

Panel on Security of the Legislative Council

Computer Systems for the Immigration Department at the New Control Point for the Hong Kong-Shenzhen Western Corridor

INTRODUCTION

This paper informs Members of our plan to install computer systems for the operation of the Immigration Department (ImmD) at the new control point for the Hong Kong-Shenzhen Western Corridor (HK-SWC).

BACKGROUND

2. On 18 July 2003, the Finance Committee (FC) of the Legislative Council (LegCo) approved a capital commitment of \$2,173.5 million in money-of-the-day prices for the design and construction of a new control point at Shekou in Shenzhen. The scope of the project, *inter alia*, includes the design and construction of up to 91 passenger counters, 64 goods vehicle kiosks, 50 private car kiosks and four coach kiosks for both inbound and outbound directions. We aim to complete the design of the new control point by the first quarter of 2004 and complete the construction works by end 2005 to tie in with the commissioning of the HK-SWC.

3. As mentioned in the funding application for the design and construction of the new control point, we need to seek separate funds from **Head 710 – Computerisation** for the administrative computer systems for the new control point¹, and from **Head 703 – Buildings** for the land development cost of the project site.

¹ We will seek funds for the computer systems for the operation of the Customs and Excise Department and the Hong Kong Police Force from the block vote of **Head 710 – Computerisation**.

IMMIGRATION COMPUTER SYSTEMS FOR THE NEW CONTROL POINT

4. A total of eight immigration computer systems, for which we will seek FC's funding approval, are required to support ImmD's operation at the new control point, including three systems supporting the operation of counters and kiosks, and five systems supporting the operation of back offices. Functions of these systems are summarised in the ensuing paragraphs.

Systems supporting the operation of counters and kiosks

5. Three computer systems are required to support the operation of immigration counters and kiosks at the new control point, viz. the Enhanced Immigration Control Automation System (ICAS-2), the Automated Passenger Clearance (APC) and the Automated Vehicle Clearance (AVC) systems.

6. ICAS is an existing computer system which supports the process of immigration clearance at all counters and kiosks, including the implementation of the Easy Travel Scheme under which Hong Kong permanent residents can travel in and out of Hong Kong producing only their Hong Kong identity cards. The optical character recognition readers of the system do away the need to manually input personal data of holders of Hong Kong identity cards or other machine-readable travel documents by an immigration control officer (ICO) during immigration clearance. The system will be enhanced by June 2004 to ICAS-2 to cope with the growth in passenger and vehicular traffic and to support and interface with the APC and AVC systems.

7. The APC and AVC systems, to be rolled out by end 2004 by phases, will support self-service immigration clearance by employing smart card and fingerprint recognition technologies. A passenger using an APC channel will insert his smart identity card into a card reader and place his thumb onto a fingerprint scanner at the APC channel. The APC system will validate the card and verify the fingerprint template

captured by the scanner against the fingerprint template stored in the smart identity card. If the two templates are matched and there is no irregularity, the passenger will be allowed to pass through the channel. Similarly, the AVC system will allow drivers to use their smart identity card and fingerprint for self-service immigration clearance. Upon implementation of APC and AVC systems, we estimate that one ICO will be able to supervise up to five unmanned APC channels or six unmanned AVC kiosks.

Systems supporting the operation of back offices at the new control point

8. We also need to extend five existing computer systems to ImmD's back offices at the new control point. Of these, four are required to facilitate the verification of the authenticity of various types of travel documents, viz. the Electronic Documentation of Information System on Network (EDISON) for verifying foreign travel documents, iPermit System (IPS) for verifying iPermits issued to Taiwan visitors, Smart Identity Card System (SMARTICS) for verifying Hong Kong Identity Cards, and Travel Document Information System (TDIS) for verifying HKSAR passports, Documents of Identity for Visa Purposes, Re-entry Permits and Seaman's Identity Books. The fifth is the Government Office Automation (GOA) System which provides an effective and efficient means for file and mail exchanges in electronic form between the new immigration control point and ImmD headquarters.

FINANCIAL IMPLICATIONS

9. Our indicative estimate is that the installation of immigration computer systems for the new control point, viz. ICAS-2, APC, AVC, EDISON, IPS, SMARTICS, TDIS and GOA systems will require a total non-recurrent expenditure of about \$176.6 million over a four-year period from 2004-05 to 2007-08, broken down as follows –

	\$ million
(a) Hardware, software and communication network	122.1
(b) Implementation services (including contract staff)	26.7
(c) Site preparation	11.3
(d) Consumables	0.4
(e) Contingency	16.1
Total	<hr/> 176.6 <hr/>

The additional recurrent expenditure arising from the project is estimated to be about \$21.7 million per annum.

10. Apart from the current funding proposal for computer systems, the financial implications of the new control point for the HK-SWC include the \$2,173.5 million approved by FC for the design and construction of the control point, and the costs for the land used by the control point. During discussions on the funding proposal for the new control point at the LegCo Security and Transport Panels meeting on 6 May 2003 and the Public Works Subcommittee meeting on 11 June 2003, Members noted that the reclamation works for the land on which the boundary crossing facilities of the two sides would be constructed were expected to be completed by mid-2004. We also reported that the two sides had already agreed on the principle that each side would bear the development and usage costs for the land used by that side, and that we would in due course submit an application for funding to meet these costs to the FC after they had been ascertained with the relevant Mainland authorities.

IMPLEMENTATION PLAN

11. Subject to funding approval by the FC, we plan to adopt a phased implementation programme as follows –

Activity	Timing
Procurement	May 2004 to June 2005
System design and development	January 2005 to July 2005
User acceptance test	May 2005 to November 2005
Cabling, installation and commissioning	August 2005 to November 2005
Roll-out (stage 1)	November 2005 to December 2005
Roll-out (stage 2)	late 2007

12. Under stage 1 of the implementation plan, ImmD will install ICAS-2, APC and AVC systems at 91 passenger counters and 78 vehicle kiosks (including 40 for goods vehicles, 34 for private cars and 4 for coaches) as well as EDISON, IPS, SMARTICS, TDIS and GOA systems at the back offices at the new control point. Stage 1 implementation will be capable of handling the anticipated peak hour traffic upon commissioning of the HK-SWC, i.e. an hourly traffic flow of 150 coaches, 830 private cars and 2 220 goods vehicles per direction.

13. Taking into account the actual traffic flow upon commissioning of the HK-SWC by end 2005 and traffic projection to be refined nearer the time (e.g. the impact arising from the operation of the Sheung Shui to Lok Ma Chau Spur Line by mid-2007), ImmD will proceed to stage 2 implementation by late 2007 by installing ICAS-2 and AVC systems at the remaining vehicle kiosks (up to 24 for goods vehicles and 16 for private cars) at the new control point. With stage 2 implementation, the new control point will be capable of handling the anticipated peak hour traffic up to year 2016, i.e. an hourly traffic flow of 150 coaches, 1 640 private cars and 2 600 goods vehicles per direction.

Security Bureau
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