**For discussion on
14 February 2011**

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**Legislative Council Panel on
Information Technology and Broadcasting**

**Update on the Operation and Forward Planning of
the Hongkong Post Certification Authority**

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Purpose

This paper updates Members on the status of public certification services provided through the Hongkong Post Certification Authority (HKPCA) and arrangements for the continuation of its services.

Background

2. Enacted in January 2000, the Electronic Transactions Ordinance (Cap.553) (ETO) provides a statutory framework for the conduct of electronic transactions by according electronic records and digital signatures the same legal status as that of their paper-based counterparts. Under the ETO, Postmaster General is a recognised Certification Authority (CA)[1] and the HKPCA has been issuing digital certificates under the brand name of "e-Cert" to individuals and organisations in Hong Kong since January 2000.

3. Digital certificates enable secure and trusted communication and ensure the confidentiality of electronic transactions conducted over networks. They also enable the user to generate and affix digital signatures which ensure non-repudiation of an electronic transaction, and the authenticity and integrity of the information transmitted in the transaction. Digital certificates are extensively used in some Government-to-Business transactions, such as Government Electronic

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[1] Apart from designating the Postmaster General as a recognised CA, the ETO also established a voluntary recognition scheme for CAs that issue digital certificates whereby CAs are free to apply for recognition from the Government. At present, Digi-Sign Certification Services Limited is a CA granted recognition by the Government Chief Information Officer.

Trading Services (GETS[2]) and Road Cargo System (ROCARS[3]). They also support a wide range of e-Government services, such as e-procurement, business registration, permit and licence applications, etc. In the private sector, some licensed banks accept digital certificates recognised under the ETO in authenticating certain financial transactions.

4.   Following a business review conducted in 2005, the Government decided to outsource the operation of HKPCA with a view to generating a self-financing CA operation. Selected through public tender, the outsourcing contract was awarded to E-Mice Solutions (HK) Limited for four years from 1 April 2007 to 31 March 2011. Members were updated on the results of the tendering exercise vide LC Paper No. CB(1)229/06-07(01) entitled "Outsourcing the Operation of HKPCA". The contract, renewed for one year in accordance with contract provisions, will expire on 31 March 2012.

5.   Under the outsourcing arrangement, the service operator of the HKPCA is responsible for the full operating cost in providing the e-Cert services, whilst it is entitled to receive subscription and renewal fees from e-Cert subscribers. It may also provide value-added services riding on e-Cert under its own brand name for generating a self-financing CA operation. These value-added services, however, are not part of the outsourcing contract. While the e-Cert services are operated by the service operator, the Postmaster General remains as the recognised CA under the ETO.

Operation of HKPCA

6.   Since commencement of the outsourcing contract in April 2007, the service operator has rolled out a number of value-added services to promote the adoption of e-Cert in education and financial services sectors respectively. Its successful inclusion of the root certificate of HKPCA in common web browsers and the provision of more portable devices such as

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[2]   GETS refers to the electronic submission and processing of six official trade-related documents, including import and export declaration, certificate of origin, production notification, dutiable commodities permit, cargo manifest (excluding road mode), and textiles notifications under the Textiles Trade Registration Scheme.

[3]   ROCARS refers to the electronic submission and processing of advance cargo information for customs clearance of road cargoes.

SIM-card and USB-drive as the storage and access media of e-Cert have also enhanced its user-friendliness. As at December 2010, the number of valid recognised e-Cert remained at around 55 000.

7. HKPCA has been meeting service pledges to the public in delivering e-Cert services. During the contract period, the Government monitors the performance of the service operator in operating the services and makes periodic assessments by independent assessors to ensure that the e-Cert services comply with the ETO, the Code of Practice for Recognised CAs, the Personal Data (Privacy) Ordinance (Cap. 486), and Government security rules and regulations.

Arrangement for the Continuation of HKPCA

Continued Need for HKPCA Services

8. With continued increase in on-line transactions, growing concern on Internet security and the need to protect the privacy and integrity of electronic data and transactions, the provision of a secure and trusted environment through the continued operation of HKPCA for the conduct of electronic transactions is necessary. Internationally, although digital certification services remain a niche market, the underlying technology base is such that it is still considered as an effective measure to augment high security electronic transactions. As a public certification authority, the continuation of HKPCA is also required to cater for the unforeseen eventuality that non-government CAs recognised under the voluntary recognition scheme provided by the ETO give up their recognition status.

9. In terms of demand for digital certification services, the Government is a major user of HKPCA services. Apart from those mentioned in paragraph 3 above, bureaux and departments are subscribing to about 17 500 organisational e-Certs for use in handling confidential e-mail over the Government internal network. Moreover, some new initiatives on the adoption of digital certificates are being considered by Government departments and statutory bodies such as Hong Kong Police Force and Hospital Authority. The continuation of HKPCA would facilitate the development of e-Government services and e-transactions in

general that require a high level of security. The Government will continue to ensure that adequate security measures are in place to protect personal data.

Expression of Interest

10.　　As the services of the existing contractor will expire on 31 March 2012, the Government conducted an expression of interest exercise in October 2010 to gauge market interest in operating the HKPCA. Positive responses were received, showing that there is interest in operating the HKPCA.

Way Forward

11.　　In view of the continued need for public, digital certification services and positive responses from the expression of interest exercise mentioned in paragraph 10 above, the Government will select an outsourcing contractor to operate HKPCA through public tender.　We aim at issuing the tender invitation in mid 2011, with a view to awarding a new outsourcing contract before the expiry of the current one on 31 March 2012.

12.　　We would also take this opportunity to review the contract terms so as to encourage the successful contractor to devise measures to promote the wider use of e-Certs among businesses and individuals.

Advice Sought

13.　　Members are invited to note the content of this paper.

Hongkong Post
Office of the Government Chief Information Officer
Commerce and Economic Development Bureau
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