information. In addition, the ImmD will also maintain close

communication with other law enforcement agencies, the Airport Authority Hong Kong, the MTR Corporation Limited and the Mainland authorities to ensure smooth passenger traffic at control points. Appropriate traffic diversion measures will be implemented when necessary.

16. The ImmD will continue to suitably deploy its resources and review its manpower and resources requirements in response to the trend of passenger flow and the implementation of improvement measures.

### **Advice Sought**

17. Members are invited to take note of the content of this paper.

**Security Bureau**  
**Immigration Department**  
**April 2017**

