

# 立法會

## *Legislative Council*

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### **Panel on Development**

### **Integration and Application of Information Technology in the New Legislative Council Complex**

#### **PURPOSE**

This paper informs members of a request by The Legislative Council Commission ("the Commission") to create a new commitment of \$99,017,600 for implementing the integration and application of information technology in the new Legislative Council Complex at Tamar, which is supported by the Financial Services and the Treasury Bureau under 2009 Capital Non-works Resources Allocation Exercise.

#### **PROBLEM**

2. The existing information technology ("IT") infrastructure<sup>1</sup> of the Legislative Council ("LegCo") is fragmented and scattered in four buildings. LegCo needs to build an integrated IT infrastructure, migrate existing applications systems, and install new application systems to support the business operation of LegCo upon its relocation to the new LegCo Complex at Tamar.

#### **PROPOSAL AND JUSTIFICATION**

##### **IT Strategic Development Plan**

3. In June 2006, the Finance Committee approved a project estimate of \$5,168.9 million in money-of-the-day prices for the design and construction of the Tamar Development Project ("the Tamar Project"), including Central Government Complex, new LegCo Complex, an open space and associated facilities. Separate funding is required for LegCo to implement integration and application of IT in the new LegCo Complex.

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<sup>1</sup> IT infrastructure refers to servers, data network, internet/intranet, and various IT systems and software applications for maintaining IT services in the new LegCo Complex. These are not covered by the IT infrastructure work (including building and building services works, trunking etc.) in the main contract of the Tamar Project.

4. To prepare for the move to the new LegCo Complex and to meet its long-term business need, the Commission approved in December 2008 the conduct of the Information Systems Strategic Plan ("ISSP") Study by engaging IT specialists directly from the open market who would work under the supervision of the Project Team for the new LegCo Complex ("the Project Team").

5. The ISSP Study is divided into two phases. The main focus of the first phase of the Study, which was completed in mid 2009, concerns the setting up of new IT environment, including the establishment of IT infrastructure and systems migration, and the implementation of applications which are essential to the operation of LegCo business. The recommendations of the working team for ISSP Study on the first phase of the Study were endorsed by the Commission at its meeting on 16 July 2009. The second phase of the Study, which is targeted to complete in January 2010, will concentrate on the overall IT strategic development plan taking into account the new IT infrastructure in the new LegCo Complex, and identify technical options, formulate the implementation plan and draw up the budget requirement for the implementation of these plans. Subject to the approval of the Commission and further funding support, the recommendations of the second phase of the Study would be implemented after the LegCo relocation.

6. Having assessed the current IT environment of LegCo and its readiness for integration or relocation to the new LegCo Complex, the working team for ISSP Study considers that the existing IT infrastructure is aging and inadequate to meet the LegCo's present and future IT development needs. Major problems include fragmented, and scattered IT infrastructure, as well as aging and inadequate application systems.

### **Establishing New IT Infrastructure and Systems Migration**

7. In view of the inadequacy of the current IT infrastructure, the working team for ISSP Study recommends that it is necessary to construct a reliable, secure, scalable and green IT network with necessary hardware and software capable of meeting LegCo's IT development and business needs in the new LegCo Complex. The new infrastructure should have all requisite foundation for integrating the existing systems and implementing various application systems to strengthen LegCo's corporate information and resource management.

8. In addition to the building of a new IT infrastructure in the new LegCo Complex, IT relocation-related works, including system integration and implementation, user acceptance test, relocation approach, migration strategy, multi-site operation management and system change-over, should commence at an early stage. Most of the existing production servers, application systems, desktop computers, peripherals and IT related applications and systems are required to be upgraded or replaced. IT systems which are useable and compatible to the new LegCo Complex would be relocated for continued use as far as possible. As all these servers and applications are mission-critical IT services to LegCo daily business operation, careful and detailed planning is required for the overall IT relocation

exercise so that any unnecessary technical and operational risk, service interruption, downtime, and impact on users could be minimized. Early planning of the relocation plan will also enable better integration with the electronic systems in the new LegCo Complex.

9. As the Tamar Project has proceeded to the Detailed Design Stage and the related works for IT infrastructure and electronic systems will commence soon, the IT implementation and relocation project for the new LegCo Complex should start as early as possible so that the overall IT technical architecture and integration could be fully aligned with the Tamar Project.

### **Implementation of New and Enhanced Application Systems**

10. While most application systems will be relocated to the new LegCo Complex, the working team for ISSP Study has identified some application systems which are essential to the operation of LegCo and should be enhanced or replaced prior to the commissioning of the new LegCo Complex. These application systems include LegCo Events Scheduling System which is the core business application system for the operation of Council meetings, LegCo Website and Webcasting System which is essential for the dissemination of LegCo information to the public, and Transcription System which is the core system for the production of verbatim transcripts for LegCo Council meetings.

### **ANTICIPATED BENEFITS**

11. The successful implementation of the new LegCo IT network infrastructure and enhanced/new application systems will enable LegCo to achieve the following intangible benefits –

- (a) The building of the new LegCo IT network infrastructure will enable LegCo to enhance its overall efficiency, productivity and effectiveness and will cater for future needs;
- (b) The implementation of enhanced/new application systems under one roof will eliminate duplication of efforts in maintaining different systems and databases, enhance information and knowledge management, and streamline administrative processes;
- (c) As a result of system integration and business process automation, notional savings could be derived from elimination of duplicated effort in data entry. Savings in power and paper consumption is also anticipated following the deployment of Green IT in the new LegCo Complex which aims at using computing resources efficiently; and

- (d) Enhanced information sharing functions will facilitate public's understanding of the LegCo business and improve LegCo's effectiveness in responding to requests from the public.

## FINANCIAL IMPLICATIONS

### Non-recurrent Expenditure for New IT Infrastructure and Systems Migration

12. For the building up of a new IT infrastructure and migration of application systems, a total non-recurrent expenditure of \$72,947,600 is required, with breakdowns as follows –

Items	(HK\$)
(a) Procurement of Hardware and Software	50,321,000
(b) IT Implementation and Relocation Services	11,750,000
(c) Business Applications Migration Services	1,300,000
(d) Temporary High-speed Communication Link Services	2,545,000
(e) IT Technical Training	400,000
<b>Sub-total:</b>	66,316,000
(f) Contingency:	6,631,600
<b>Total:</b>	<b>72,947,600</b>

### Non-recurrent Expenditure for New and Enhanced Application Systems

13. A total non-recurrent expenditure of \$26,070,000 is also required for the development and enhancement of application systems which are considered to be essential to the operation of LegCo in the new LegCo Complex. The breakdown of the expenditure is as follows –

Items	(HK\$)
(a) LegCo Events Scheduling System	2,500,000
(b) Website Redevelopment Project	6,500,000
(c) Webcasting System	4,600,000
(d) Electronic Display System	2,900,000
(e) Annunciator System	2,500,000
(f) Information Display System	3,700,000
(g) Digital Transcription System	1,000,000
<b>Sub-total:</b>	23,700,000
(h) Contingency	2,370,000
<b>Total:</b>	<b>26,070,000</b>

Detailed descriptions of these systems are set out in the **Appendix**.

## Recurrent Expenditure

14. The net additional annual recurrent expenditure arising from the project (after deducting the annual recurrent cost for maintaining IT networks and various applications in the current environment) is estimated to be \$7,310,700 with effect from 2012-2013 onwards, with breakdown as follows—

Items	(HK\$)
(a) Hardware and Software Maintenance	2,869,100
(b) Systems support and maintenance services for new and enhanced applications	2,985,600
(c) Annual Communication Lines	1,456,000
<b>Total:</b>	<b>7,310,700</b>

## IMPLEMENTATION PLAN

15. The proposed implementation plan is given below –

Stage	Task	Timing
0	Recruitment for IT manpower resources	December 2009 to January 2010
1	Preparing system design, analysis and integration specification	February to June 2010
2	Drawing up detailed migration schedule and IT relocation and implementation plan	July to October 2010
3	Procurement and delivery of hardware and software	October 2010 to February 2011
4	Off-site testing	January to April 2011
5	On-site installation and testing	May to September 2011
6	System Migration and Relocation	October to December 2011

## BACKGROUND

16. The Project Team has consulted the Office of the Government Chief Information Officer which has no objection to the proposal.

**ADVICE SOUGHT**

17. Members are invited to support the proposal as mentioned in paragraph 1 above.

Legislative Council Secretariat  
26 November 2009

## New and Enhanced Application Systems for New Legislative Council Complex

System	Project Description	Estimated Cost (HK\$M)
LegCo Events Scheduling System	Redevelopment of the LegCo Event Scheduling System is essential for the booking of various new facilities in the new LegCo Complex. Apart from the need to redevelop the system to meet the booking need of increasing number of facilities, the system should also be enhanced to automate the production of various statistical reports to facilitate the evaluation of utilization of these facilities. The enhanced system should also be capable to interface and integrate with various new LegCo business applications, such as the Annunicator System and Electronic Display System for showing daily LegCo business in different locations of the new LegCo Complex.	2.5
Website Redevelopment Project	Apart from general information on LegCo business such as meeting papers and LegCo Calendar, specific business requirements such as online booking of group visits to the new LegCo Complex and online souvenir shop would be considered in the context of the Website Redevelopment Project. Search engine enhancement and optimization for legislative knowledge discovery is one of the main objectives of the redevelopment. Furthermore, enhancement in content management, website security, website user access activity tracking, user survey, live video webcasting, video on demand and streaming media technology deployment etc, would also be explored.	6.5
Webcasting System	The system is for the video and audio webcast of all open meetings and press conferences held in the new LegCo Complex. Various features including simulcast of presentation materials shown at the meeting and sign language interpretation would also be included in the system.	4.6
Electronic Display System	The system includes information kiosks for LegCo users to access information relating to LegCo business.	2.9
Annunicator System	The system includes LCD display panels in various locations to display information such as live meeting broadcast and meeting agenda.	2.5
Information Display System	The system includes LCD monitors installed in Members' Desks in the Chamber and Conference Room A for showing meeting broadcast and internet access.	3.7
Digital Transcription System	The system will provide an online solution for the verbatim transcription for Council meetings to replace the existing analogy audio system. It will also provide a data management function to merge all records together and hence greatly enhance the efficiency of verbatim transcription. Cost savings include abandoning the use of cassette tapes for recording and reducing manpower resources for transporting cassette tapes from meeting venues to transcribers could be achieved.	1.0