Panel on Security of the Legislative Council

Integration and Application of Information Technology in the New Headquarters Building of the Independent Commission Against Corruption

PURPOSE

This paper informs Members of our information technology (IT) strategic development plan and the proposals to implement the first phase of the plan at the new Headquarters (HQs) building.

BACKGROUND

2. The existing IT infrastructure of the Independent Commission Against Corruption (ICAC) is fragmented and scattered in three buildings, viz. Murray Road Car Park Building (MRCPB), Fairmont House and Murray Building. The lack of adequate infrastructural support due to shortage of accommodation and power supply in MRCPB has hindered necessary upgrading and integration of existing IT systems to facilitate further IT development in the ICAC. On 13 June 2003, the Finance Committee approved funding for the construction of a purpose-built HQs building for the ICAC at Java Road, North Point. By putting the Commission under one roof, it is expected that better sharing of facilities and the pooling of administrative support service, including necessary infrastructural support for information technology, can be achieved to enhance work efficiency and communication.

3. Construction works for the new HQs building commenced in December 2004 with a view to completion in mid 2007. To prepare for the move to the new building and to meet its long-term business needs, the ICAC commissioned a consultancy study in April 2004 to map out its IT strategic development plan. The consultant recommended a two-phased IT development plan for the Commission as set out at the **Annex**. This paper deals with the first phase of the plan. For the second phase, we shall undertake feasibility studies to identify the technical options, formulate the implementation plan and determine the costs before seeking further funding.

PROPOSALS

4. With the support of the Government Chief Information Officer, we propose to implement the first phase of the IT strategic development plan which comprises two separate but inter-related projects, viz. the construction of an IT infrastructure and systems migration; and implementation of applications to improve ICAC's corporate information and resource management.

Project 1 - New IT Infrastructure and System Migration

5. We aim to construct in the new HQs building a reliable, secure and scaleable Commission-wide network with the necessary hardware and software capable of meeting the Commission's present and future IT development and business needs and to lay the requisite foundation for integrating the existing systems and implementing the various new application systems to strengthen ICAC's corporate information and resource management. Besides, to enhance the security of our infrastructure and systems, we will build a separate, secure and closed network for our confidential operational systems containing live investigation data, shielding them off completely from external access outside the Operations Department.

6. As revealed in the consultancy study, some of the operating systems, security tools and equipment used in our core systems will become obsolete by 2007. To ensure minimum interruption to our business operation upon removal to the new HQs building, we plan to upgrade or replace the aging systems and equipment to ensure they are ready for use at the same time when the new HQs building is occupied. We will adopt the "reuse as far as possible" principle and will relocate usable and compatible facilities to the new HQs building for continued use.

Project 2 - Improvement of Corporate Information and Resource Management

7. To maximise the benefits of the new infrastructure, we will integrate the different information systems developed at various points in time to enhance internal data-sharing capability. We will enhance corporate information by installing new applications including corporate portal, document management and knowledge management systems. We will also automate and streamline some major office manual processes, workflow and procedures by installing new application systems for financial management, procurement and inventory management, and facility management. As identified in the consultancy study, the integration and installation of new application systems will also bring about opportunities for business process re-engineering (BPR) which will lead to improvements in operational effectiveness of various aspects of the Commission's

work.

BENEFITS

Tangible benefits

8. It is estimated that the successful implementation of the proposed projects will result in realisable recurrent savings of about $4.2 million, which will be ploughed back to cover partly the recurrent costs of the proposed project. The savings include $2.5 million from the recurrent expenditure on hardware, software, consumables and communication lines rental to be replaced or de-commissioned; staff cost of $1.6 million arising from the deletion of two posts of Commission Against Corruption Officer (Middle/Lower) made possible after centralising all the existing systems under one roof; and $0.1 million arising from the reduced use of paper and the rental currently required for hosting one of our application systems at a private data centre.

9. Apart from realisable savings, there will be notional savings of $1.6 million mainly derived from the streamlining of manual processes such as information searching and retrieval, resulting in savings in manual efforts, and rental for file storage space. Furthermore, we anticipate that there will be a cost avoidance of $1 million in respect of additional staff cost which would otherwise be required in order to cope with the increasing workload.

Intangible benefits

10. The following intangible benefits will be achieved –

(a) Counter increasingly sophisticated corruption activities

By enhancing ICAC's IT facilities, investigators will be better equipped to fight against the increasingly sophisticated corruption cases facilitated by advanced IT, thus improving ICAC's overall effectiveness and efficiency in combating corruption.

(b) Facilitate system support and future IT development

The proposed comprehensive, solid, secure and sustainable infrastructure will form the necessary foundation upon which new application modules required to meet ICAC's future operational requirements can be built expeditiously and cost-effectively.

(c) Reinforce IT security

The proposed new IT infrastructure, with enhanced security features, will enable the ICAC to comply readily with the relevant security requirements and to catalyse reliable performance which will in turn promote ICAC as an accountable and effective organisation contributing to Hong Kong as one of the cleanest cities in the world.

(d) Improve overall operational efficiency by implementation of BPR

The implementation of BPR will enable the ICAC to eliminate duplication of efforts in maintaining different systems/databases; enhance information and knowledge management; enhance document management by automation; and streamline administrative processes in respect of procurement, inventory control, financial management and facility management.

(e) Better service quality to clients and the public

Efficient information sharing functions will improve ICAC's effectiveness in responding to requests from other government departments. With enhanced security function, the ICAC can facilitate e-means in reporting corruption and providing information through the Internet. Members of the public can in turn obtain updated corruption-related information and statistics more readily through enhanced contents of ICAC's websites.

FINANCIAL IMPLICATIONS

11. Our indicative estimate is that the implementation of the projects under the first phase of the IT strategic development plan at the new HQs building will require a total non-recurrent expenditure of $144.6 million over a five-year period from 2005-06 to 2009-10, broken down as follows –

		$ million
(a)	Hardware and software	61.9
(b)	Implementation services	59.7
(c)	Site preparation	7.2

		$ million
(d)	Communication lines	1.1
(e)	Start-up consumables	1.6
(f)	Contingency	13.1
	Total :	**144.6**

12. The implementation of the projects will also entail an additional non-recurrent staff cost of about $16.9 million for system development and implementation. With regard to the recurrent expenditure, the total amount required for operating the systems and equipment under the projects is estimated to be $15.9 million per year. After netting off the realisable recurrent savings of $4.2 million, the net amount required will be in the region of $11.7 million per year.

IMPLEMENTATION PROGRAMME

13. We aim to seek funding approval from Finance Committee in late June for the non-recurrent project expenditure under paragraph 11 above. With funding approval, we will start the first phase I of our IT strategic development plan in accordance with the following implementation programme –

Activity	**Timing**
Tendering for Project Management Office	July 2005
Tendering for implementation services	February 2006
Drawing up detailed migration schedule and IT infrastructure implementation plan	September 2006 to December 2006
Procurement of hardware and software	September 2006
Off-site testing	January 2007 to May 2007
On-site installation and testing	May 2007 to October 2007

Activity	Timing
Systems migration	May 2007 to January 2008
Implement applications arising from BPR	February 2008 to November 2009

Independent Commission Against Corruption
May 2005

Annex

IT Strategic Development Plan

Phase	Project No.	Name of Project & Description	Implementation	Status
Phase 1 (2005-09)	1	**Infrastructure Upgrade and System Migration** ➢ To build a comprehensive, solid, secure and sustainable IT infrastructure ➢ To migrate existing systems and applications with necessary technological upgrade and integration ➢ To implement database encryption for confidential systems ➢ To develop a Corporate Portal which provides a personalised environment where information can be aggregated from disparate sources and obtained through a single point access. ➢ To enhance ICAC websites	2005-08	Feasibility study was completed in March 2005. Implementation is subject to funding approval from the Finance Committee.
	2	**Corporate Information and Resource Management System** ➢ To implement a Knowledge Management System to provide a robust IT repository for storing knowledge in a systematic and easily retrievable manner ➢ To implement a Document Management System to transform paper documents into electronic format to enhance storage and facilitate sharing and retrieval ➢ To implement a Financial Management System to enhance the efficiency in maintaining and analysing financial data ➢ To implement a Procurement and Inventory System to streamline and automate the procurement process and inventory control ➢ To implement a Facility Management System to streamline the process of facilities booking	2008-09	Feasibility study was completed in March 2005. Implementation is subject to funding approval from the Finance Committee

Phase	Project No.	Name of Project & Description	Implementation	Status
Phase 2 (2008-12)	1	**Technology upgrading of existing core systems** ➢ To conduct a feasibility study on ICAC's business needs and technical options available for upgrading the following core systems. - Operations Department Information System, the existing functions of which include complaint logging, case management, investigation-related forms generation, intelligence analysis, operations control, Detention Centre administration, prosecution preparation and reporting - Corruption Prevention Department Assignment Management Information System, which is a web-based application that helps management and officers to keep track of the progress and performance of assignment studies and consultation activities. It also functions as an electronic library that stores assignment and consultation reports - Community Relations Department Management Information System, which is a web-based application for managing client information, liaison activities and projects; generating project and activity forecasts and generating bulk mails. It effectively assists ICAC in the conduct of community education work ➢ To upgrade the above core systems to meet the latest business needs of the ICAC	2008-12	Feasibility study will be conducted in 2008. Implementation is subject to availability of funds.