

## **“Replacement of library automation system”**

**FCR(2006-07)42**

### **Supplementary Note**

#### **Purpose**

This note addresses the issues raised by the Chairman of the Finance Committee on FCR(2006-07)42 in the pre-meeting for the FC meeting to be held on 9 February 2007.

2. The Chairman has noted the problem experienced by Social Welfare Department (SWD) in implementing Phase II of its departmental Information System Strategy (ISS) and asked the Leisure and Cultural Services Department (LCSD) to have regard to the lesson learnt by SWD in implementing its FCR(2006-07)42 project. The Chairman would also like to know more examples of the use of Radio Frequency Identification (RFID) systems.

#### **SWD’s ISS Phase II**

3. The contract of the Client Information System (CIS) under SWD’s ISS Phase II was terminated in September 2006. The problem in essence is the contractor, after repeated changes of development approach and extension of project completion date by about 10 months to allow for the agreed changes, failed to propose a viable solution acceptable to SWD for delivering the system in accordance with the contract. SWD informed the LegCo Panel on Welfare Services of the issue on 13 November 2006. The information note (LC Paper CB(2)292/06-07(01)) is at Annex.

4. In view of the possibility of litigation, it might not be appropriate to release further details on the implications of the contract termination at this stage.

5. The Office of Government Chief Information Officer (OGCIO) has strengthened the governance of IT projects by introducing a project risk profile assessment and a three-tier governance scheme with effect from 1 April 2006. The project risk profile assessment will review the risks relating to project cost, scale, complexity, technology, etc. at the time of funding approval stage.

6. At the scheduled briefing on the Governance of IT Projects at the LegCo Panel on IT and Broadcasting on 14 May 2007, OGCIO representatives will brief members on the details of IT Governance.

### **Replacement of library automation system**

7. Hong Kong Public Libraries (HKPL) underwent a major upgrade exercise of the library automation system (LAS) from late 1999 to early 2001 when the systems of the two former municipal councils were merged. HKPL had gained very valuable experience from implementing that complex project. User requirements of the replacement project (FCR(2006-07)42) are very clear and will be specified clearly in the tender document. The application software to be acquired is a well-proven software package to be customized according to LCSD requirements. The implementation approach of LAS is different from developing a system from scratch as in the case of SWD.

8. LCSD will have both library users and technical staff participating in the project management teams to be formed for the replacement project. These management teams will monitor the project closely throughout the implementation cycle. A comprehensive change management plan will be in place to manage and approve changes that are raised with proper justifications.

9. The “Replacement of library automation system” project has also undergone the project risk profile assessment when the funding request was processed by OGCIO in September 2006. The implementation plan of the replacement project has taken into account OGCIO's recommendations in the project risk profile assessment relating to the use of off-the-shelf software package, the large number of end users of library services and commitments of LCSD's senior management. The GCIO will also participate in the project steering committee to provide timely management advice and LCSD will make monthly progress report to OGCIO after funding approval by the Finance Committee.

10. With the measures in paragraphs 7 to 9, LCSD is confident that the replacement project will be completed successfully.

## Worldwide implementation of using RFID systems for libraries

11. In addition to the two examples of implemented RFID systems mentioned in the FCai concerned, the following libraries have implemented RFID systems:

Country	Libraries with RFID system implemented
Mainland China	Shenzhen Public Library
Australia	Brisbane City Council Wynnum Library
USA	<u>Public Libraries</u> <ul style="list-style-type: none"><li>• Phoenix Public Library</li><li>• Salt Lake City Public Library</li><li>• Maricopa County Library District</li><li>• Chandler Public Library</li><li>• Michigan – Kent District Library</li></ul> <u>Academic Libraries</u> <ul style="list-style-type: none"><li>• Utah State University Library</li></ul>
The Netherlands	Amsterdam Public Library
Belgium	Antwerp Public Libraries
Germany	Hamburg Public Library
Austria	Vienna Public Library

12. According to the American Library Association, as of late 2005, there were around 300 libraries using RFID systems.

**LEGISLATIVE COUNCIL PANEL ON WELFARE SERVICES**  
**Implementation of Phase II of the Information Systems Strategy of**  
**the Social Welfare Department – Technical Infrastructure and**  
**Client Information System**

**PURPOSE**

This paper informs Members of the termination of the contract of the Client Information System (CIS) under Phase II of the Information Systems Strategy (ISS) of the Social Welfare Department (SWD) and the way forward.

**BACKGROUND**

2. At its meeting held on 4 February 2002, the Legislative Council Panel on Welfare Services supported SWD to implement Phase II of ISS, which covered a Technical Infrastructure (TI) and a CIS. On 12 April 2002, the Finance Committee (FC) approved a commitment of \$241,053,000 for SWD to implement these two projects. Details of the TI and the CIS are set out below:

- (a) **Technical Infrastructure (TI)** – It provides a communication backbone for SWD to deploy department-wide information systems. The infrastructure must be in place for CIS and any other SWD ISS-recommended systems to be fully implemented. It includes desktop computers, communication networks,

communication lines and information processing equipment that allow the future integration of all SWD's ISS systems. It also provides a common office environment for word processing, spreadsheet and e-mail capabilities; and

- (b) **Client Information System (CIS)** – It provides a client-focused, automated case management process, standardising and streamlining case screening, case assignment, needs assessment, care plan development and management, and case closure. The CIS workflow encompasses the core case management process and captures relevant client information to facilitate case management decisions. The system provides instant access to most client information via electronic case records available at any SWD location at any time. It also creates new capabilities for SWD management staff to manage caseloads through electronic distribution, auditing and approval of care plans, and to evaluate the performance and outcomes of services delivered through comprehensive and timely management information.

Further details of the systems are set out in the Annex.

## **PROGRESS**

3. On 11 July 2003, the Government invited proposals for the two systems

through open tendering. After evaluation, the TI contract was awarded to the Unihub Limited (which was renamed as PCCW Solutions Limited (PCCWSL) in January 2006). The CIS contract was awarded to the EDS Electronic Data Systems (Hong Kong) Limited (EDS). Both contracts were effective on 1 June 2004.

#### Technical Infrastructure (TI)

4. The implementation of TI was completed on 30 April 2005. SWD has since been transformed from a paper-based to an electronic-based organisation using information technology to streamline and enhance operations and services. All SWD staff are now provided with tools to perform their tasks more efficiently. They are able to communicate better within SWD and with other government departments/bureaux, non-governmental organizations and members of the public. They also have rapid access to information required through the electronic network.

#### Client Information System (CIS)

5. The Contractor completed the System Analysis and Design (SA&D) stage in September 2004. In the meantime, in the light of changes agreed between EDS and SWD, the completion date of the project was extended from 30 November 2005 to 18 September 2006. However, despite close monitoring by SWD and numerous meetings and discussions between EDS and SWD, EDS, after repeated changes of development approach, failed to propose a viable

solution acceptable to SWD for delivering the CIS in accordance with the contract. Considering that EDS would be unable to deliver the CIS by the scheduled completion date of 18 September 2006 and to avoid further delay in the implementation of the project, the Government concluded that the contract with EDS should be terminated with a view to making arrangements for re-tendering as soon as possible. The contract was formally terminated on 19 September 2006.

## **IMPLICATIONS OF TERMINATION OF CIS CONTRACT**

6. The implementation cost of the CIS contract was US\$3,857,390.72 (about HK\$30,199,511.95). In accordance with the contract, the Government has paid about 20% of the contract price to EDS upon acceptance of the SA&D report. Meanwhile, the Government also obtained from EDS a banker's guarantee of the same amount. SWD is seeking legal advice on recovering the payment made to EDS and related loss and damage (if any) as appropriate. In view of the possibility of litigation, it is not appropriate to release further details on the implications of the contract termination at this stage.

## **WAY FORWARD**

7. We are making preparation for re-tendering the CIS. The technical coverage of the new tender will be largely the same as the previous one except

for inclusion of changes agreed with EDS. We plan to award the contract in the middle of 2007 and complete the implementation of the CIS in early 2009.

8. We will keep Members informed of the progress of the CIS project in due course.

### **ADVICE SOUGHT**

9. Members are invited to note the progress of the implementation of TI and CIS as well as the way forward.

Social Welfare Department  
November 2006

## **Technical Infrastructure and Client Information System for the Social Welfare Department**

### **Technical Infrastructure**

The technical infrastructure (TI) for the Social Welfare Department (SWD) includes building a SWD network, TI management tools, two data centres, common desktops, e-mail, groupware and other office automation tools. It provides the backbone for SWD to deploy department-wide information systems. This infrastructure must be in place in order for other information systems recommended by the SWD's Information Systems Strategy (ISS) to be implemented.

2. The major technical components of TI include workstations and a collection of powerful, centralised computer servers in the data centres. These workstations and servers are connected via networks and managed centrally so that the total system is secure and functions well together.
3. The proposed TI includes approximately 1 980 personal computers (PCs), 110 notebook computers and 780 printers of various types. A Wide Area Network (WAN) will connect 283 SWD offices and the data centres. Within most offices, the workstations and printers will be connected to a Local Area Network (LAN), and these LANs will connect to the WAN.
4. The SWD network will be connected to the Government's Central Internet Gateway in order to provide Internet access. This will allow SWD staff to access the Internet for finding information and communicating with external parties such as non-governmental organisations (NGOs). The SWD network will also be connected to the Government Backbone Network. This connection allows SWD to communicate with other Government departments and bureaux. The SWD network will also integrate with the network of the Computerised Social Security System (CSSS).
5. The data centres house the equipment used to manage the network, monitor the PCs and run the ISS applications. This includes servers, disk

storage, backup media, network and system management consoles, etc. There will be two data centres, one for production and the other for disaster recovery.

6. To ensure that all TI components are operating at maximum capabilities, they are centrally managed and controlled from the TI network and system console. All errors and alert messages received by users are sent to the TI network and system console and are monitored by the helpdesk support staff. This will allow speedier support and timely resolution of problems.

7. With the implementation of TI, SWD will move from a paper-based organisation to an electronic-based organisation that uses information technology to streamline and enhance operations and services. SWD staff will be able to perform their tasks more efficiently with rapid access to needed information and improved communications within SWD and with other Government departments/bureaux and NGOs. Sharing of information for knowledge management will become easier and more effective.

### **Client Information System**

8. The Client Information System (CIS) for SWD is to provide a workflow-based database which collects and shares client data across SWD for operational, management and planning purposes. This will enable SWD to improve the use of its resources and provide better and more effective levels of client service.

9. CIS is made up of three components –

- (a) a secure database to hold client personal data and their service history;
- (b) different types of application functionality to allow different tasks, such as -
  - (i) processing of queries, client intake and referrals;
  - (ii) case opening, allocation of staff to clients, and case management through to case closure;
  - (iii) workload management and case supervision; and

- (iv) generation of management reports from the underlying data;
- (c) a common user interface which provides services for some or all CIS users. This will include electronic mail, access to office applications such as word processing, on-line help and a management information facility.

10. CIS is capable of close integration with other proposed ISS systems, particularly the proposed Service Provider Information System and Management Information System to be implemented in Phase III. It allows links for data exchange with external databases, and will have some integration with the CSSS to enable identification of clients receiving both social security and social work services.

11. CIS automates case management, standardising and streamlining case screening, case assignment, needs assessment, care plan development and management, and case closure. It maintains a service history on clients, including previous contacts with social welfare personnel, problems encountered and services received. By allowing caseworkers to access clients' service history information, CIS provides staff with as much information as possible to facilitate more realistic care planning and intervention. This also helps to raise client satisfaction with SWD service.

12. Client service is improved in many ways with CIS. CIS automates and streamlines the intake process by allowing client demographic data to be collected and recorded once. SWD staff can query CIS and know immediately if the department has served a client, thereby reducing the client's enquiry time and eliminating the need for clients to repeat information they have already provided to the department.

13. CIS generates useful management information for service planning purposes. It allows staff to generate reports on the profile and number of clients served. Another example could be tracking an increasing number of child abuse and neglect cases to allow the department to adequately allocate resources for prevention programmes.