

For discussion on
11 May 2009

**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, highlighting the major achievements and the benefits that E-government services have brought to citizens, and our way forward to encourage bureaux and departments (B/Ds) to make the best use of information and communications technology (ICT) to achieve their policy objectives/departmental goals.

Background

2. Under the Digital 21 strategy, the Government set out its objective for developing the next generation of public services. Over time, we aim to:

- Provide people with the services they need, in an efficient, convenient manner, which is as pleasurable and straightforward as dealing with the most customer-friendly organisations in the commercial and voluntary sectors;
- Enable Government policy priorities such as healthcare reform and business facilitation by appropriate and world-leading use of ICT;
- Enhance the internal efficiency of Government, so that it approaches that of the most efficient commercial organisations; and
- Enhance transparency and public engagement through the use of ICT.

3. This paper reports on:

- Achievements since we last briefed Members on the progress of major E-government initiatives in May 2008;
- Initiatives taken by the Office of the Government Chief Information Officer (OGCIO) to build the ICT capabilities that the Government needs to achieve its objectives for the next generation of public services; and
- Centrally-driven and B/Ds' E-government projects under planning or implementation.

Achievements in past year

4. We have made good progress on the implementation of E-government programmes in the past year. Major achievements include:

- The one-stop portal, GovHK, has continued to deliver a high-level of user satisfaction, and has won awards¹ for its content and services compared to E-government sites in other cities and economies;
- The coverage of the GovWiFi service has been extended, and usage has grown strongly;
- Usage of the e-Passport system has grown, and a new channel (self-service kiosks) has been added;
- A pilot express e-Channel has been introduced at the Lo Wu Immigration Control Point; this cuts the time required to pass through the gate by one third;
- A new Property Information Online service has been launched to provide easier access to information held by the Rating and Valuation Department and by the Land Registry;
- A pilot Public Transport Enquiry Service has been launched;
- A pilot Procurement Portal has been launched for suppliers and users in three pilot departments; and
- Four new modules for the Government Financial Management

¹ Awards include first runner-up of "Best Practices e-Government" presented at the World e-Government Mayors Forum 2008 and "WebAward 2008" presented by Web Marketing Association.

Information System, including a world-leading Accrual Accounting module, have been successfully rolled out.

5. Further details on these achievements are included in **Enclosure 1**.

Building Capabilities

6. To bring E-government to the next level, we see a number of areas where OGCIO and the Government IT professionals deployed in B/Ds can do more to inspire and support B/Ds to make best use of ICT to achieve their policy objectives.

Task Force on E-Government Service Delivery

7. As our objective is to provide services that are comparable to the best provided by the private sector, we are doing more to draw on the experience of how organisations outside the Government use IT. We have set up a Task Force on E-Government Service Delivery under the Digital 21 Strategy Advisory Committee (D21SAC) to help formulate suitable objectives, strategies and initiatives. The Task Force comprises leaders of IT from a number of leading Hong Kong enterprises, as well as academics and Government representatives.

Optimising the Use of Delivery Channels of Government Services

8. Leading private sector organisations regularly review the way they use service delivery channels so as to optimise the channel mix and to promote customer usage and satisfaction. To enable the Government to take a similar approach, OGCIO has initiated a study of the effectiveness of the existing channels used for the delivery of Government services. Based on the study, we will identify priority areas for improvement.

Aligning IT Strategies with the Business and Policy Goals of B/Ds

9. Many private sector and voluntary organisations see ICT as a

fundamental consideration when they develop strategies for achieving their organisational goals. We wish to inspire B/Ds to take a similar approach to ICT. B/Ds are currently encouraged to plan their IT requirements in a systematic and strategic manner, through the formulation and subsequent regular updating of departmental information systems strategies and plans. To enhance this further, OGCIO has recently set up an IT Strategy Division which will develop best practice approaches to planning how ICT can best support the delivery of B/D objectives. It will also develop Government-wide IT strategies and identify where shared investment in ICT can help multiple B/Ds to achieve their policy objectives and departmental goals.

Improving Governance of IT Projects

10. Good IT strategic planning has to be complemented by good project implementation. To facilitate better monitoring of IT projects in the Government and assist B/Ds in better management of their IT projects, we have introduced an enhanced governance mechanism for Government IT projects since April 2006. Advice is now given to B/Ds on a range of issues relevant to their projects at the funding stage. The result is that project planning process has become more comprehensive and project risks are identified at an early stage. Through the experience gained in the implementation of the enhanced project governance mechanism, the OGCIO has embarked on a new initiative with a view to designing and implementing new processes, tools and governance arrangements for the entire lifecycle of projects. The new initiative will make further recommendations for B/Ds to better manage IT projects and enhance their ability to deliver business benefits. Moreover, we will provide training to B/Ds with a view to enhancing their ability to identify opportunities to make effective use of IT for business transformation.

Enhancing Security Compliance

11. More sophisticated and diversified E-government applications building on more complex and distributed IT infrastructure has created more concerns on information security. To mitigate security risks, all E-government applications, from the start of the design process, need to adhere to the security requirements stipulated in Government's security regulations and

policies. The OGCIO requires B/Ds to carry out regular security risk assessments and audits and where there are data privacy issues, privacy impact assessment to ensure proper handling of personal data. Security plan will need to be formulated and security measures need to be implemented commensurate with the findings from the respective assessments. We will provide an update on the progress of the multi-pronged approach to enhance information security in the Government in July 2009.

Developing the Professional Workforce

12. A highly qualified IT workforce is pivotal to the successful implementation of projects. To ensure the Government has a sustainable and robust IT workforce, in terms of capacities and capabilities, to develop and deliver its IT strategies, initiatives and programmes, we developed, in mid-2008, a Government IT Skills Framework (GISF) with reference to international best practices. Building on the GISF, we are now designing our future mode of operation (FMO) with the aim to enable the Government IT profession to meet the challenges of tomorrow. The FMOs re-emphasise a number of key operating principles so as to better align the Government IT activities with policy goals, in particular in aligning IT strategy with business and policy objectives, in designing and delivering IT-enabled business change projects that enable timely delivery of policy goals and in assuring the quality of Government IT activities.

Centrally-led Initiatives Under Planning and Implementation

13. To plan for the next wave of E-government service, we have consulted the Task Force on E-Government Service Delivery and critically reviewed the roles that GovHK has to play in the future to bring the greatest benefits to both the users and the B/Ds. To the users, GovHK will deal with most of their needs and quickly direct them to the right place to the rest of their needs. GovHK will treat them as individuals and remember their preferences and make helpful suggestions on the services and information that they might find useful. To the B/Ds, GovHK will provide them with a cost-effective and fast way to improve delivery of services to their customers and to boost usage

of convenient and efficient online channels.

14. With the above roles in mind, we plan to improve the underlying architecture for service delivery to make it easier to enhance the existing online services and shorten the time required to develop new joined-up services. We aim to provide an enhanced user experience for the users.

Future Development of GovHK

15. To continuously enhance the user experience on GovHK and provide users with the services they need in an efficient and convenient manner, we will revamp the look and feel of the portal, and make it easier for the public to use the Change of Address online service and the most commonly used forms.

16. We will shortly begin to develop a personalised interface on GovHK in 2010-11 to better meet the needs of the users. The features under planning include personalised myGovHK accounts to facilitate users to have a choice how they access registered public services; a personalised portal to show Government services and news feeds already subscribed and personalised preferences on the user interface; as well as personalised messaging services to receive government bills, reminders or messages relating to government services. We will adopt a modular approach in implementing the above enhancements and plan to roll them out in 2010.

Common and Shared Services

17. To facilitate B/Ds in rolling out new online services by saving their development efforts, costs and time, we plan to develop more common and shared services for the use of B/Ds. We plan to roll out a number of common and shared services, namely the Geospatial Information Hub and Services, the e-billing services and the identity management service - Multiple Application Registration Service (MARS). With these common and shared services made available, there should be better integration of various Government online services as well as a faster response to changing technologies.

Electronic Information Management

18. IT is also a key enabler in improving Government's internal efficiency. To optimise cost, maximise benefit and reduce risk in information management through wider use of IT, we have adopted a strategic approach to guide B/Ds in implementing Electronic Information Management (EIM). Since B/Ds have different information environments, business requirements and IT capabilities, we are identifying suitable B/Ds to become early adopters of EIM. We target to engage around five B/Ds in mid-2009 to define their departmental EIM strategies, and collate experience gained from the formulation of departmental strategies to develop a framework by 2010 to facilitate the wider EIM implementation in the Government.

19. The adoption of an electronic office to help achieve a reduction in paper consumption through the use of IT is to be applied to the Tamar Central Government Complex (CGC). IT is a key element throughout the design, construction, implementation and even the on-going operation and maintenance of the associated infrastructure and facilities. By making reference to the EIM strategy under development, we will adopt technologies that will enable collaborative working environment in the CGC.

Major Departmental Initiatives Under Planning and Implementation

20. At the departmental level, many B/Ds have already moved towards the citizen-centric mode of public service delivery and the use of electronic channel is gradually becoming more popular (see **Enclosure 2**). In the meantime, some B/Ds are going to implement e-government initiatives to further enhance their public service delivery capability and to support their business goals and policy objectives. Major initiatives of B/Ds include:

- eHealth of Food and Health Bureau;
 - Enhancing public library services by Leisure and Cultural Services Department;
 - Replacing Computerised Social Security System;
 - Information System Strategy projects of Customs and Excise Department;
- and

- IT Support for 2011 Population Census.

Details of the above initiatives are at **Enclosure 3**.

Benefiting the industry

21. We have earmarked \$1,753.9 million in the Capital Works Reserve Funds (CWRF) for carrying out the Government IT programme in 2009-10, and we envisage that the industry will find many new business opportunities (see **Enclosure 4**). We have published on the Digital 21 Strategy website IT projects which are above \$10 million as well as those projects not exceeding \$10 million which are funded under CWRF Head 710 Computerisation Block Allocation². The information will be updated on a regular basis.

Audit Report

22. The Director of Audit has carried out a review of E-government services and reported his conclusions on 22 April 2009. Many of the Director of Audit's recommendations will be addressed by the initiatives described above to enhance the way OGCIO and the Government IT professionals deployed in B/Ds inspire and support B/Ds to make best use of ICT to achieve their policy objectives. We will of course study the recommendations in detail and make further improvements as needed.

Conclusion

23. The Government will continue its efforts to further develop the E-government programme, through transforming and joining-up government processes to provide convenient and user-friendly services to citizens and

² Government IT projects have been published on the Digital 21 Strategy website:
(English: <http://www.info.gov.hk/digital21/eng/catalogue/cata.html>
Chinese: <http://www.info.gov.hk/digital21/chi/catalogue/cata.html>)

businesses. We will continue to update Members regularly on our progress and achievements on an annual basis.

**Office of the Government Chief Information Officer
Commerce and Economic Development Bureau
May 2009**

Major Achievements in the Past Year

GovHK

Since its official launch in 2007, the Government one-stop access portal – GovHK – has met its original goals in providing users with a customer-oriented and user-friendly platform for Government information and online services (see **Annexes 1-A to 1-D**). The customer satisfaction survey conducted in October to December 2008 found that 87% of the respondents liked GovHK and 94% of the respondents would like to use GovHK in the future. In the “World e-Government Mayors Forum 2008”, Hong Kong, out of 86 cities, won the first runner-up of "Best Practices e-Government" (behind Seoul), and our one-stop portal GovHK was ranked first in terms of content and services and second in overall e-governance.

2. With a view to keeping up with the international trends, meeting the growing expectations of the customers and taking heed of the industry views, we are dedicated to continuously enhancing the user experience on GovHK by providing users with the services they need in an efficient and convenient manner.

Government Wi-Fi Programme

3. The Government Wi-Fi (*GovWiFi*) programme has been progressing well. As at the end of March 2009, we have completed installation of Wi-Fi facilities at 302 government premises for providing Internet connection service to citizens. We are planning to extend the service to more premises, making a total of around 380 premises by March 2010.

4. Since its launch in March 2008, the *GovWiFi* programme has supported over 1 million Internet connection sessions. The total number of Internet connections per month has increased from 20 000 in April 2008 to 168 000 in March 2009 (see **Annex 1-E**). We expect this number will continue to grow with the further extension of the programme to cover

additional premises and the increase in take-up of Wi-Fi devices by the public.

e-Passport

5. Since the roll-out of the Electronic Passport System (e-Passport System) by the Immigration Department, further application channels through the Internet and Self-service kiosks were also integrated into the System and successfully implemented in December 2007 and August 2008 respectively. Over 1.2 million Hong Kong Special Administrative Region (HKSAR) e-Passports have been issued. With the support of the e-Passport System, the HKSAR e-Passports have been blended with advanced security features and biometric technologies, and wins global reputation. At present, 137 countries or territories have granted visa-free access or visa-on-arrival to HKSAR passport holders. With the introduction of the e-Passport System, Hong Kong citizens can benefit from a shorter processing lead time in passport application and enjoy more convenience in travel.

Pilot scheme on Express e-Channel at Lo Wu Control Point

6. To further enhance the efficiency of self-service immigration clearance, the Immigration Department has commenced a pilot scheme for the Express e-Channel at the Lo Wu Control Point in early March 2009. All existing users of e-Channel who are aged 18 or above may enrol to use the new service by giving consent to the storage of their personal data in the back-end servers to facilitate subsequent retrieval. The average clearance time has shortened from 12 seconds to 8 seconds as compared with the traditional e-channels. The pilot scheme has received very positive response since its production launch on 3 March 2009. As at 15 April 2009, nearly 312 000 residents have enrolled for using the service and up to 30 000 passenger clearances a day have been processed by the 10 Express e-Channels installed.

Property Information Online

7. To provide one-stop access by the public to reliable and updated property information held by the Government, the Rating and Valuation Department (RVD) and the Land Registry (LR) are embarking on a property

information initiative.

8. In February 2009, RVD launched its new Property Information Online service as the first step for implementing a one-stop service. The new service enables the public to conduct bilingual searches on RVD and LR's address records. About 2.2 million aligned lot and property addresses of the two departments are accessible to the public through RVD's new online platform, which will be expanded to 2.57 million records by the end of 2009. During the first two months of production service, there are about 200 000 aligned address records browsed by public users who can then opt to purchase essential property information such as floor areas, age and permitted occupation purpose of individual property unit. In addition, there are about 650 000 searches made for online display of rateable value of properties. Together with the online service available through the Integrated Registration Information System of LR, the Property Information Online service helps the public to obtain property information from Government easily.

Transport Information System

9. To enable public transport passengers to search for possible routes to a specific destination, Transport Department (TD) has launched a web-based pilot Public Transport Enquiry Service in April 2009. As for motorists, TD is planning to launch a Driving Route Search Service for them in the latter half of 2009. TD has also provided sample Intelligent Road Network data to interested companies of the motor trade industry and the wireless telecommunication industry for them to consider making use of the data to provide enhanced services such as car navigation and fleet management to the public.

Government Electronic Trading Services

10. To promote electronic commerce, improve efficiency and maintain Hong Kong's competitiveness as an international trading centre, the Government has introduced Government Electronic Trading Services (GETS) since 1997. Currently, there are two service providers appointed by the Government for the provision of front-end electronic services to the trading

community for submission of Government-related trade documents to the Government. Their service contracts will end on 31 December 2009. In December 2008, new contracts for the provision of GETS from 2010 to 2016 were awarded to three service providers through an open tender exercise.

11. In the new term of GETS, several improvement measures will be introduced, including addition of new competition measures. On the technical improvements, format of data common in a GETS document, Import Export Declaration, and cargo information in the future Road Cargo System³ will be standardised and data inheritance function between these two documents will be provided in order to maximise the potential of customs facilitation and minimise traders' data input efforts. Besides, IT infrastructure of GETS will be upgraded with a view to improving data portability for traders, maintaining high level system performance in anticipation of future demand, and maximising users' choice of service providers in those transactions involving multiple parties.

Electronic Procurement

12. Since the funding approval by the Finance Committee in 2007, the pilot E-procurement initiatives have been under active development for the pilot departments (namely the OGCIO, the Immigration Department and the Environmental Protection Department). We expect that the E-procurement initiatives will facilitate better sourcing and streamlining the procurement workflow and encourage e-Commerce in the supplier community.

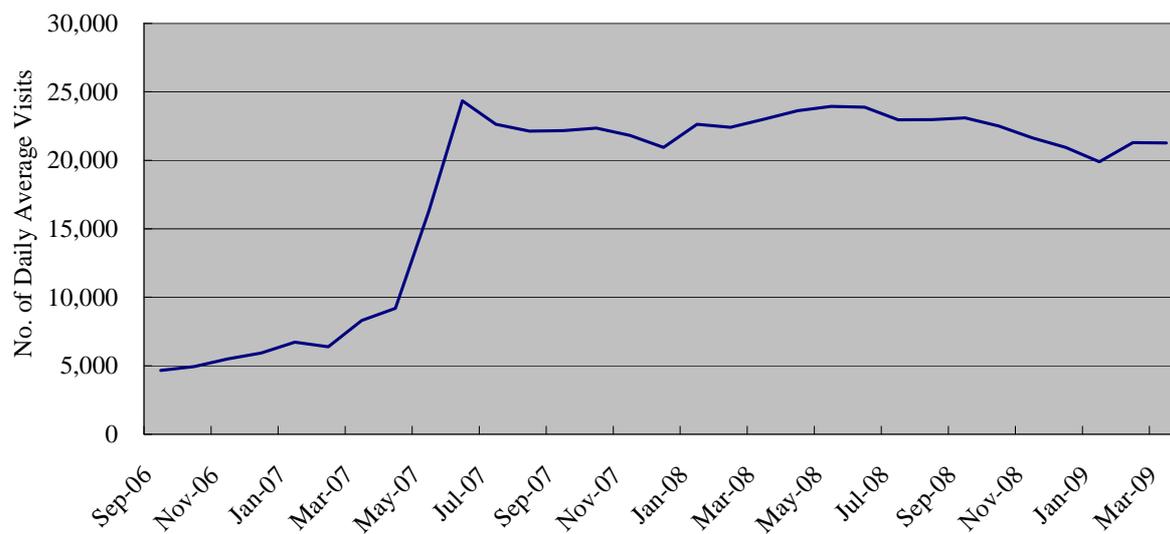
13. In June 2008, the Procurement Portal was launched for suppliers and users in pilot departments to access procurement related information. The remaining initiatives, namely workflow, E-catalogue and E-sourcing will be rolled out progressively from September 2009 to early 2010. After full operation of the pilot E-procurement initiatives, we will conduct a review for considering the way forward.

³ The Road Cargo System (ROCARS) is a system being developed which provides the electronic infrastructure for facilitating customs clearance of road cargoes as well as the movement of transshipment cargoes that involve inter-modal transfer (e.g. from land to air).

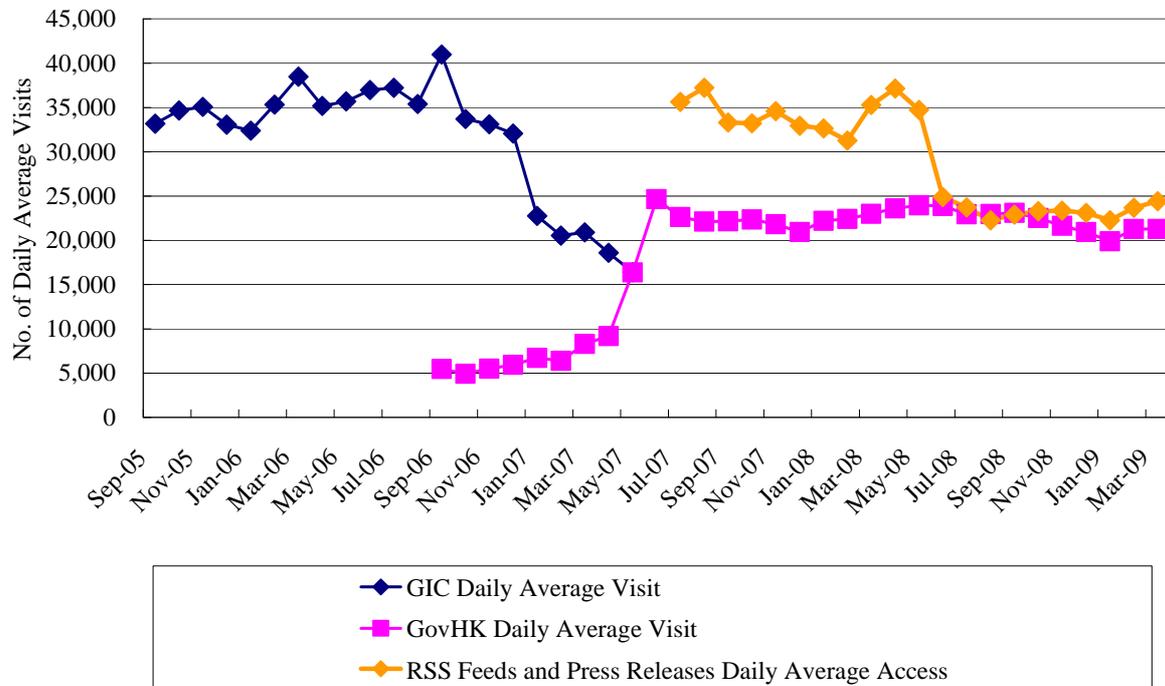
Government Financial Management Information System (GFMIS)

14. The GFMIS, serving some 5 400 users in various B/Ds service-wide, will enable the Government accounting and financial management operations and processes to be conducted in a more efficient and effective manner, support informed decision making, and provide functionalities to meet both the cash-based and accrual-based financial reporting requirements. Following the rollout of Phase 1 covering the General Ledger Module in December 2007, four modules of Phase 2, i.e. Accounts Payable, Purchase Order, Accrual Accounting and Fixed Assets, were implemented on 31 March 2009. The remaining two modules on Revenue Recording and Management and Costing Information Processing are scheduled for rollout in the former part of 2009-10, taking into account the readiness of B/Ds.

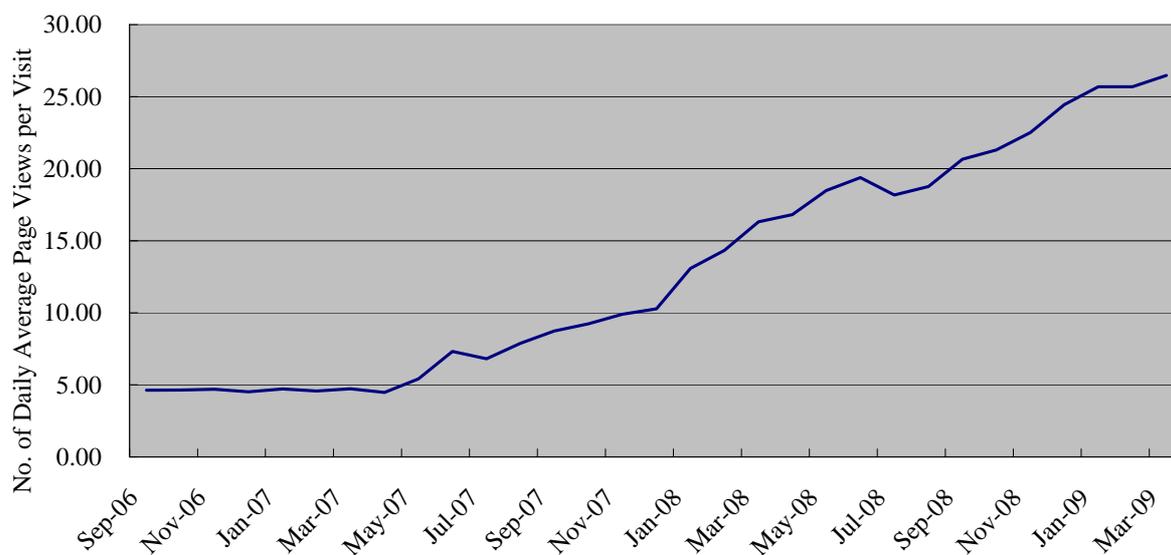
**Trend on Average Daily Visits per Month on GovHK (since soft launch)
from September 2006 to March 2009**



Daily Average Visits of GovHK and RSS cum Press Releases Access from September 2005 to March 2009



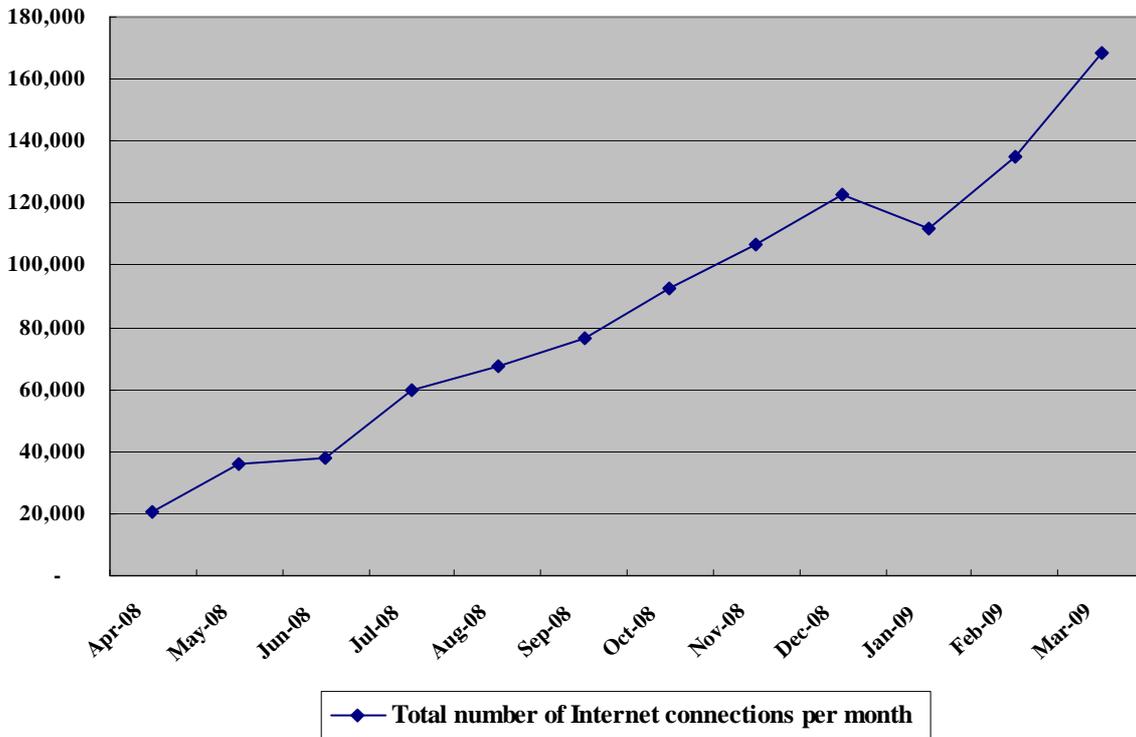
Trend on Average Daily Page Views per Visit per Month on GovHK (since soft launch) from September 2006 to March 2009



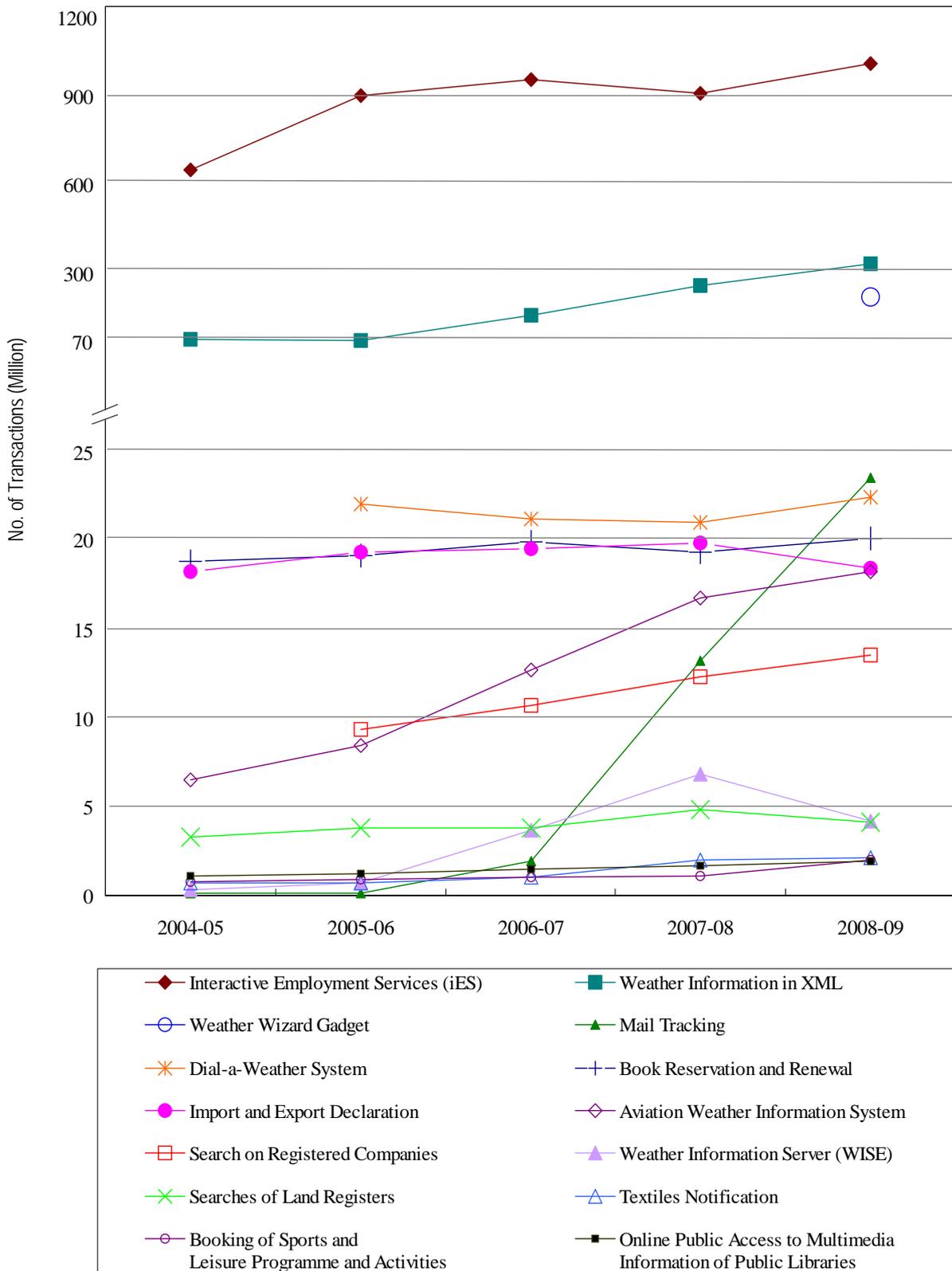
GovHK Customer Satisfaction Survey from 2006 to 2008

	<u>2006</u>	<u>2007</u>	<u>2008</u>
Liked GovHK	83%	87%	87%
Would use GovHK in future	91%	95%	94%

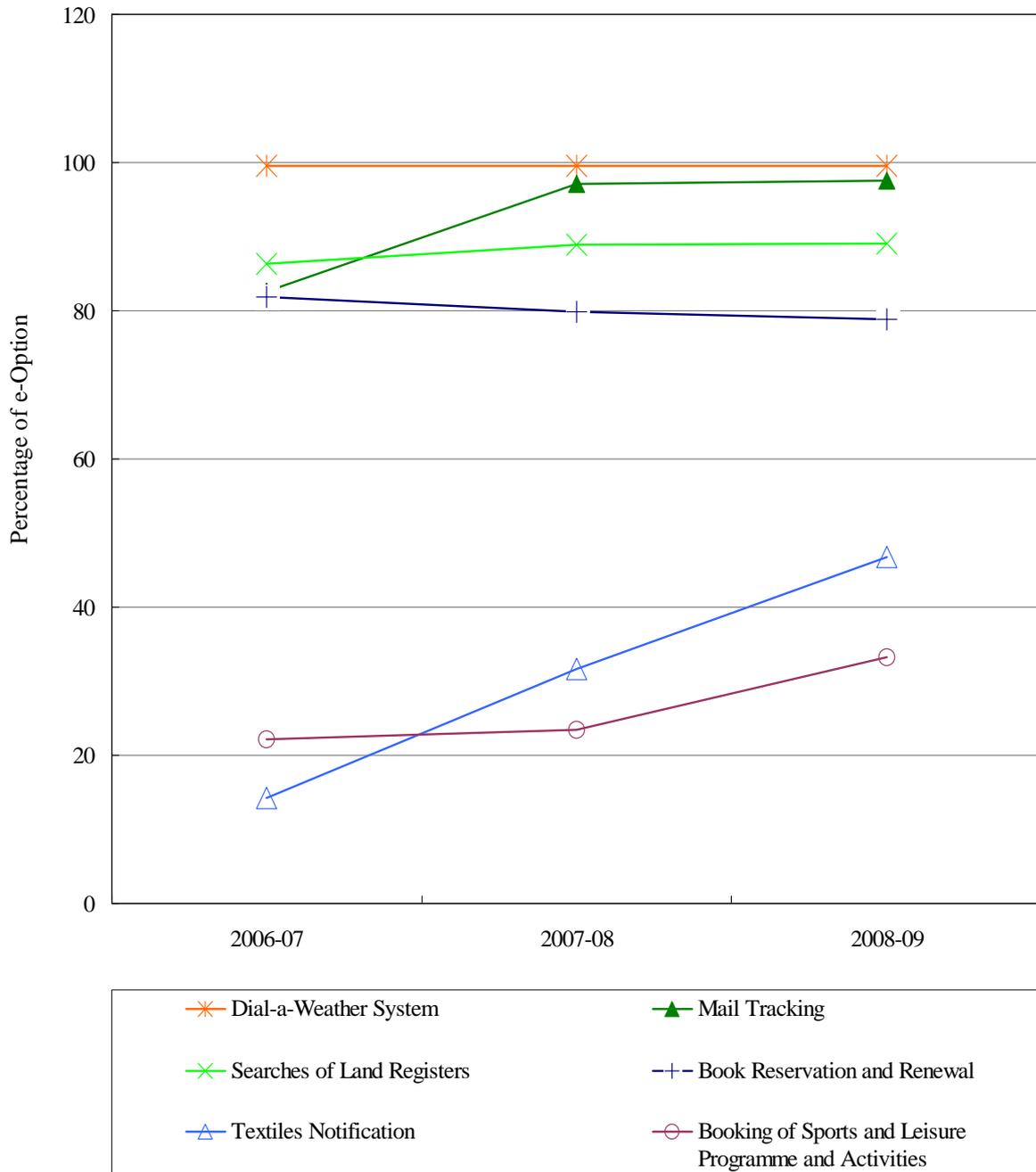
Government Wi-Fi Programme - Total Number of Internet Connections per Month



A. Popular E-Services Usage Statistics (e-transaction volume) from Year 2004-05 to 2008-09



B. Popular E-Services Usage Statistics (e-options over all available options)⁴ from Year 2006-07 to 2008-09



⁴ The popular e-services shown in Chart B are those having both e-option and other service delivery channels in Chart A.

Major Departmental Initiatives Under Planning and Implementation

Electronic health record

A territory-wide, patient-oriented electronic health record (eHR) sharing system is an essential infrastructure to support the Healthcare Reform. The eHR sharing system will provide an information infrastructure for healthcare providers in both the public and private healthcare sectors, with patients' informed consent and proper authorisation for access to the system, to share the eHR of the patient they keep on the patient with other healthcare providers and to retrieve the eHR of the patient shared by other healthcare providers, and by implementing the Healthcare Reform by enabling patient-centred healthcare, enhancing primary care and facilitating the hospital-primary care interface and public-private partnership.

2. A development roadmap for eHR has been devised and validated by an external third-party consultancy. Under the roadmap, the initial target is to have the eHR sharing platform ready by 2013-14 for connection with all public and private hospitals, and to have electronic medical/patient records and other health information systems available in the market for private doctors, clinics and other health service providers to connect to the eHR sharing platform.

3. The Government plans to seek capital funding approval from the Legislative Council Finance Committee for the development of the eHR sharing system in stages, having regard to clear milestones in the overall development roadmap. Specifically, the Food and Health Bureau will proceed to seek capital funding of \$702 million within the current legislative year for the First Stage of the eHR Development Programme that is designed to deliver the initial target and milestones of the roadmap by 2013-14.

Using smart ID card for elderly healthcare voucher

4. The Elderly Health Care Voucher Pilot Scheme was launched on 1

January 2009. As at 15 April 2009, over 2 100 healthcare providers have enrolled, and the Department of Health has handled more than 110 000 voucher claims. To further simplify the procedures and afford greater convenience to elders, the Government will, subject to the technical feasibility, make use of the “card face data function” in the chips of smart Hong Kong Identity Cards for registration and claiming for the use of elderly healthcare voucher.

Enhancing public library services

5. The Leisure and Cultural Services Department is upgrading the existing Multimedia Information System (MMIS) to enhance its public library services. It will extend the MMIS services to all branch libraries, lengthen the MMIS Internet services round-the-clock and make the MMIS accessible through personal mobile devices. The new system will be a gateway for accessing the digitised documents and audio/video materials of libraries as well as multimedia resources of other digital information archives. It will also provide better customer services so that patrons can personalise webpages to facilitate their access to the MMIS, obtain the latest library news of interest and make reservation on audio/video booths in addition to MMIS content and workstations. Moreover, it will strengthen the readiness for future development, and improve the cost effectiveness of organising library events and other library operations. The new system is planned for operation in 2012-13.

Replacing Computerised Social Security System

6. To further improve the operation and administration of the social security schemes, the Social Welfare Department is replacing the existing Computerised Social Security System which was launched in 2000. The new system will provide operationally integrated and new functionalities to various business sections with a view to improving efficiency in investigation, assessment, authorisation of payment and monitoring of anomalies. It will also deliver e-services through the Internet to improve the accessibility of social security services so as to enhance convenience to customers. With a more flexible architecture, the new system will enhance the efficiency of the business

units in supporting the implementation of new policy initiatives. The replacement is planned for completion in phases from 2011 to 2012.

Information System Strategy projects of the Customs and Excise Department

7. To cope with its existing operational needs and future developments, the Customs and Excise Department (C&ED) has formulated a strategic implementation plan by implementing five Information Strategy System projects from 2009 onwards. A new, integrated and centralised IT infrastructure will be put in place and will tie-in with the completion of the new Headquarters in 2010. In addition, C&ED will replace the Air Cargo Clearance System by 2010 to help sustain a speedy and reliable customs clearance service for air cargoes and would contribute towards upholding Hong Kong's position as a regional aviation and trading hub.

IT support for 2011 population census

8. The Census and Statistics Department (C&SD) will conduct a population census in Hong Kong in 2011. It is a large-scale and complex operation involving the recruitment and training of some 20 000 temporary field workers; the enumeration of some 2.4 million households during the 45-day data collection period from 19 June to 2 August 2011; the processing of the completed questionnaires within a short period of time; and the dissemination of results in stages in 2012 and 2013. Different from previous population censuses which collected data basically by face-to-face interviews, a new multi-modal approach integrating “face-to-face interviewing”, e-reporting on the Internet and postal return will be introduced. A new computer system integrating the returns collected from different modes will be used to support this new multi-modal data collection approach.

Approved IT Projects Outsourced⁵

	2007-08 (Actual)	2008-09 (Revised estimate)	2009-10 (Estimate)
Value of Work Outsourced (\$ million)	1,010.6 out of	1,046.9 out of	1,169.3 out of
Value of Work Undertaken (\$ million)	1,085.7 (93.1%)	1,082.0 (96.8%)	1,753.9 (66.7%)

⁵ Value of work undertaken is based on allocation of CWRF Head 710 on Computerisation. Apart from this, the Government spending on IT investment also consists of recurrent IT expenditure including staff cost as well as non-recurrent cost for projects under other funding heads (e.g. Head 708 on Capital Subventions and Major Systems and Equipment, Subhead 603 on Plants, vehicles and equipment and Subhead 700 on General non-recurrent), computerisation in schools and IT expenditure of Housing Authority/Housing Department and Hospital Authority.