

香港電腦學會的信頭

Letterhead of Hong Kong Computer Society

2nd November, 1999

Mr Matthew Loo
Senior Assistant Secretary (1)7
Legislative Council Secretariat
3rd floor Citibank Tower
3 Garden Road
Central
Hong Kong

Dear Mr. Loo,

Comments on the Electronic Transaction Bill

Thank you for giving the Hong Kong Computer Society the opportunity to review the Electronic Transaction Bill after its second reading in the Legislative Council.

We have reviewed the content of the Bill and reckoned that this is the right time to introduce this bill to provide the initial legal framework for Electronic Commerce. Compared with U.S.A. and Singapore, we are one year late but that is a blessing because we have the opportunity to formulate the policy with someone else's hindsight.

The Information Infrastructure Advisory Committee has done a fantastic job in researching the global electronic commerce environment and come up with this proposal in November/December 1998. However, the scenario of the global electronic commerce (EC) environment is changing rapidly. For instance, the Nua Internet Strategy firm has forecasted in early 1998 that the value of global EC would be \$300 billion by 2002. Early 1999, Forrester Research has revised the forecast to be \$1.3 trillion by 2003 in the Emerging Digital Economy Report. The pace and scope of change brought about by electronic commerce cannot be underestimated. The Chairman of the Federal Reserve Board U.S.A., Alan Greenspan, also noted that 15.8% of 171 million Internet users are in Asia Pacific in his report on "Electronic Commerce in the Digital Economy" (May 1999). The number of Internet users is growing in an unprecedented way as we move into the new millennium.

With the aforementioned paragraphs as the backdrop, we have the following opinions concerning the Bill:

Recognized Certification Authorities

With the Hong Kong Post as the first public certification authority (CA) is an indication that electronic commerce is Government-led. This is not a problem as long as the appointment of CA's in the private sectors will follow in time. However, little is said about trans-border transactions where documents will come in and/or go out of Hong Kong. The statement on unrecognized CA's is vague and is subject to interpretation. Do unrecognized CA's serve the cross-border transaction originators and addressees? Are common law principles sufficient to cover the identification, authorization, security, confidentiality, integrity and other risks? The bill will have to recognize the need for the legal recognition of electronic signatures generated abroad or authorization services providers based in a third country.

Role of Director of Information Technology Services (DITS)

The DITS will exercise the approval of recognized CA's and issue the code of practice. We believe that the industry should play a consultative role at least in the establishment of the code of practice. Technology standards and inter-operability are areas which the industry could contribute. It comes to our knowledge that the code of practice in other countries is generally industry-led.

As electronic commerce will certainly be a crucial agenda item in the emerging global information infrastructure, will the Government create a dedicated electronic commerce policy section (e.g. within ITBB) that will eventually take over some of the roles of DITS, for example the granting of hierarchical CA's and cryptographic policy, plus other emerging task like cross-border transaction policy? The section will also respond to the emerging needs of the global information infrastructure and act on the implications for Hong Kong.

Public Key Infrastructure and Technology Neutral Approach

The use of public key infrastructure (PKI), an asymmetric cryptography, could be seen as a less technology neutral approach as PKI was introduced in 1976 and was under the laboratory environment for a long time. It was selected as a de facto standard now because it can handle a key size of up-to 2048 bits. It replaces the previous secret key standard (Data Encryption Standard DES) which is only supporting 64 bits. However, secret key technology remains extremely important and is the subject of much ongoing study and research. The National Institute of Standards and Technology NIST, instead of modifying DES every 5 years, is developing the Advanced Encryption Standard (AES) with 1024 bits in the laboratory and ready for field trial in Year 2000.

Technology is changing at intervals. While we are adopting PKI, similar to U.S.A. and Singapore, we should not rule out the possibility of the future.

Conclusion

We are very pleased that the Electronic Transaction Bill will open the door for electronic commerce officially in Hong Kong. More importantly, it is a milestone to step Hong Kong towards global electronic commerce. As citizens of Hong Kong, we welcome the challenge and hope that the Government will co-lead the social and technical changes along with the industry, in a period of uncertainty and fast-changing environment.

Yours sincerely,

Daniel Lai

President
Hong Kong Computer Society