COMMENTS ON THE 2004 DIGITAL 21 STRATEGY
(Submitted by Center for E-Commerce Infrastructure Development, HKU)

The 2004 Digital 21 Paper highlights Hong Kong's important achievements in the last five years. The HKSAR Government has been a key driver in information technology development and adoption. We appreciate the Government's continuous commitment to promoting IT, and we are keen for Hong Kong to sustain its momentum. In this document, we propose three directions with recommended actions that are complementary to the Strategy.

PROPOSED DIRECTIONS
- Hong Kong to become a technology center in Asia with focus in value-added services and skills (under "A Vibrant IT Industry" on p.16)
- Enhance efficiency and productivity of businesses in Hong Kong through the use of technology (under "Infrastructure and Business Environment – Promote the Adoption of e-Business" on p. 11)
- Support SME adoption of e-business by promotion of OSS (under "Infrastructure and Business Environment – Promote the Adoption of e-Business" on p. 11)

We also support the appointment of a Chief Information Officer (CIO), either in a person or an institution within the Government. This Function should execute IT strategies and decisions. It can also increase the effectiveness of coordination of IT development, adoption and standardization. Effective coordination can reduce duplicate resources, for example, by leveraging on projects of all Bureaux and Departments (B/Ds). Communication among B/Ds can also be improved.

A Vibrant IT Industry
- ***Hong Kong as a Value-Added Technology Centre***

Supporting the strategy of fostering a vibrant information technology industry in Hong Kong, we suggest the Strategy elaborate on Paragraph 30 by being specific: Hong Kong positions itself to be a value-added technology center providing software design, project management and programmer sourcing. As pointed out in the Paper, Hong Kong has considerable competitive advantage in human resources, knowledge resources and infrastructure. These advantages can indeed support Hong Kong to become a link in the global value chain of software development.

Human Resources
Workforce in Hong Kong is educated and is encouraged by the Government to upgrade its skills continuously. More important, the workforce possesses an international perspective as well as competency in English and Putonghua skills. Hong Kong's skilled workforce and the abundant supply of programmers from PRD and China can help Hong Kong become the value-added technology center.

Knowledge Resources
Hong Kong has obtained a myriad of knowledge resources from its role in the international arena. Hong Kong has excellent domain knowledge in finance & banking,

trading, and logistics. Such knowledge is critical for the delivery of high-valued services in software design and project management.

Infrastructure
Hong Kong's legal system and rigorous protection of intellectual property rights not only provide Hong Kong with a very favorable business environment, but they are also crucial to Hong Kong as becoming the favorable IT sourcing center.

RECOMMENDATIONS
1. *Promotion of Hong Kong R&D Results and High-Valued Skills to China and Overseas*
   Since 1999, ITF has invested HK$854 million to fund technology and innovation R&D. Many of these projects have produced results with high potential for commercialization. Public sector organizations like the Hong Kong Trade Development Council (TDC) and the Hong Kong Productivity Council (HKPC) can play a prominent role in promoting these R&D results as well as Hong Kong's other high-valued software and IT skills to China and overseas. Hong Kong can play the intermediary role to match overseas demand for low-cost IT skills with supply in China, just like Hong Kong's role in trading in past decades.

Infrastructure and Business Environment – Promote the Adoption of e-Business
- ***Enhancement of Efficiency and Productivity of Hong Kong Businesses***
- ***SME Adoption of e-Business Through the Use of OSS***

The Paper has identified the important role of IT for Hong Kong. However, the challenge is to increase adoption by Hong Kong businesses. In addition to the actions suggested under Paragraph 20 in the Paper, we propose the following recommendations on implementation.

RECOMMENDATIONS
2. *Establishment of a Central Standardization Council*
   Although standards bodies in Hong Kong for various industries exist, usually in the form of trade associations[1], a central standardization council linking up these standards bodies can accelerate technology adoption in Hong Kong and results in productivity growth. The UK published a National Standardization Strategic Framework (NSSF) in September 2002 with an update in April 2003. The Framework explicitly states "standardization (the process of development, selection and application of standards within a project) is accepted by business leaders, economists and government as a major lever for the enhancement of competitiveness and productivity".[2]

   Having recognized the importance of standards, the Mainland has already established The China National Institute of Standardization (CNIS)

---

[1] An example is the Hong Kong Article Numbering Association (HKANA) which is committed to bringing international standards of bar coding to Hong Kong's Fast Moving Consumer Goods sector.
[2] *Update on the UK's National Standardization Framework (NSSF) (*http://www.dstan.mod.uk/nssf2.pdf)

(http://www.cnis.gov.cn) to collect, process, research and offer information services on standards, methodology and quality. It is linked to standards databases of national and international standards bodies. Besides China, several other Asian economies also have similar standardization councils: Electronic Commerce Promotion Council of Japan (ECOM) (http://www.ecom.or.jp), Korea Institute for Electronic Commerce (KIEC) (http://www.kiec.or.kr), and Institute for Information Industry (III) (www.iii.org.tw).

The recommended central standardization council can facilitate the coordination and synchronization of technology development with China. Specifically, it should develop an e-business technology platform to link up with a similar platform in China. China is adopting open standards such as Rosetta Net[3]. RosettaNet China is moving very fast in adopting open standards in e-business to facilitate international and domestic business activities. We need to make Hong Kong's businesses ready so that they can work with their counterparts in China on the same technology level and platform.

Further, the standardization council should assign senior officials from the HKSARG Bureaux and Departments to coordinate government level information exchange between Hong Kong and China. Examples of such information exchange include communicable disease information, customs information, and immigration information.

3. *Demonstration of e-Business Benefits through Deployment Cases*
   To encourage enterprises in Hong Kong to adopt e-business technology more readily, we suggest the Government and trade associations expand from G2C projects to G2B and B2B projects. The proposed standardization council should also promote E-government initiatives, such as the Interoperability Framework, for use in industry. More important, the e-business and e-government deployment projects should be publicized as an educational tool to demonstrate e-business benefits.

4. *Promotion of OSS as a Viable Alternative for e-Business Technology*
   Adding to the actions suggested in the Paper (p. 16 Openness in technology and standards adoption), we also recommend the Government and trade associations identify lead projects in HK core industries (e.g. logistics) to adopt OSS. Moreover, enterprises, especially SMEs, should be engaged in some of these pilot projects. Again, a critical mass can be built only if successful early adoption projects are visible.

---

[3] RosettaNet Enters into Strategic Alliance with China
http://www.rosettanet.org/RosettaNet/Rooms/DisplayPages/LayoutDoc?PressRelease=com.webridge.entity.Entity[OID[1FB8513A3E725C4BA1FB1B278CCBC8B9]]