## ITEM FOR FINANCE COMMITTEE

CAPITAL WORKS RESERVE FUND
HEAD 710 - COMPUTERISATION
Immigration Department
New Subhead "Implementation of Phase III of the Updated Information
Systems Strategy for the Immigration Department"

Members are invited to approve a new commitment of \$336,845,000 for implementing Phase III of the updated Information Systems Strategy for the Immigration Department.

#### **PROBLEM**

The existing Processing Automation System (PAS) of Immigration Department (ImmD) is aging and obsolescent. There is a need to enhance this system and modernise the records management of ImmD to enhance services to the public and improve productivity.

#### **PROPOSAL**

2. The Director of Immigration, with the support of the Secretary for Security and the Secretary for Commerce, Industry and Technology, proposes to create a new commitment of \$336,845,000 to implement Phase III of the updated Information Systems Strategy (ISS-2), which comprises the Application and Investigation Easy System (APPLIES) and the Electronic Records Programme (ERP).

/JUSTIFICATION .....

FCR(2004-05)10 Page 2

#### **JUSTIFICATION**

#### **Progress of ISS-2**

3. In January 2002, the Finance Committee approved funds for the implementation of Phase I of ISS-2 vide FCR(2001-02)54. Since then, projects under Phase I have been progressing smoothly and the major developments are as follows –

- (a) The iPermit System was successfully launched in March 2002. With this internet-based system, the processing of applications for visit permits submitted by residents of Taiwan has been reduced from five working days to only a few minutes.
- (b) The development work of the Information Technology (IT) Infrastructure Upgrade Programme<sup>1</sup> started in January 2002 and will be completed in October 2004 as scheduled.
- (c) The implementation of the Immigration Control Automation System (ICAS) Enhancement Programme<sup>2</sup> is in good progress. It will be rolled out to immigration control points in May 2004 and will be completed in June 2004.
- 4. In January 2003, the Finance Committee approved funds for the implementation of Phase II of ISS-2 vide FCR(2002-03)51, which comprises the Automated Passenger Clearance (APC) System and the Automated Vehicle Clearance (AVC) System<sup>3</sup> Projects. The contract for the implementation of these projects was awarded to the successful tenderer in March 2004. Design and development of the systems have started. It is expected that AVC will be implemented in end 2004 while APC will be rolled out at control points in phases spanning from around end 2004 to mid-2006.
- A list of ISS-2 projects and the updated implementation plan are set out at Encl. 1 Enclosure 1.

/Phase .....

IT Infrastructure Upgrade Programme is to upgrade the IT infrastructure of ImmD, which provides the infrastructural communication network and system architecture underpinning relevant application systems of the Department.

<sup>&</sup>lt;sup>2</sup> ICAS Enhancement Programme is to enhance the existing ICAS which supports the immigration clearance services at control points.

APC & AVC will automate the immigration clearance process to cope with the significant increase in passenger and vehicular traffic at immigration control points.

FCR(2004-05)10 Page 3

#### Phase III of ISS-2

5. Phase III of ISS-2 covers the enhancement of the existing PAS to turn it into the APPLIES and the implementation of the ERP to enable business transactions in ImmD, in particular those related to APPLIES, to be conducted digitally with the availability of electronic records.

#### **Application and Investigation Easy System (Enhancement of PAS)**

- Designed in 1993 and implemented in 1995, PAS supports the processing of applications for visas, permits, travel passes, registration matters relating to births, deaths, marriage and investigation cases, etc. It provides indexing, history tracking and result updating functions for the cases. Assessment of the applications and handling of the investigation cases are dealt with manually on paper files. Decision is made based on the previous records stored in a variety of forms including paper file, microfilm and microfiche. The system is aging and currently running on out-dated hardware and software platforms<sup>4</sup> which are facing the problems of obsolescence and lack of maintenance support. The functionality of the system is limited and provides only auxiliary service to the case officer.
- 7. A feasibility study conducted in 2003 concluded that it is necessary to enhance PAS by a new electronic record-based computer system. The enhanced system, i.e. APPLIES, will enable ImmD to cope with increasing workload and continuous demand for service improvements; achieve productivity improvement; and provide necessary management information for better decision making and resources planning. APPLIES has the following features -
  - (a) case officers assessing applications and handling investigation cases will work in a paperless environment supported by imaging facilities, automatic tracking and case distribution functions, online processing capability as well as expert system technology to facilitate decision making and investigation;
  - (b) the public will be able to submit applications for most services by electronic means and obtain services required with one visit or the minimum number of visits. The processing time can be significantly shortened. The applicants can also check the progress of the applications by electronic means;
  - (c) the system will integrate standalone systems developed through end user computing to provide better system support to process applications; and

/(d) .....

<sup>&</sup>lt;sup>4</sup> Examples of the outdated components are personal computer (PC) with 486 processor, Windows 3.x operating systems and Netware 3.12 file server.

(d) the system will provide enhanced functionalities to investigation officers including information analysis, data dissemination, operation support, detention control and electronic printing of recognisance forms.

#### **Electronic Records Programme**

8. Records in ImmD are maintained in a variety of forms. Some of the records are digitised but the majority of them are held in different forms of hardcopies such as paper files, microfilm and microfiche. The out-dated mode of records maintenance is costly, space-, time- and labour-intensive and has to some extent hampered the efficiency of case processing as well as inhibited new initiatives for service delivery. ERP will put in place the necessary technical architecture to provide for a paperless environment in ImmD through the employment of imaging, workflow and document management technologies. All necessary records supporting the processing of cases and administrative activities will be converted into a digital format either through a conversion exercise beforehand or on the spot upon request. All references to records and handling of administrative matters can be done on-line under a secure and tight control environment. Manual maintenance and distribution of records and files will be phased out. The modernised mode of records management enables a highly efficient workflow-based business process and further enhances productivity and green management.

#### **Benefits**

- 9. The successful implementation of APPLIES and ERP will enable ImmD to achieve the following benefits
  - (a) APPLIES and ERP will enable ImmD to cope with the projected growth in workload generated from a rising number of applications for immigration facilities up to at least 2011-12.
  - (b) The digitisation of relevant records will enable ImmD to move away from a paper-driven and constrained workplace to a highly efficient workflow-based business environment, thereby improving the efficiency of records retrieval.

- (c) The modernised and centralised records system will enable ImmD to shorten the turnaround time for application processing. For example, processing time for application for entry for employment can be shortened by three to five working days whereas the search of births, deaths or marriage records can be reduced to several minutes. Besides, the number of documents that the applicants need to furnish and the number of their visits to ImmD offices can also be reduced. 'One-stop' service will be possible for most types of applications.
- (d) The improvement in resilience and reliability of the system will help ensure that services to the public will not be disrupted. This is important since ImmD serves over 4 000 applicants daily.
- With the introduction of electronic interface facilities in APPLIES, (e) most of the applications including visa applications can be submitted electronically. The public will be able to use most of the services provided by ImmD 24 hours a day and seven days a week by means of e-booking of appointments, e-submission of applications, epayment of service fees and e-communication with ImmD offices through the electronic service delivery channels. The public can also check the progress of applications and obtain information provided by ImmD through electronic means. Hence, in most cases, the public will no longer be required to travel physically to the offices for obtaining the respective services. There will thus be substantial savings in community cost, in terms of time saved which can be used for work or leisure. Besides, the system will embody very user-friendly and bilingual features to facilitate use by the public. This will encourage utilisation and help promote e-Government services.
- (f) The enhanced technology platforms of APPLIES will render better support to various service delivery schemes launched by the Government such as the Admission of Mainland Talents and Professionals and Capital Investment Entrant Schemes, and provide capability to push ahead various new initiatives conducive to the economic growth of the HKSAR, such as paperless visas.
- (g) The improved records management and retrieval of relevant information will enable law-enforcement officers to take more effective measures against unlawful employment, illegal immigration, overstaying, forgeries and human smuggling.

#### **Cost savings**

- 10. The implementation of APPLIES and ERP will bring about annual recurrent savings of \$127,687,000 from 2007-08 onwards, comprising
  - (a) Realisable savings of \$61,412,000 This represents annual savings in staff cost of \$49,788,000; maintenance cost of the existing PAS of \$7,279,000 and consumable costs of \$4,345,000 from the existing PAS and management of the paper-based records. The staff savings which involve 26 posts of immigration service staff and 133 posts of general and common grade staff will be realised progressively from 2006-07 and onwards. The immigration service staff can be redeployed to meet other operational needs and cope with the increasing workload or new service delivery initiatives of ImmD. As for the general and common grade staff, they will also be redeployed within ImmD or to other government departments in the normal manner.
  - (b) Cost avoidance of \$33,549,000 Implementation of APPLIES will enable ImmD to sustain the staff savings of 72 posts resulting from the implementation of the existing PAS and avoid the creation of 22 posts to cope with the growth in workload. Hence, the creation of 94 posts at an annual staff cost of \$27,082,000 can be avoided and without the APPLIES, the figure would have to increase annually in line with the growth in workload. Besides, implementation of ERP will enable ImmD to avoid the creation of 25 posts at an annual staff cost of \$5,992,000 to cope with the increase in workload for handling the operational and administrative records. Furthermore, the cost of \$475,000 for upgrading the existing PAS can be avoided.
  - (c) Notional savings of \$32,726,000 This represents the notional staff cost savings of \$23,732,000 and the notional accommodation cost savings of \$8,994,000 arising from reduction in the office space and record storage area required.
- Encl. 2 11. We set out at Enclosure 2 a detailed breakdown of the savings and cost avoidance.

/Cost .....

## Cost and benefit analysis

12. A cost and benefit analysis of the implementation of Phase III of Encl. 3 ISS-2 is at Enclosure 3. We expect to achieve break-even in 2011-12, i.e. five years after full implementation.

#### FINANCIAL IMPLICATIONS

### Non-recurrent expenditure

13. We estimate that the implementation of Phase III of ISS-2 will require a total non-recurrent expenditure of \$336,845,000 over a three-year period from 2004-05 to 2006-07, broken down as follows –

		2004-05 \$'000	2005-06 \$'000	2006-07 \$'000	Total \$'000
(a)	Hardware and software	-	85,052	20,892	105,944
(b)	Implementation and contract staff services	6,113	57,310	58,434	121,857
(c)	Records conversion	-	21,581	44,804	66,385
(d)	Site preparation	1,807	9,300	6,957	18,064
(e)	Consumables and miscellaneous	-	4,908	2,891	7,799
(f)	Communication lines	-	663	91	754
(g)	Contingency	397	8,941	6,704	16,042
	Total	8,317	187,755	140,773	336,845

- 14. As regards paragraph 13(a), the expenditure of \$105,944,000 is for the acquisition of hardware, software and network equipment including general computer equipment (such as database servers, web and application servers, storage area network, workstations and printers, etc.), record storage and scanning facilities. Software packages for workflow, document and records management will also be required.
- 15. As regards paragraph 13(b), the expenditure of \$121,857,000 is mainly for the acquisition of service from external service providers and contract staff to implement the two projects. Main activities include system analysis and design, programme development and system acceptance / system integration / user acceptance / load tests as well as provision of technical consultancy.
- 16. As regards paragraph 13(c), the expenditure of \$66,385,000 is required for the conversion of the existing paper and microfilm records maintained by ImmD registries to digital format by external service providers.
- 17. As regards paragraph 13(d), the expenditure of \$18,064,000 is for site preparation including the fitting-out costs for the imaging centre and the records conversion centre, installation of data ports and power points, as well as trunking and cabling work at ImmD offices.
- 18. As regards paragraph 13(e), the expenditure of \$7,799,000 is for the acquisition of start up consumables, such as backup tapes, toner cartridges, barcode ribbon and labels, and media optical disk, etc.
- 19. As regards paragraph 13(f), the expenditure of \$754,000 is for the acquisition of communication lines connecting the network between ImmD Headquarters, immigration offices and the resilience centre for data transmission.
- 20. As regards paragraph 13(g), the expenditure of \$16,042,000 represents a 5% contingency on the cost items set out in paragraphs 13(a) to (f).

**Other** .....

#### Other non-recurrent expenditure

21. In addition, the implementation of Phase III of ISS-2 will entail an additional non-recurrent expenditure of \$105,027,000 in respect of the accommodation costs and in-house staff costs for both system development and implementation. The cost breakdown is as follows –

		2004-05 \$'000	2005-06 \$'000	2006-07 \$'000	Total \$'000
(a)	Staff cost	20,755	38,352	33,138	92,245
(b)	Accommodation	1,196	5,835	5,751	12,782
	Total	21,951	44,187	38,889	105,027

- 22. As regards paragraph 21(a), the expenditure of \$92,245,000 represents the staff cost of immigration service grade and IT professional grade staff for setting up project teams to develop and implement the two projects. It comprises 1 146 man-months of immigration service grade staff (involving 49 non-directorate posts) and 325 man-months of IT professional and general grade staff (involving one Chief Systems Manager (D1) and ten non-directorate posts). We set out at Enclosure 4 details of the non-recurrent staffing requirement. The project team will be responsible for monitoring the performance of the external service providers as well as project management and monitoring of the project activities like system analysis and design, development, site preparation, installation support, performing system/user acceptance/load tests, devising new procedures, preparing documentation, arranging and conducting training and implementing the two projects. They will also ensure that implementation of the two projects is compatible and will tie in with the other systems developed under ISS-2 to produce the synergy effect.
- 23. As regards paragraph 21(b), the expenditure of \$12,782,000 is for providing accommodation for the records conversion centre as well as for the project teams for system development, testing and training of staff.

Encl. 4

24. ImmD will absorb the non-recurrent staffing and accommodation requirements set out in paragraphs 22 and 23 from within its own resources.

## **Recurrent expenditure**

25. We estimate that additional recurrent expenditure arising from the two projects is \$40,662,000 per annum as from 2007-08, as set out below –

		2005-06 \$'000	2006-07 \$'000	2007-08 and onwards \$'000
(a)	Hardware and software maintenance	23	15,215	16,203
(b)	On-going support services	26	3,748	13,650
(c)	Communication lines	206	3,623	5,574
(d)	Consumables and miscellaneous	105	1,666	2,242
	Sub-total	360	24,252	37,669
(e)	Staff cost	-	1,097	1,646
(f)	Accommodation	21	504	1,347
	Sub-total	21	1,601	2,993
	Total	381	25,853	40,662

26. As regards paragraph 25(a), the annual expenditure of \$16,203,000 is for hardware and software maintenance as well as software licence fees to support the document and records management, imaging and workflow systems.

Encl. 5

- As regards paragraph 25(b), the annual expenditure of \$13,650,000 is for the maintenance service for the application software of the two projects provided by the external service providers.
- 28. As regards paragraph 25(c), the annual expenditure of \$5,574,000 is for rental of data lines.
- 29. As regards paragraph 25(d), the annual expenditure of \$2,242,000 is for the purchase of consumables such as backup tapes and toner cartridges.
- 30. As regards paragraph 25(e), the annual expenditure of \$1,646,000 represents the recurrent staff cost of 24 man-months of immigration service grade staff (involving one post of Senior Immigration Officer and one post of Immigration Officer). They will be responsible for providing additional on-going support and maintenance of APPLIES. Details of the recurrent staffing requirements are set out at Enclosure 5.
- 31. As regards paragraph 25(f), the annual expenditure of \$1,347,000 is for providing accommodation for the additional staff as well as the external staff of the on-going support services.
- 32. ImmD will absorb all the recurrent expenditure, staffing and accommodation requirements set out in paragraphs 26 to 31 from within its own resources.

#### IMPLEMENTATION PLAN

33. The proposed implementation plan of Phase III of ISS-2 is as follows –

/Activity .....

Activity	Tentative schedule
Tendering	
<ul><li>Main system functions</li><li>Electronic Service Delivery</li></ul>	June 2004 to December 2004 April 2005 to December 2005
System design and development	
<ul><li>Records systems</li><li>Main system functions</li></ul>	January 2005 to May 2006 January 2005 to August 2006
Live Run of Immigration Imaging Centre	May 2006
Records / Data Conversion	October 2005 to December 2006
Site Preparation	November 2004 to August 2006
User Acceptance Test	
<ul><li>Administrative records</li><li>Main system functions</li></ul>	August 2005 to October 2005 February 2006 to November 2006
User Training	
<ul><li>Administrative records</li><li>Main system functions</li></ul>	October 2005 to November 2005 March 2006 to December 2006
System Roll-out	
<ul><li>Administrative records</li><li>Main system functions</li></ul>	November 2005 May 2006 to December 2006

#### **BACKGROUND INFORMATION**

34. The ISS review consultant recommended that ISS-2 be initiated according to a structured programme comprising five phases, viz., Phase 0 to start in 1999-2000, Phase I in 2000-01, Phase II in 2001-02, Phase III in 2002-03 and Phase IV in 2003-04. The following is an outline of the major projects in each phase, with elaboration on their inter-dependence –

- Phase 0 Due to the urgent need to replace the aging system that supports the issue of identity (ID) cards, the HKSAR ID Card Project started in 1999-2000 even before the conclusion of the ISS review consultancy study. After the live-run of the new system on 23 June 2003, a territory-wide ID Card replacement exercise commenced on 18 August 2003. The smart ID card provides an infrastructure for launching APC and AVC under Phase II of ISS-2.
- Phase I This phase consists of mainly the IT Infrastructure Upgrade and ICAS Enhancement Programmes, two time- and mission-critical programmes which will affect ImmD's ability to continue to use IT to provide services to the public. The upgraded infrastructure has laid the foundation for implementation of other major projects under ISS-2, such as APC and AVC, APPLIES and ERP. The Electronic Visit Permit Application System (Pilot) (or known as the iPermit System) is also included in this phase. The iPermit System was rolled out in March 2002.
- **Phase II** APC and AVC, which will employ smart card and biometrics recognition technologies, are the two major projects in this phase. These two projects will be rolled out in phases spanning from end 2004 to 2006.
- **Phase III** This phase mainly comprises APPLIES and ERP and seeks to enhance immigration services to the public, modernise the record keeping systems of ImmD, save manpower and space as well as improve office efficiency and productivity.
- Phase IV This phase covers the Data Warehousing Project, the building of an Intranet for ImmD, the Business Information, the Personnel Support and the Chinese Language Support facilities. Implementation of the Advance Passenger Processing will also be pursued in this phase.

ImmD will regularly review and update ISS-2, including the roll-out programme, in the light of factors such as advancement of technologies and the changing demand of the community.

35. We consulted the Legislative Council Panel on Security on the proposal on 16 March 2004. Members supported the proposal but requested the Administration to provide further information relating to the classification, processing and retention of electronic documents. The information note is being finalised and will be issued shortly.

-----

Security Bureau May 2004

## List of projects and macro implementation plan of the updated Information Systems Strategy for the Immigration Department

Phase	Project No.	Name of Project & Description	Implementation	Status
Phase 0 (1999-2000)	1	HKSAR ID Card <sup>D</sup> To develop and implement the necessary infrastructure and application system for issuing smart ID cards to the citizens and to replace all existing ID cards by smart ID cards in 4 years.	June 2003	Following implementation of the new system on 23 June 2003, a territory-wide ID Card replacement exercise commenced on 18 August 2003. The project is progressing smoothly.
Phase I (2000-01)	2	Business Process Re-engineering E  To streamline and centralise work processes with the aim of significantly improving productivity as well as bringing the greatest benefit from new and improved information systems.	Throughout the implementation of ISS-2	Studies have been and will be conducted to identify business process re-engineering (BPR) opportunities prior to implementation of the related information systems.  BPR studies were conducted in 2000 on applications for extension of stay and visas; verification of right of abode claims; and management of births, deaths and marriage records. Recommendations of the studies became useful input to the FS on the Enhancement of Processing Automation System which was completed in December 2003.  BPR study was conducted from June to September 2002 on procedures on maintenance of microfilm and paper records. As a result, the overall efficiency has been increased and 17 posts were saved.

Notes -

Phase Project No.	Name of Project & Description	Implementation	Status
Phase I 3 (Part I	To introduce a new computer system (called iPermit System) for handling applications and issue visit permits to Taiwan visitors through electronic means. (The experience gleaned from this pilot scheme will be useful for subsequent implementation of Part II of the scheme to cover other categories of visitors.)	March 2002	The iPermit System was successfully rolled out on 18 March 2002.
January 2 is in prog	gration officers handling various adquarters and to the officers manning the clearance counters and kiosks at immigration control points to facilitate their daily work.  Communications Network Investment E  To upgrade the communication network (a core IT infrastructure component shared by all ImmD applications	Network was completed in August 2003.  Stage II- Extending new Infrastructure to control points was completed in February 2004.  Stage III- Extending new Infrastructure to travel documents issue	

Phase	Project No.	Name of Project & Description	Implementation	Status
Phase I (2000-01)	9	Immigration Control Automation System (ICAS) Enhancement Programme ICAS Enhancement D To enhance the existing system to address the aging and obsolescence problems and system limitation; and to raise the technology platform to support and interface with other initiatives of ISS-2 to improve the efficiency and effectiveness of the operation of immigration control points.  Improvement on Information Security D The opportunity will also be taken to improve data security of ICAS.		Funds were approved by the FC on 11 January 2002. Development work has been completed. The new system will be rolled out in May 2004 and completed in June 2004.
	10	Information Systems (IS) Branch Organisation Restructuring  To restructure the IS Branch (comprising 358 staff as at 1 January 2004) and strengthen it with IT professional staff to prepare for the implementation of ISS-2.	Throughout the implementation of ISS-2	With effect from 1 April 2001, the IS Branch of ImmD has been re-organised to integrate 48 IT professional grade staff (from ITSD) to enhance co-ordination and effective implementation of ISS-2.  Divisions of the IS Branch have been re-organised since October 2003 to improve efficiency and productivity. As a result, 13 posts were saved.

Phase	Project No.	Name of Project & Description	Implementation	Status
Phase II (2001-02)	11	Automated Passenger Clearance D  To enable the clearance of passengers securely using smart card and biometrics technologies without the aid of an immigration officer with a view to speeding up passenger flow and optimising staff usage.	End 2004 to Mid-2006	Funds were approved by the FC on 24 January 2003. The contract for the implementation of the systems was awarded to the successful tenderer in March 2004. Roll out of the system will start in around end of 2004 and the whole project will be completed in mid-2006.
	12	Automated Vehicle Clearance D  To automate vehicle clearance at land crossing points through the establishment of self-service kiosks using vehicle identification and biometrics technologies with a view to raising the overall vehicle throughput and reducing traffic congestion.	End 2004	Funds were approved by the FC on 24 January 2003. The contract for the implementation of the systems was awarded to the successful tenderer in March 2004. The system will be rolled out in around end 2004.

Phase	Project No.	Name of Project & Description	Implementation	Status
Bra thes	tie-in with	Capability Improvement Programme IS Process Improvement E A comprehensive project to define the new processes for the restructured organisation to employ, and to train and support staff in their use. To equip the IS Branch with new and improved processes based on good IT industry practices, so management capability.  Project No. 10 (IS management capability.  Quality Measuring E were of regular measurement and target this as the means of driving quality view to improving the effectiveness of the IS Branch. Specifically, the IS Branch will conduct monthly performance review of how well information systems are doing in relation to agreed performance measurements and to publish regular performance reports. This Branch will also establish a system defect reduction plan for its units.  IS Strategy Project Office E To set up a Project Office to conduct periodic reviews of the overall strategy, to adjust the implementation plan, and to obtain funding for successive phases.	Throughout the implementation of ISS-2	
	16	Change Management <sup>E</sup> To define the formal departmental approach to proactively manage change throughout the organisation and to underpin the process re-engineering activities required to deliver the benefits of technology to the business.	Throughout the implementation of ISS-2	Proactive change management has been adopted and will be maintained as an established culture and approach.

Phase	Project No.	Name of Project & Description	Implementation	Status
Phase II (2001-02)	17	Communication E  To communicate to the staff within ImmD to keep them informed of the progress of the implementation of ISS-2 and of the potential effects on business and people. The aim of this programme is to educate and inform all interested parties on a "no surprises" basis to facilitate smooth implementation of ISS-2.	Throughout the implementation of ISS-2	The communication has started and the effort will be sustained. The implementation of the prototype intranet (Project No. 25) in June 2003 is one of the measures.
Im	plementatio	Processing Automation System (PAS) Enhancement December 2003. m (APPLIES)] on of the project is stability of funds.  em to meet the current business ess current deficiencies of the PAS hnology platform to support the ng for more efficient handling of entry permits and extension of stay.  Integration of Supplementary Labour Scheme Information Management System (SIMS) into PAS The SIMS will be integrated with PAS to enable more effective maintenance of information on quotas of the importation of labour schemes.	2006-07	

Phase	Project No.	Name of Project & Description	Implementation	Status
2002-1 200 pro	03. Impl	ogramme  ork to progressively convert a colossal non-electronic records into electronic ormat to support and enable business ring activity and new systems 'he records include visa, travel document applications.		
	21	Imaging <sup>E</sup> To exploit imaging technology and to implement imaging solutions in line with business requirements, namely, to make more information available to greater number of staff at faster speed and to achieve savings in staff and accommodation.	2006-07	
	22	Workflow <sup>E</sup> To employ workflow tools and techniques to automate some business processes, in particular, those repetitive administrative procedures, with a view to improving the office efficiency.		
	23	Document Management <sup>E</sup> To define and implement documentation management standards and practices in ImmD and to centralise document management under a single management responsibility with a view to improving information management and enhancing productivity.		

Phase	Project No.	Name of Project & Description	Implementation	Status
Phase IV (2003-04)	24	Data Warehousing (Management Information System) <sup>D</sup> To provide user-friendly access to information held in ImmD's databases and to make it readily available to our management to aid their decision making, and to assist in the acquisition and deployment of resources more intelligently.	2006-07	FS was completed in February 2004. Implementation of the project is subject to availability of funds.
Phase IV (2003-04)	25	Intranet Implementation D  To install an intranet with increasing range of facilities and information for more speedy and effective communication among some 3 000 staff of ImmD. The project will improve staff productivity and morale.	2006-07	A prototype intranet was implemented in mid-2003. Expansion of the Intranet facilities will be continued.
	26	Electronic Service Delivery Support Deli	2006-07	The Department has been working closely with the Commerce, Industry and Technology Bureau to offer wider and better services to the public via the ESD infrastructure.
	3 (Part II)	Electronic Visa/Permit & Advance Passenger Processing [Full Version] D  To provide alternative means for travellers to Hong Kong to apply for and be issued with permits or visas which may be electronic or in hard copy to be delivered by new and more efficient methods. To utilise data captured at airline checking to allow pre-checking of passengers and to facilitate passenger processing.	2006-07	The Department will join the feasibility study on the Advanced Passenger Information System co-ordinated by the Asia Pacific Economic Cooperation in late 2004.

Phase	Project No.	Name of Project & Description	Implementation	Status
Phase IV (2003-04)	27	Business Information E  To provide secure electronic access to essential documents required by our officers in their day-to-day duties, and to members of the public via ESD.	2006-07	This will be jointly studied with Project No. 26 [Electronic Service Delivery Support].
	28	Chinese Language Support D  To introduce Chinese language processing facilities into ImmD's information systems wherever feasible and affordable.	2006-07	Chinese language facilities have been and will be installed in relevant information systems of ISS-2. The capability for handling simplified Chinese will be addressed.
	29	Personnel Support <sup>E</sup> To provide systems, tools and facilities to support the ongoing training of immigration personnel in both IT and business matters through the personnel training system and to provide a personnel information system in order to manage career progression and handle duty rostering for the service staff.	2006-07	The Personnel Information System was enhanced in mid-August 2003. The system is linked to a newly developed system, Duty Roster System for control points to cater for flexible staff deployment. Computer-based training materials have been uploaded to the intranet. Further enhancement to these related systems will be made.
	30	Additional Long Range Strategic Studies <sup>E</sup> To explore in detail other possible strategic opportunities identified in the ISS Review with a view to bringing about cost saving and cost avoidance.	2006-07	ImmD will conduct these long range studies after implementing the time- and mission-critical initiatives under ISS-2.

D denotes that the project is one of the 12 delivery projects.

E denotes that the project is one of the 18 enabling projects.

Savings Arising from the Implementation of Phase III of the Updated Information Systems Strategy for the Immigration Department

Savings					\$'000				
Savings	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	Total
(A) Realisable savings									
APPLIES	-	-	5,358	32,240	32,391	32,550	32,723	32,907	168,169
ERP	-	-	15,756	29,172	29,172	29,172	29,172	29,172	161,616
Total realisable savings	-	-	21,114	61,412	61,563	61,722	61,895	62,079	329,785
(B) Cost avoidance									
APPLIES	-	-	25,759	27,557	29,638	31,817	34,177	36,678	185,626
ERP	-	970	4,371	5,992	5,992	5,992	5,992	5,992	35,301
Total cost avoidance	-	970	30,130	33,549	35,630	37,809	40,169	42,670	220,927
(C) Notional savings									
APPLIES	-	-	2,037	12,452	12,452	12,452	12,452	12,452	64,297
ERP	-	1,783	12,207	20,274	20,274	20,274	20,274	20,274	115,360
Total notional savings	-	1,783	14,244	32,726	32,726	32,726	32,726	32,726	179,657
Total savings	-	2,753	65,488	127,687	129,919	132,257	134,790	137,475	730,369

# Cost and Benefit Analysis of the Implementation of Phase III of the Updated Information Systems Strategy for the Immigration Department

	Cashflow (\$'000)												
	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	Total				
Cost													
Non-recurrent													
Expenditure	8,317	187,755	140,773	-	-	-	-	-	336,845				
Staff cost	20,755	38,352	33,138	-	-	-	-	-	92,245				
Accommodation	1,196	5,835	5,751	-	-	-	-	-	12,782				
Sub-total	30,268	231,942	179,662	-	-	-	-	-	441,872				
Recurrent													
Expenditure	-	360	24,252	37,669	37,669	37,669	37,669	37,669	212,957				
Staff cost	-	-	1,097	1,646	1,646	1,646	1,646	1,646	9,327				
Accommodation	-	21	504	1,347	1,347	1,347	1,347	1,347	7,260				
Sub-total	-	381	25,853	40,662	40,662	40,662	40,662	40,662	229,544				
Total Cost	30,268	232,323	205,515	40,662	40,662	40,662	40,662	40,662	671,416				
Savings													
Realisable savings	-	-	21,114	61,412	61,563	61,722	61,895	62,079	329,785				
Cost avoidance	-	970	30,130	33,549	35,630	37,809	40,169	42,670	220,927				
Notional savings	-	1,783	14,244	32,726	32,726	32,726	32,726	32,726	179,657				
Total savings	-	2,753	65,488	127,687	129,919	132,257	134,790	137,475	730,369				
Net savings	-30,268	-229,570	-140,027	87,025	89,257	91,595	94,128	96,813	58,953				
Net cumulative savings	-30,268	-259,838	-399,865	-312,840	-223,583	-131,988	-37,860	58,953					

## Estimated Staffing Requirement for Implementation of Phase III of the Updated Information Systems Strategy for the Immigration Department

#### **Non-recurrent Staffing Requirement**

				2004	4-05		2005-06 2006-								6-07	)7			
Rank	Annual Staff Cost \$	Total No.	Ma	n-month		Staff Cost	Total No.	Ма	ın-month		Staff Cost	Total No.	М	an-month			Staff Cost \$		
		of Staff	APPLIES	ERP	Total		of Staff	APPLIES	ERP	Total		of Staff	APPLIES	ERP	Total				
Assistant Principal Immigration Officer	1,213,008	1	10	0	10	1,010,840	1	12	0	12	1,213,008	1	10	0	10		1,010,840		
Chief Immigration Officer	1,051,620	3	17	10	27	2,366,145	3	24	12	36	3,154,860	3	21	9	30		2,629,050		
Senior Immigration Officer	931,572	9	33	30	63	4,890,753	10	82	32	114	8,849,934	10	63	18	81		6,288,111		
Immigration Officer	713,928	15	71	30	101	6,008,894	19	177	32	209	12,434,246	19	162	18	180		10,708,920		
Chief Immigration Assistant	480,720	0	0	0	0	0	8	62	0	62	2,483,720	8	70	0	70		2,804,200		
Senior Immigration Assistant	365,616	0	0	0	0	0	1	0	6	6	182,808	1	0	9	9		274,212		
Immigration Assistant	243,576	2	9	0	9	182,682	7	24	30	54	1,096,092	7	18	45	63		1,278,774		
Executive Officer II	374,592	1	0	10	10	312,160	1	0	8	8	249,728	0	0	0	0		0		
Clerical Assistant	221,412	1	10	0	10	184,510	1	12	0	12	221,412	1	12	0	12		221,412		
Chief Systems Manager	1,824,720	1	2	2	4	608,240	1	3	2	5	760,300	1	2	1	3		456,180		
enior Systems Manager 1,437,360		1	5	5	10	1,197,800	1	7	7	14	1,676,920	1	6	6	12		1,437,360		
Systems Manager	1,090,560	3	12	10	22	1,999,360		24	12	36	3,271,680	3	28	8	36		3,271,680		
Analyst/Programmer I	675,492	3	20	10	30	1,688,730	3	24	12	36	2,026,476	3	28	8	36		2,026,476		
Assistant Computer Operation Manager	731,100	1	5	0	5	304,625	1	12	0	12	731,100	1	12	0	12		731,100		
	Total	41	194	107	301	# 20,754,739	60	463	153	616	# 38,352,284	59	432	122	554	#	33,138,315		

<sup>#</sup> ImmD will absorb the non-recurrent staffing requirements from within its own resources.

Note: The man-month effort of the Chief Systems Manager (D1)(CSM) post required to oversee the implementation of the APPLIES & ERP projects will be absorbed by the existing supernumerary post of CSM extended for 3 years from 1 November 2003 for the ISS-2 project as approved by FC in July 2003 [EC(2003-04)10].

# Estimated Staffing Requirement for Implementation of Phase III of the Updated Information Systems Strategy for the Immigration Department

#### **Recurrent Staffing Requirement**

	Annual Staff Cost \$			2004	-05				2006	5-07		2007-08 and onwards						
Rank		Total Man-month No. of Staff APC AVC Total			Total No. of Staff	Man-month f APPLIES ERP Total			\$	Total No. of Staff			Total	Staff Cost \$				
Senior Immigration Officer	931,572		0	0		0	1	8	0	8	621,048		12	0	12	931,572		
Immigration Officer	713,928	0	0 0 0 0		0	1	8	0	8	475,952	1	12	. 0	12	713,928			
	Total	0	0	0	0	0	2	16	0	16	# 1,097,000	2	24	0	24	# 1,645,500		

<sup>#</sup> ImmD will absorb the recurrent staffing requirements from within its own resources.