For discussion on
11 June 2012

Legislative Council Panel
on Information Technology and Broadcasting

Progress Update on E-Government Development

Purpose

This paper updates Members on the latest progress on e-Government development, and our initiatives to support Bureaux/Departments (B/Ds) to achieve their policy objectives and initiatives through wider and better adoption of information technology (IT)[1].

Background

2.		Under the Digital 21 Strategy, the Government sets out its objective for developing the next generation of public services.	Through automation, integration and re-engineering of processes within and across government departments, we have made good progress to enhance the efficiency and effectiveness of services provided to the public.	This paper reviews the progress of e-Government made last year and introduces some of the related forthcoming major initiatives.

Progress Since Last Reporting

3.		The Government has adopted a citizen-centric mode of public service delivery and utilization of e-Government services has grown

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[1] In this paper, information technology (IT) is used as an extended synonym for information and communications technology (ICT).

significantly. According to a recent internal survey, the overall utilisation of e-Services delivered by B/Ds has increased by more than 60% over that of last year. For example, the visitor count of the Hong Kong Observatory website in 2011 reached 6.2 billion, which is 3.4 times that of 2010. For transactional e-Services, the transaction volume of the mail tracking service of Hongkong Post for 2011 doubled that of 2010. **Annex A** shows the utilisation figures of those most popular e-Services. We conduct annual satisfaction surveys on our GovHK one-stop portal. Around 70% to 80% of respondents said that they liked GovHK over the past few years, representing continuous appreciation of our sustained efforts. GovHK has also been recognised internationally, and was bestowed the Best in Class Award (government category), the highest honour in the Interactive Media Awards 2011, as well as the Outstanding Website Award (government category) in WebAward 2010 and 2011.

4. We have also made progress on various e-Government initiatives. Following the announcement of cloud computing initiatives in the 2011-12 Policy Address, the Office of the Government Chief Information Officer (OGCIO) has established a procurement mechanism for acquiring public cloud services to facilitate B/Ds to acquire commercial offers that best suit their business needs. We have successfully developed a cloud-based virtualised system environment in the Government Central Computer Centre to optimise shared use of resources and achieve a greener environment. We have also completed the e-Procurement programme review and reported to Members in mid-April the forward plan for rolling it out on a government-wide scale. On the reuse of public sector information (PSI), at least 13 mobile applications have been developed by the community using the data sets provided under the pilot scheme and these applications have been so popular that there are up to 700 000 daily downloads of traffic snapshot images, which made a strong case for extending this initiative. Many B/Ds have also made good progress on e-Government development last year. For example, the 24-hour e-Registry portal for electronic company incorporation and business registration developed by the Companies Registry has contributed to the recognition of Hong Kong as one of the

most business friendly jurisdictions in the world.   Further details of the progress are included in **Annex B**.

5.　　　　To address the growing popularity of mobile devices, 15 B/Ds have developed mobile applications and 22 B/Ds have developed mobile websites as other electronic channels to deliver their services to the public. Mobile public services have been delivered by the community through developing mobile applications making use of PSI data sets.   To further improve web accessibility to facilitate persons with disabilities to access online information and services, the Government will enhance its web sites according to a higher level of international guidelines for accessibility by January 2013.

Forthcoming Major Initiatives

Centrally-led Initiatives

Government Data Centre Service Arrangements

6.　　　　We have commissioned a consultancy study to examine the present situation and future needs of data centres in B/Ds, with a view to formulating a blueprint for the long-term development and arrangements of data centre services in the Government.   The study aims to come up with the most optimal arrangements of data centre services in the Government, including outsourcing, adoption of cloud computing, building new government data centres, and consolidation of some of the 25 existing data centres managed by different B/Ds.   We will also examine the case of building a Next Generation Data Centre to address the long-term requirements of hosting services within Government.   To this end, we will formulate a blueprint of data centre service arrangements by the end of this year, catering for growth and more efficient use of energy to support green IT.

New Hosting Infrastructure for E-Government Services

7.　　　　With funding approved by Finance Committee in April 2011,

the OGCIO will continue to develop a new E-Government Infrastructure Services (EGIS) platform for hosting e-Government applications. The new hosting infrastructure will provide additional capacity for about 100 new services, while re-provisioning the resources for 118 existing e-Government services in an energy-efficient manner. Additional capacity for hosting new services will be available progressively from mid-2013 while the whole infrastructure will be built by March 2015.

Development of a Government Cloud Platform

8.   To facilitate more agile and cost-effective delivery of e-Government services, we aim to award the contract for the Government Cloud Platform (GovCloud) in end 2012 and commence the implementation in early 2013. The GovCloud will cover infrastructure services to support the development and hosting of common e-Government services, including electronic information management and electronic procurement services, for shared use by B/Ds. We will launch GovCloud before the end of 2013.

Electronic Information Management (EIM)

9.   The OGCIO promulgated the government-wide EIM strategy and framework to B/Ds in May 2011. It aims at guiding departmental EIM strategy development and driving EIM implementation in B/Ds in a consistent manner to achieve better content, records and knowledge management. We are developing common shared services including collaborative workspace and electronic recordkeeping solution to facilitate adoption by B/Ds. We have already delivered collaborative workspace as a shared service in June and will launch the electronic recordkeeping service in mid-2013. These shared services will ride on GovCloud when it is launched before the end of 2013 to enable expandability to more B/Ds.

Mobile and Accessible Version of the MyGovHK Portal

10.   The number of accounts on MyGovHK, the personalised platform on the Government's one-stop portal, has continued to grow since its launch in December 2010, reaching 62 000 in December 2011

and 94 000 in May 2012.   Apart from enriching the portal's functions, features and information, we will develop a mobile and accessible version of MyGovHK by end 2013.

Mobile Public Services

11.   Apart from individual departments' continued effort to develop more mobile applications, the OGCIO will launch in the second half of 2012 three cross-department mobile applications, namely –

(a)   a government notification application,

(b)   a centralised platform for citizens to download government applications, as well as

(c)   a government event finder,

to enhance Government-to-citizen communications and facilitate citizens to download government mobile applications conveniently and securely.

Value-added Re-use of Public Sector Information

12.   In view of the encouraging response of the PSI pilot scheme launched in March 2011 (which involved real-time traffic data and geo-referenced public facilities data), we will progressively make available more PSI for value-added re-use.   The datasets we plan to make available in the near future include:

(a)   information on approved charitable fund-raising activities kept by the Social Welfare Department, Food and Environmental Hygiene Department and Home Affairs Department;

(b)   weather and climatological data of the Hong Kong Observatory; and

(c)   air pollution indices of the Environmental Protection Department.

Major Departmental Initiatives

Education Bureau

13.	With funding approved by the Finance Committee in April, the Education Bureau (EDB) will redevelop the Education Information System (EdIS) into an integrated computer system on a new IT infrastructure from 2012 to 2016 to enable it to deliver its functions more efficiently and effectively in meeting the education needs in Hong Kong. The new IT infrastructure of EdIS will ensure the continuation of the existing services supported by the system and enhance the capability for future growth and harness improvement opportunities.	The new EdIS will provide a unified platform and central repository of students, teachers and schools information, and support the operational, administrative and management processes of EDB.

Food and Health Bureau

14.	Development of the first stage of the territory-wide patient-oriented Electronic Health Record (eHR) Sharing System is in progress.	In implementing the eHR programme, the Government accords paramount importance to data privacy and system security.	To this end, the Food and Health Bureau (FHB) launched a two-month public consultation on the Legal, Privacy and Security Framework for eHR sharing in December 2011.	Over 110 responses were received and FHB is analysing the views gathered.	As regards the Privacy Impact Assessment (PIA) on the eHR Sharing System, the first phase is in progress for completion by mid-2012.	With the enactment of the relevant legislation in 2014, the eHR Sharing System is planned for rollout in the same year.

Immigration Department

15.	The Immigration Department has been strategically adopting IT to support its dynamic business operations and cater for future service demands.	In September 2010, a structured package of IT programme was mapped out for the next decade on completion of its third Information

Systems Strategy (ISS-3) review. To date, the feasibility study for the first initiative of the programme, namely, the New Information Technology Infrastructure project, has been completed. The project with a commitment of $862 million approved by the Finance Committee in December 2011 is the cornerstone for all initiatives under ISS-3. The new infrastructure will be established by mid-2014.

Social Welfare Department

16.   The Social Welfare Department (SWD) is committed to building a caring community with self-sufficiency, dignity, harmony and happiness for the people of Hong Kong. SWD is replacing the existing Computerised Social Security System (CSSS) which has been used for more than a decade, by a new computer system (CSSS-II) to enable more efficient online support for processing case applications and reviews to better serve its customers. CSSS-II will also allow electronic submission of applications and preliminary checking of eligibility by the public, thus improving the accessibility of social security services. SWD plans to roll out the CSSS-II by three phases from late 2013 to early 2014.

Conclusion

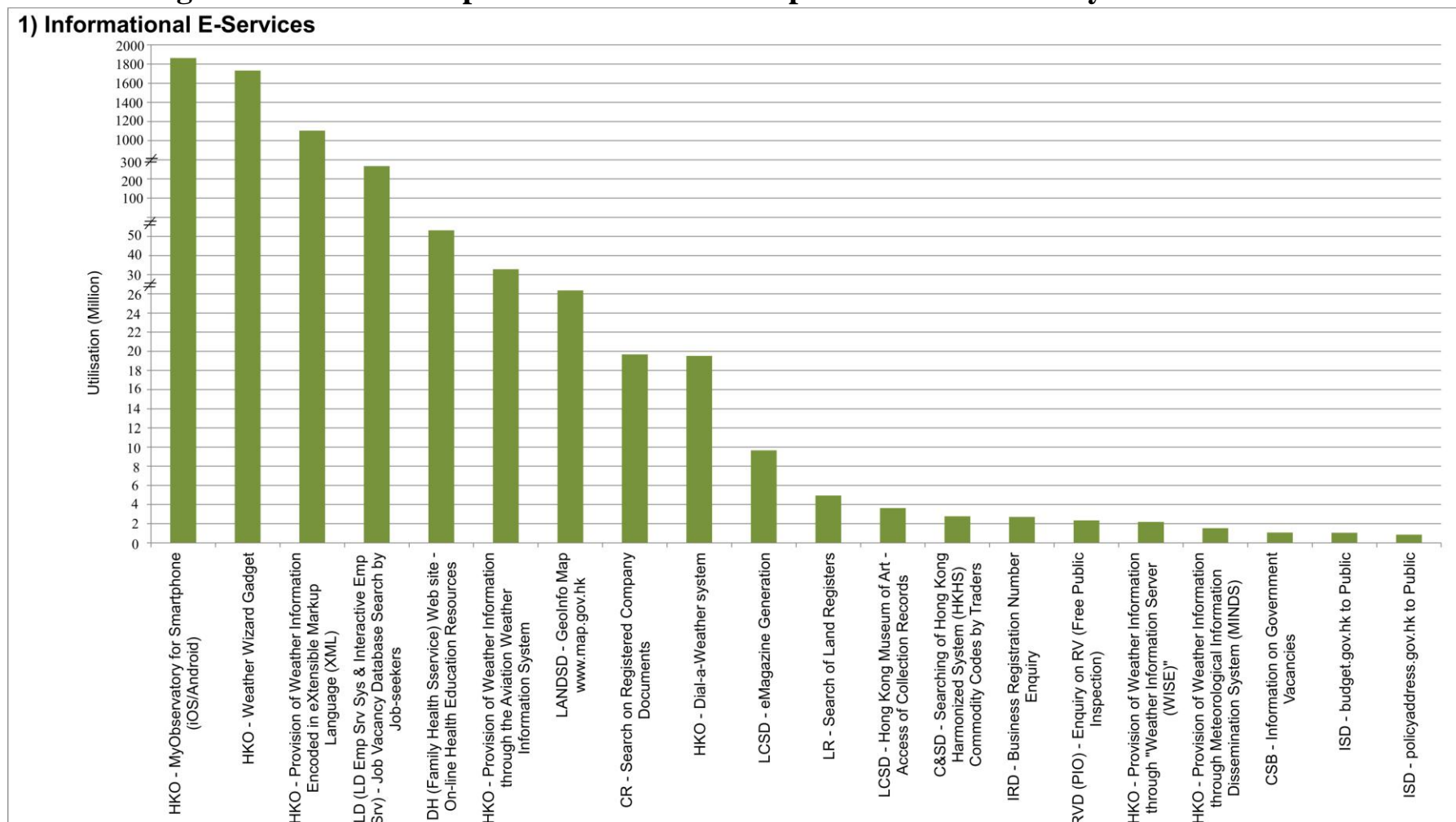17.   We are committed to achieving the objectives defined under the Digital 21 Strategy by transforming and joining up government processes through IT adoption. We will continue to update Members on our progress on an annual basis.

Advice Sought

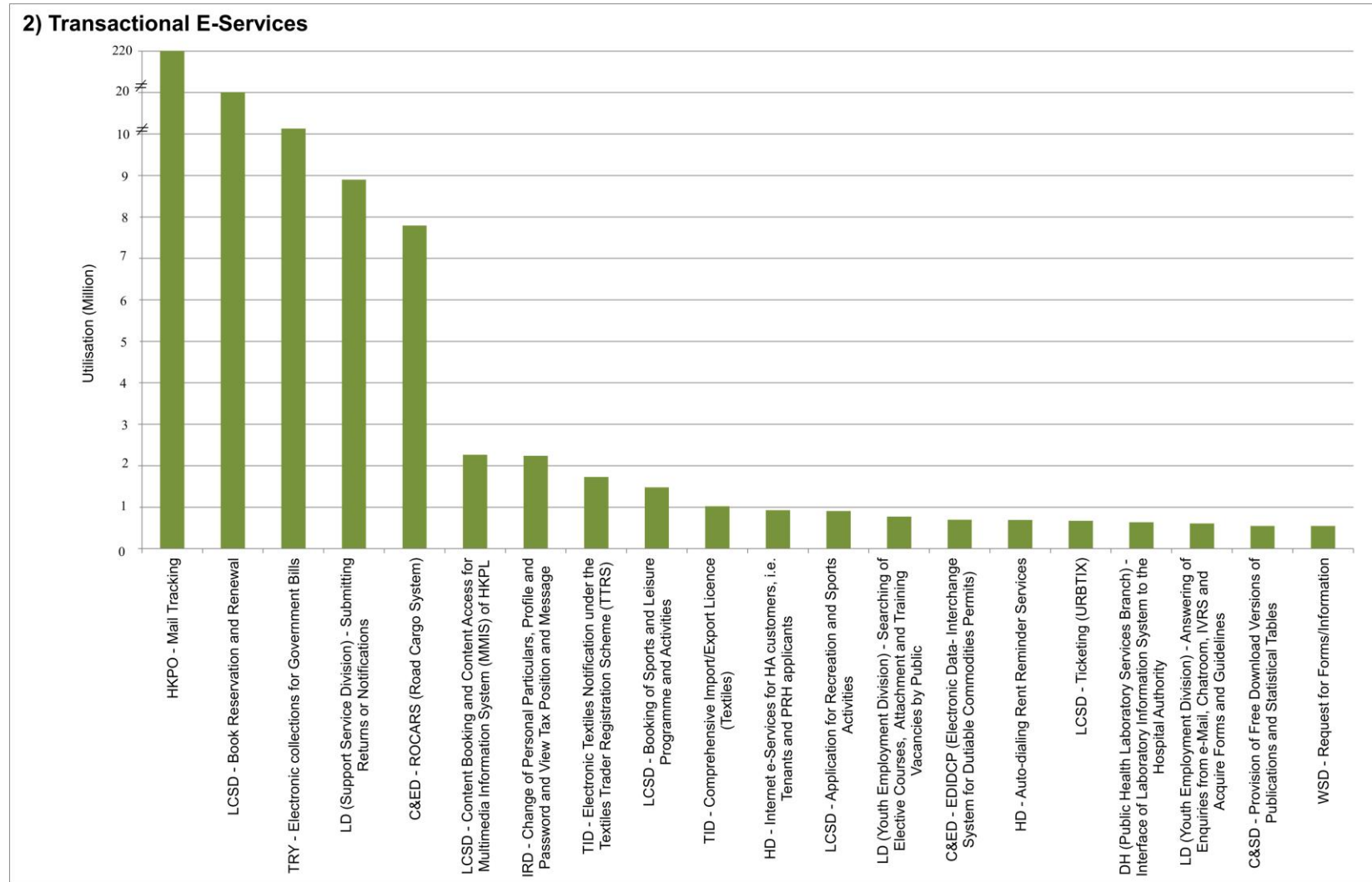18.   Members are invited to note the contents of this paper.

Office of the Government Chief Information Officer
Commerce and Economic Development Bureau
June 2012

Utilisation Figures of the Most Popular E-Services in the period from 1 January to 31 December 2011

1) Informational E-Services

Y-axis: Utilisation (Million) — 0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 30, 40, 50, 100, 200, 300, 1000, 1200, 1400, 1600, 1800, 2000

Categories:
- HKO - MyObservatory for Smartphone (iOS/Android)
- HKO - Weather Wizard Gadget
- HKO - Provision of Weather Information Encoded in eXtensible Markup Language (XML)
- LD (LD Emp Srv Sys & Interactive Emp Srv) - Job Vacancy Database Search by Job-seekers
- DH (Family Health Sservice) Web site - On-line Health Education Resources
- HKO - Provision of Weather Information through the Aviation Weather Information System
- LANDSD - GeoInfo Map www.map.gov.hk
- CR - Search on Registered Company Documents
- HKO - Dial-a-Weather system
- LCSD - eMagazine Generation
- LR - Search of Land Registers
- LCSD - Hong Kong Museum of Art - Access of Collection Records
- C&SD - Searching of Hong Kong Harmonized System (HKHS) Commodity Codes by Traders
- IRD - Business Registration Number Enquiry
- RVD (PIO) - Enquiry on RV (Free Public Inspection)
- HKO - Provision of Weather Information through "Weather Information Server (WISE)"
- HKO - Provision of Weather Information through Meteorological Information Dissemination System (MINDS)
- CSB - Information on Government Vacancies
- ISD - budget.gov.hk to Public
- ISD - policyaddress.gov.hk to Public

Note: "Informational" type of service means its purpose is dissemination of information, which can be static or generated based on selection criteria, e.g. on-line telephone directory.

Utilisation Figures of the Most Popular E-Services in the period from 1 January to 31 December 2011

2) Transactional E-Services

Note: "Transactional" type of service will involve interactive sessions with users, e.g. on-line booking of facilities and filing of returns.

Progress Since Last Reporting

Provision of Central IT Services in Government Based on the Cloud Computing Model

Facilitating B/Ds to acquire Government Public Cloud Services

      To enhance efficiency in central procurement and pave way for the adoption of public cloud services, we have made available a public cloud procurement arrangement through making ready a list of service providers and their corresponding public cloud services in May 2012. This mechanism not only reduces B/Ds' time and effort through adopting standard terms and conditions for making individual procurement for acquiring public cloud services to process non-sensitive applications and data, but also provides more opportunities to the industry, including small and medium sized enterprises, to participate in government procurements without going through lengthy procurement processes.

Architectural framework of hosting services

2.   The Central Computer Centre Virtualised Infrastructure (CCCVI) services were launched in December 2011. CCCVI is a pilot implementation of Infrastructure-as-a-Service (IaaS) (comprising server, storage and network resources) for hosting IT systems in the Central Computer Centre (CCC) of OGCIO. Through consolidation and virtualisation, this pilot aims to optimise the use of CCC resources for achieving better cost-effectiveness and energy efficiency. Flexibility is also provided for scaling up (or down) the required resources for meeting changing demands.

E-Procurement

3.   We completed a review of the Pilot e-Procurement Programme and the anticipated benefits were achieved to different degrees in the pilot implementation. A business case for wider rollout of e-Procurement in the Government was established. To reap the early benefits of

e-Procurement, we will require all B/Ds to adopt the e-Procurement system for purchase of IT products and services through existing bulk purchase contracts. With suitable enhancement to the system, acquisition and installation of hardware and software, and conducting training to users, we expect the necessary system functions can be ready for use by end 2013. For B/Ds that are more ready to roll out the full functions of e-Procurement, we will extend the full system functionality to them starting from 2013. We will also develop e-invoice as an add-on to the e-Procurement system with a view to shortening the delivery time and further speeding up the procure-to-pay process. To achieve economy of scale, the wider rollout will be in the form of a shared service riding on the Government Cloud Platform.

Provision of common facilities for paper-less meetings in B/Ds

4.   The OGCIO has launched a pilot scheme to encourage the use of paper-less meeting solution in Government since August 2009 to facilitate the new way of convening meetings in paper-less and more efficient manner. It also serves to promote a more environmental-friendly means of information sharing by reducing the use of paper. In May 2012, a Communal Paper-less Meeting System was launched and started providing services progressively to B/Ds to enable more B/Ds making use of the services to convene paper-less meetings.

Mobile e-Government Services

5.   The Government has taken steps to extend its e-Services to the mobile platform, with a view to addressing the growing popularity of mobile devices, evolving user habits, as well as citizens' needs on-the-go. Up to May 2012, the Government has developed 34 mobile applications and 34 mobile websites. Using these mobile services, citizens can not only obtain Government information, but also make enquiries and submissions to the Government.

Electronic Submission of Commonly Filed Statutory Returns for Companies

6. Presently, over 90% of the public searches on company information registered with the Companies Registry (CR) are conducted through electronic means. Since the launch of the one-stop service for electronic company incorporation and business registration in March 2011 through a 24-hour e-Registry portal, CR has continued to provide new services under Phase II of the Integrated Companies Registry Information System (ICRIS II) in order to make Hong Kong a better place to do business and enhance its competitiveness. New e-Services, including electronic submission of some commonly filed statutory returns, bulk submission and third party software interface functions as well as electronic registration of agents and e-Monitor of company information were released by stages at the e-Registry portal. Electronic filing of annual returns and an e-Reminder function are expected to be launched in the year.

Customs and Excise Department's Projects

7. Customs and Excise Department (C&ED) completed the Information System Strategy (ISS) Projects in March 2012. The ISS Projects have put in place an integrated IT infrastructure at the new Customs Headquarters Building for effective operations at both the new Headquarters and other offices at various locations. The projects included consolidating data centres; improving capacity and security management for network and server infrastructure; implementing central information repository to facilitate information sharing and efficient management decision; setting up secured communications gateway for exchange of operational data; and establishing a department-wide framework for monitoring and managing C&ED's computing environment. The completion of ISS Projects enhanced the capacity of C&ED in carrying out its daily operations.

Integrated Licensing, Fire Safety and Prosecution

8. Fire Services Department (FSD) has developed a computerised Integrated Licensing, Fire Safety and Prosecution System (LIFIPS) to

enhance the effectiveness of sharing fire protection information among various units and for handling applications relating to licensed premises. Phased rollout of the system commenced in December 2011 and the system will be fully rolled out in mid-2012.   With the implementation of LIFIPS, integrated case-related data in respect of licensing, fire safety and prosecution is transmitted by means of an electronic platform, thereby expediting the processing of applications.   The LIFIPS features a mobile working platform for FSD's personnel to check case-related data and input data directly into their portable computers anytime during fieldwork, saving the time spent on repeated data entry.   The LIFIPS can also process e-submission, thus providing the public with an additional means to submit applications and enhancing effectiveness in processing applications.

Hong Kong Public Libraries Services

9.   Leveraging on the use of advanced technology is one of the ongoing strategies for enhancing library facilities and services with a view to achieving the broader cultural mission of the Hong Kong Public Libraries (HKPL).   The Next Generation Integrated Library System (NGILS) is the core computer system of HKPL providing automated library services to the public, such as searching, reservation, borrowing and renewal of library materials through different platforms.   Leisure and Cultural Services Department completed Phase 1 of the NGILS and pilot phase adopting the Radio Frequency Identification (RFID) technology in six selected branch libraries for the provision of the core services in December 2011, and targeted to launch the Phase 2 in 2013 to provide additional new functions, such as self-service printing, e-payment, virtual reference service, and customer relationship management systems.