To whom it may concern,

After reading the proposed Digital 21 Strategy consultation paper, I'd like to share my personal views with you.

First of all, I am using Hongkong Post e-Cert for many years, both e-Cert (Personal) for login my eTax account and e-Cert (Organisational) for business use frequently. I would highly appreciate the Government to offer Free Digital Identity. Therefore, I'd like to express my support and, furthermore, enrich the strategy with some suggestions.

Unfortunately, there are only 4 paragraphs in Chapter 3 (A) related to the Electronic Transactions Ordinance (ETO), free digital ID and the use of digital certificates. I wish that this strategy can collaborate with the other 17 strategies to create synergy to make Hong Kong smarter and our living smarter.

Here below my personal suggestions with regards to the Free Digital Identity.

(I) Encourage Adoption of Digital ID in All Strategies

The Government may provide incentives, such as funding support, awards...etc, to Bureux and Departments/startups/NGO/universities for proposals that will use Digital ID in their e-services.

(II) Government takes the lead

We all know that lack of killing applications and low take-up rate of digital certificates are a chicken-n-egg issue. The Government can take the lead to (1) actively enable more new e-government services to public; and (2) deploy digital certificate in the existing e-government services. Motivation to all Bureau and Departments would be required. Successful deployment of digital certificates in Government will be a good example to commercial sector.

(III) Potential e-government services

Paragraph 13 mentioned some e-services, e.g. voter registration, renewal of vehicle license, that require the use of digital certificates. Paragraph 16 named a few more e-government services. There are more potential e-services:

(1) E-book and multi-media materials loan services of public library through internet

(2) e-notary service (e.g. http://www.govtech.com/e-government/Virginia-Court-Accepts-Digitally-Notarized-Deed.html)

(3) Digital archiving for Government records

(4) Provision of e-forms for government services (e.g. PDF forms)

(5) E-filing of trademarks, patents and designs with digital signature

(IV) Server Certificate as a Digital ID for Registered Company in Hong Kong

Paragraph 15 mentioned free digital certificates to all Hong Kong citizens. In e-commerce, it is equally important for the merchant, or service provider, to authenticate itself as a registered company in Hong Kong through a server certificate under Recognized Certification Authority's root (so call 'Hong Kong Root'). A server certificate under 'Hong Kong Root', that is also a recognized digital certificate, assured the authenticity of the merchant with legal binding when the consumer makes an electronic transaction.

(V) Lengthening the validity period of digital certificate

As a measure to make digital certificates more user-friendly, paragraph 15 mentioned lengthening the validity period of digital certificate. As the PKI industry is moving forward to heighten security strength of public key cryptography, e.g. by transitioning key length from 1024-bit to 2048-bit and the signature algorithm from SHA1 to SHA256/512. The validity period of the free digital identity could be as long as 4 years. Moreover, citizens should not be required to extend the subscription within the validity period.

(VI) Easier authentication by reading Card Face Data of ID Card

Free digital ID will be a large-scale deployment of digital certificates in Hong Kong, that the effort of face-to-face authentication should not be underestimated. Therefore, Hongkong Post and possibly through its Registration Authorities such as banks and other B/Ds must have well-trained staff. It is vitally important to check ID Card is genuine and the card face data of ID Card is correctly put in the digital certificate. Hongkong Post may consider to automate this process

by reading the card face data of ID Card by system.

(VII) Paradigm shift of Digital Signing in Mobile Environment

Traditionally, a signer "hold" digital certificate stored in a detachable token, such as the HK Smart ID cards or USB tokens when digitally sign a transaction. This approach obviously has shortcoming in the modern mobile computing environment. For example, time-consuming or cumbersome to deliver such token to the signer, the signer may easily lost the token in mobile environment and some mobile devices don't even have communication port for the token. The Government, the society, the business users and the application developers should be prepared for a paradigm shift in digital signing through a centrally managed digital certificate system. Of course, the promise of non-repudiation must remain intact. In fact, European Telecommunications Standards Institute (ETSI) has been developing standards for digital signature generation service provide. ETSI is a European Standards Organization with more than 700 ETSI member organizations drawn from 62 countries across 5 continents world-wide.

(VIII) More scope of e-services

With the free digital ID, it is possible to ignite more scopes of e-services, e.g.:

(1) e-Learning
(2) authentication for devices
(3) authentication for digital content or code signing
(4) time-stamping
(5) cloud services
(6) mutual recognition of digital certificates with the Mainland

(IX) Federated Identity Management of digital ID between Government and Business

Paragraph 16 mentioned a unique online account for each Hong Kong resident to access e-government services. Naturally the free digital ID must be used when accessing the online account. I am also looking forward to the user's authentication process that can be interoperable across multiple IT system or even organizations or G-to-B.

Thank you and looking forward to a successful implementation of Digital 21 Strategy in Hong Kong.

Regards,

Ho Sing Man