

**For discussion  
on 17 January 2011**

**Legislative Council Panel on Public Service**

**Replacement of the 1823 Call Centre Systems**

**PURPOSE**

This paper seeks Members' support for replacement of obsolete systems in the 1823 Call Centre (1823) to ensure continued efficient and effective services to the public.

**BACKGROUND**

2. 1823 provides round-the-clock one-stop services to answer public enquiries for participating Government departments and to receive complaints for the whole Government. The convenience offered by 1823 improves public interaction with the Government and enables more responsive and productive Government services.

3. When 1823 was first established in July 2001, it handled enquiries and complaints about environmental hazards and cleanliness issues involving five Government departments. Since then services have been enhanced and expanded. In addition to telephone calls, members of the public can now access 1823 services through electronic forms, e-mail, fax, SMS and by post. The number of participating departments has increased covering a wider range of issues cutting across Government's organisational boundaries. As at December 2010, there were 21 participating department as listed at **Annex A**.

4. 1823 also provides public enquiry hotline services for major events and ad hoc incidents apart from its normal service. These hotline services have included those for the Severe Acute Respiratory Syndrome Home Confinement (2003), the World Trade Organization Sixth Ministerial Conference (2005), Avian Flu (2005), the International Telecommunication Union Telecom World Conference (2006), the Olympic and Paralympic Equestrian Events (2008), Sichuan Earthquake (2008), as well as the Legislative Council Election (2008) and By-election (2010).

5. Since 2009, 1823 has taken up the role of receiving complaints against all government bureaux and departments. 1823 ensures that complaint cases are directed to the right authorities for follow-up actions. The bureau or department retains the responsibility to consider and act on the complaint, but 1823 tracks case progress and keeps the complainant informed of action. It has also established a comprehensive network of contacts with departments to assist rapid communication and quick response. Dedicated complaint teams help identify the responsible departments and monitor their follow-up actions.

6. In 2010, 1823 handled around 290 000 public complaints and 94% were assigned to departments for action within three hours. To enhance its capacity in complaint analysis, 1823 has set up a Complaint Intelligence System to conduct in-depth analysis of information collected. The system automates the generation of meaningful statistics to help management monitor performance and assess critical issues. Some of the first uses are to help improve responses to tree management complaints and conduct monthly complaint analysis for the participating departments. The analysis can provide a basis for better resources planning and deployment by departments.

7. In its first full year of operation after launch in July 2001, 1823 received 0.5 million calls. In 2010, 2.93 million telephone calls and 150 000 emails or faxes were received. The first time resolution rate for enquiries was 98% in 2010, compared with 91% in 2002 and an industry standard of 80%. Customer satisfaction has remained consistently high with an average score of 4.2 on a 5-point scale.

## **JUSTIFICATIONS**

### **Need for replacing the existing systems**

8. The operation of 1823 is made possible by a wide range of telephony and computer systems. Key system components are set out in **Annex B**.

9. The existing 1823 systems have been in use for almost ten years. They now face problems and limitations in the following areas –

- (a) Maintenance – the key system components are approaching the end of their serviceable lives. Most of the software has

become obsolete and incapable of effectively meeting current and future operational needs. Due to the lack of spare parts, the existing maintenance contractor has indicated that the support service for some major systems will cease upon the expiry of the existing contract in 2012;

- (b) Technology – the Customer Relationship Management System (CRMS), built on technology developed in 2000, cannot support web-based services and advanced call centre functions. This makes data retrieval, updating and analysis difficult and time-consuming. The software vendor has ceased to provide technical support. This renders the system vulnerable to failure. Moreover, the obsolete client-server technology inhibits the development of an efficient interface for exchanging data with other Government departments; and
- (c) Capacity – with greatly increased annual call volume, the existing systems have been stretched to their maximum capacity to meet demand. To minimise fault occurrences, such as data being missed due to system instability or delay, the basic hardware and software components, including the mail and fax servers, backup system and network switches, need urgent replacement to ensure reliable support to different systems, and to improve operational efficiency and meet new service demands.

10. During the last decade, 1823 has proved its value as an efficient means of direct communication between the Government and the community. To ensure the continued provision of this convenient and effective service to the public, 1823 must replace its systems. Failure to do so will lead to degradation of existing services, hinder extension of service to meet new needs and will result in public dissatisfaction.

### **The proposed replacement**

11. The intended replacement project will involve the following –
- (a) replacement of obsolete components and systems before they cease to be serviceable; and
  - (b) development of an integrated CRMS to support web-based services with enhanced service availability, functions and

workflow. This will also allow efficient interaction and exchange of data with information systems of other Government departments.

## **Benefits**

12. The following benefits are anticipated from the replacement programme –

- (a) continuity for 1823's efficient and effective services to the public;
- (b) use of web-based technology will allow a standard interface to be devised to increase the efficiency of communication and information exchange with Government departments and between 1823 and the public. It will also allow more user-friendly applications to be deployed for the public when lodging their cases to 1823; and
- (c) the increased system capacity will allow for future enhancement and development of 1823 to meet changing operational needs.

## **RISK MANAGEMENT**

13. The call centre systems are critical for 1823's operation. The project management plan will establish key project milestones, identify and assess risks and mitigation measures for each stage, and lay down project governance mechanisms. These will include tracking progress (and variance from milestones); making sure that the design and capacity of the systems are aligned with user requirements; and monitoring expenditure against estimated project cost. Senior officers at directorate level in the Efficiency Unit (EU) will oversee the entire procurement, development and implementation process.

## **FINANCIAL IMPLICATIONS**

### **Non-recurrent Expenditure**

14. The replacement project is estimated to require a total non-recurrent expenditure of \$40 million over a period of three years from 2011-12 to 2013-14. A detailed breakdown is at **Annex C**.

### **Recurrent Expenditure**

15. The estimated recurrent expenditure for the proposed replacement systems is \$4 million in a full year from 2014-15 onwards. Taking into account the savings arising from ending the annual maintenance cost of the existing systems, the additional recurrent expenditure for the proposal is \$0.9 million. The EU will absorb the additional recurrent expenditure from within its existing resources.

## **IMPLEMENTATION PLAN**

16. If approved, the replacement systems will be implemented by October 2012. A detailed implementation plan is at **Annex D**.

## **ADVICE SOUGHT**

17. Subject to Members' views on the proposal, funding approval will be sought from the Finance Committee in February 2011.

Efficiency Unit, Offices of the Chief Secretary for Administration  
and the Financial Secretary  
January 2011

**Government Departments participating in 1823**

1. Agriculture, Fisheries and Conservation Department
2. Architectural Services Department
3. Buildings Department
4. Civil Engineering and Development Department
5. Companies Registry
6. Drainage Services Department
7. Electrical and Mechanical Services Department
8. Food and Environmental Hygiene Department
9. Hongkong Post
10. Highways Department
11. Labour Department
12. Lands Department
13. The Land Registry
14. Leisure and Cultural Services Department
15. Marine Department
16. Office of the Government Chief Information Officer
17. Rating and Valuation Department
18. Social Welfare Department
19. Student Financial Assistance Agency
20. Tobacco Control Office, Department of Health
21. Transport Department

### Functions of Key System Components of 1823

<b>System Component</b>	<b>Function</b>
Private Automatic Branch Exchange	Supports automatic distribution of calls to Customer Service Officers (CSOs)
Interactive Voice Response System	Provides voice and fax on demand for callers to obtain information by self-service
Customer Relationship Management System	Manages the case information, workflow and knowledge base
Case Information System	Provides interface for information exchange with government departments
Voice and Screen Logger	Records telephone conversations for quality assurance
Workforce Management System	Supports work scheduling based on call patterns and skill profiles of CSOs
Infrastructure for data networking and backup (including data network, email servers, fax servers and backup systems)	Supports all of the above applications

### Non-recurrent Expenditure of the Proposed Replacement Project

	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>Total</b>
	<b><u>\$'000</u></b>	<b><u>\$'000</u></b>	<b><u>\$'000</u></b>	<b><u>\$'000</u></b>
(a) Hardware	-	12,000	-	12,000
(b) Software	-	8,500	-	8,500
(c) Implementation service	-	10,000	2,000	12,000
(d) Training for system support staff	-	500	-	500
(e) Site preparation	3,000	-	-	3,000
(f) Contingency <i>(About 10% of the total non-recurrent expenditure. Cash flow in 2012-13 and 2013-14 is indicative.)</i>	-	2,000	2,000	4,000
<b>Total :</b>	<b>3,000</b>	<b>33,000</b>	<b>4,000</b>	<b>40,000</b>

**Implementation Plan for the Proposed Replacement Project**

<b><u>Activity</u></b>	<b><u>Target Completion Date</u></b>
(a) Funding approval	February 2011
(b) Tender preparation	July 2011
(c) Tendering, evaluation and award of contract	December 2011
(d) System analysis and design	March 2012
(e) Equipment delivery, installation and system development	July 2012
(f) User acceptance test and training	September 2012
(g) System live-run	October 2012