# Hong Kong Information Technology Federation

## HKITF Response to "Public Consultation on 2004 Digital 21 Strategy"

**Summary**

1. The Hong Kong Information Technology Federation (HKITF) supports the 2004 Digital 21 strategy review, and believes that the strategy should be one that is based on building on existing strengths, correcting some present areas of deficiency, and creating a vision and action plan for new technology opportunities for Hong Kong. The government's consultation paper sets out the basis for the first two points, but has not sufficiently addressed the need to create a new technology industry environment for Hong Kong. Our paper will first provide a commentary response to the areas of actions as presented by the consultation paper, and then proceed to set a vision for Hong Kong's technology future.

2. HKITF concurs that the current areas of action by the government in its IT strategy and policies are largely on the right track, and the government should be commanded for its work implementation since the first Digital 21 strategy was announced in 1998. But some refocusing or additional efforts are necessary in several areas in order to achieve more desirable results or adjust to current and changing environments, and to capture missed opportunities.

3. However, we believe that simply continuing on the current path is not sufficient to maintain our leadership position in IT adoption, in today's globalized knowledge economy. Not only will we face insurmountable competition from our neighbors and even China, we will also miss out on the potentially immense opportunities available to us.

4. Hong Kong has also not engaged in carving a role in the national development of various technology sectors in our country, from R&D to industrial policies. This distance has left Hong Kong out of the picture in much of the overall strategic development of our country in various key sectors, like software, Internet, wireless standards, etc. A new philosophy of aligning our development with that of China must be adopted.

5. The original 1998 Digital 21 focused on the development of Hong Kong's information infrastructure. The 2001 Digital 21 strategy had a title of "Hong Kong: Connecting the World." We suggest that the theme of the 2004 Digital 21 strategy could be **"Hong Kong: Connecting**

**China and the World,"** with three sub-themes of *Sustaining Core Competency for Growth, Adopting a Sectoral Development Vision for IT,* and *Integrating with China's National IT Strategy.*

### *Sustaining Core Competency for Growth*

6. In this section, we comment on the eight main areas of action as stated in the consultation paper.   These areas mostly concern infrastructure or previously adopted IT policy initiatives, and constitute Hong Kong's core IT competency.   Adoption of any new strategy in these areas should focus on creating a sustainable environment with a target of growth for the IT sector, based on various factors like industry development, manpower, service level, etc.

7. <u>Government leadership:</u>   The government has been a committed advocate and champion for ICT adoption in Hong Kong.   Despite the budget stringency faced, it has continued to maintain its IT investment level as well as its IT outsourcing program, and should be commanded for its commitment.   It has also hoped to facilitate the development of e-commerce through various e-government programs.   But we believe there are several points to pay attention to in this area:

    - Information Technology Professional Services Arrangement (ITPSA): This program was introduced with some of its objectives being to provide more opportunities for small and medium sized IT companies to take part in government jobs or sub-contracting, and for the government to simplify and standardize its procurement effort for IT projects over a certain size.   However, from many of the industry stakeholders' point of view, the system still leaves much room for improvement.   Without going into the details of a critique of the existing ITPSA arrangement in this response, we would call for a thorough and open review of ITPSA to be carried out as soon as possible in advance of the end of the current contracts by the end of 2004.   Moreover, we would call for the government to create a procurement system and a project management framework such that as many qualified local Hong Kong companies can have the opportunity to participate in government IT contract work as possible.

    - The ESD Scheme: The present G2C e-government services are largely provided via the electronic service delivery scheme, through the infrastructure built and owned by a private company with a termed agreement with the government.   It is to the benefit of

the public and the IT industry that the government will reveal its consideration for the future of ESD, and how and when it will plan to open up the access to these services by other players in the market in addition to the present player. We believe the introduction of competition to the ESD scheme will be critical for the ultimate success of e-government services, as measured by citizen adoption and enhanced government efficiency.

- Wireless data application adoption: The government is in a unique position to take the lead in the adoption of wireless data application in Hong Kong, an area that Hong Kong holds great potential with our world-class infrastructure and penetration. The government should lead by example in this area, by adopting key wireless data applications internally and for the public, using existing and emerging technologies such as SMS, 2.5 to 3G, WLAN, etc.

- Post Office's eCert: We propose a review of the current government strategy relating to the Post Office's eCert, which is expensive to maintain yet adoption remains low. We are unsure if the "success" of eCert will be at all critical to the successful adoption of e-commerce in Hong Kong. We also believe that the government should consider adopting other domestic or international certificate authorities rather than favoring its own implementation which has not been well-received by the market after years of investment and promotion.

- We believe that the government should launch a review with the industry and the public about the escalating problem of spam. While HKITF has not yet taken a position regarding spam legislation, largely due to its uncertain levels of success since various implementations have taken place in various parts of the world, we believe a review should be undertaken, so that the public can be engaged and become educated about the pros and cons of various forms of spam regulations, and thereby consider the way forward.

8. <u>Sustainable e-government program:</u> While Hong Kong's e-government activities are widely viewed as world-class, it is still mainly provided merely as an alternative to existing services in the same sense except the means of delivery. The new approach should be to tailor service delivery to meet citizens' needs, instead of approaching it from the government side; in other words, it should be customer-driven, and may involve substantial re-engineering of how

government services should be provided, electronic or otherwise. This will involve substantially more complex organizational effort within the government as a whole, and across different bureaus and departments, but will be critical to the ultimate success of a truly sustainable e-government program that achieves higher customer satisfaction and provider's efficiency.

- Interoperability and technology neutrality: We believe that they government should follow an IT development strategy that is based on full interoperability and remains neutral on technology platforms and vendors. We support the government to evaluate its choices among vendors and technologies based on factors such as life-cycle costs, features, performance, compatibility, etc.

9. <u>Infrastructure and business environment:</u> By and large, Hong Kong has the advantage of having an advanced infrastructure and a business friendly environment. Maintaining this advantage, however, cannot be taken for granted. Some areas where we would like to comment in particular on are:

- Telecommunications: Whether or not the advanced telecommunications infrastructure is sustainable has been a controversial issue among network operators of various natures and backgrounds, many of which have expressed concerns about the policy implications on their will to invest. While we believe that market liberalizations have been important catalysts in the past to achieve our current state of high wireless and broadband penetration and low prices enjoyed by consumers for most services, we must agree that a review of the current policies will be necessary. However, we must also emphasize that the government must be able to lead and assist the industry to build a consensus by identifying the common goals and aligning the interests of the stakeholders, in order for this process to be fruitful.

- Broadcasting: We welcome the government's intention to review the broadcasting regulatory regime. While the broadcasting industry in Hong Kong excels and leads the region in many ways, the regulatory regime appears to be out-dated in several ways, including the lack of measures to facilitate convergence, and the absence of pro-competition framework – not even the sectoral pro-competition provisions in the Telecom Ordinance. We also believe that digital broadcasting must be introduced as soon as possible for the benefit of both the industry and the public.

- Promote the adoption of e-business: As we expressed in our recent joint publication with Mr Sin Chung-Kai, legislator for the IT sub-sector, we believe the promotion for the adoption of e-business should be by a sectoral approach at our current stzage of development.   We welcome the government's initiative for the travel industry, and we hope the government will continue to invest this way to bring about more efficient results and effective returns.   As an example of self-initiated effort by the industry, HKITF is cooperating with the Hong Kong Article Numbering Association to establish the Greater China Chapter of the Supply Chain Council, the global association that supports SCOR (Supply-Chain Operations Reference-model), expected to be finalized in early 2004.   In addition, we also believe that the adoption of best practice in e-commerce will be important to enhance consumer confidence and protect their interest at the same time.

- Intellectual property protection: Hong Kong's strong protection regime for IP is one of our differentiating strengths.   With such protection properly enforced, our industry can be supported and innovation and creativity can be fostered.   At the same time, a free market for user choice must be maintained, and with proper protection for consumer's rights and safeguards against any competitive or trade practice abuses.

10. Institutional review: We welcome in particular the government's initiative to consult the industry over the proposals for several institutional changes.   Our comments:

    - Merging ITSD into CTB: We appreciate and welcome the initiative from the angle of efficiency and cost-saving.   However, we are concerned about the unclear impact that the proposed integration may have on the current functional roles of ITSD, especially over the IT procurement process, project management and quality assurance procedures, etc.

    - Role of IIAC: We believe IIAC has functioned well as an advisory body, but there is still a gap in the overall institutional architecture of the government's IT and technology related organizations.   Specifically, we believe that a new authority similar to the Infocomm Development Authority (IDA) should be established, with statutory power and objectives to develop, fund and/or carry out specific projects, including test-beds for advanced technologies or new infrastructures.   IIAC may evolve into the board for

such a new authority, which we believe should be led by a chief executive from the industry with the vision for industry collaboration and the ability to establish regional and cross-industry partnerships. We do not believe that this organization should be a simple rehash of existing functions within organizations such as the Hong Kong Productivity Council, as new visions and organizational flexibility will be critical for the success of the new authority.

- A unified regulatory body for broadcasting and telecommunications: HKITF has advocated for an integration of the broadcasting and telecommunications authorities since the late 1990s. We believe it is an inevitable trend in the world due to converging technologies and business models, and it is applicable for Hong Kong too. But we are concerned over the uncertainty of the future overriding philosophy of the unified regulator, as well as how the new organization will be set up and decision-making power will be vested. For example, the degrees of liberalization of the two regimes are currently very different, and the industry must be consulted in advance about the direction to be taken by the unified regulator. The government must also explain to the industry about its intended legislative revisions to enable such unification, so that the industry stakeholders may consider any potential impacts.

11. Technological development: Support for technology investment and development are most critical to the success of our IT strategy. Yet in the past, government support for the local IT industry to expand its market to China and internationally has been piecemeal and lacking in focus. There also has not been enough effort to provide global IT market information to the industry, and to attract overseas investment to the local IT industry. We will reserve further comments for this section to the next part of this response, under "Adopting a Sectoral Development Vision for IT."

12. A vibrant IT industry: In the past few years, the IT industry in Hong Kong can hardly be said to be vibrant, as we have faced a multitude of problems, which can be mainly attributed to the limited local market, shrinking margins due to intense domestic competition, and the difficulties in opening up new markets. Meanwhile, the Mainland market opportunities have remained elusive, and will probably remain "not for everyone."

13. Human resources in a knowledge economy: Needless to say, manpower is a critical factor of success for our industry. However, we must stress that our manpower strategy and planning

must be aligned with that of China.  For example, if there is a broad supply of entry level programmers in the mainland, we must train our students to be able to perform project or people management from an earlier stage of their careers.  In order to get there, here are some comments in several areas:

- IT in Education: The funding for primary and secondary schools for "IT in Education" ends after the termination of the five-year plan promulgated in 1998.  This is unfortunate, considering that IT in education must be a continuous investment.  On the other hand, it is doubtful that the previous investment – largely spent on hardware and much of which may not have been even fully utilized – has been well spent.  A review or audit into the success of the funding should be carried out, with professional input from IT industry practitioners, to find out what need to be done if some level of funding can be sustained, as it should be.

- Fostering Innovation and Digital Creativity: Current IT curriculum places too much of an emphasis on technical training, and lack the more unconventional but useful training in proper use of IT (e.g. security, intellectual property, ethics, etc.) and developing a culture for innovation and creativity at all levels of education starting at a young age. The government should provide assistance to non-traditional training providers or NGOs that may be able to aide in fostering the development of such culture among our children.

- University and vocational training: We must continue to invest in various levels of advanced education to produce quality manpower for the local IT industry, despite the recent downturn.  But these programs and curriculums must adjust more rapidly to changes in market structure and conditions, as well as the levels of demand.  As resource allocations for tertiary education will inevitably be more constrained, academia and industry must work more closely to ensure the results from our investment in education are on target.

- Short-term employment for experienced and entry level professionals: Although the IT market is recovering, unemployment in the IT sector remains relatively high.  We recommend the implementation of funded schemes for experienced IT workers or managers with young, under-employed university or vocational training graduates to team up together and provide IT consulting and implementation services for NGOs and

educational institutions, allowing them to contribute to society while maintaining or even growing their technical and project competency.

14. <u>Bridging the digital divide:</u> In the past years, the government has made great strides in closing the digital divide through various programs to improve web usability, establish public computer access facilities, etc.   We believe this effort must be continued, with some adjustments:

   - The government should continue to fund NGOs with proven record of working with their target constituency so that they can carry out training, promotion or other assistance programs to tackle the digital divide in their areas.   We recommend the establishment of a "digital solidarity fund" with seed money provided by the government, for the industry to collaborate with the human services sector to supervise the allocation of resources according to needs and worthiness to society.

   - The government should work with the private sector to promote the concept of "social enterprises" such that companies can see the prospects and opportunities in creating "digital dividends" out of the digital divide problems, for mutual benefit of the commercial enterprises and the underprivileged sectors.

## *Adopting a Sectoral Development Vision for IT*

15. Traditionally, Hong Kong has been content with innovation at the application level, by applying technologies developed elsewhere to achieve world-class solutions to support various industries and services locally and regionally.   While we must continue to leverage on this, we must realize that we must deepen our commitment to technology to the next level in two ways: first, creating an industrial policy that more actively introduce the use of IT in our industries with a sectoral approach, and second, investing more actively in the IT sector itself, through critical R&D and test-bed activities.   We call this a "Technology First" approach:

   - "IT supports the development of other industries; other industries support development of IT": This approach is widely used in the Mainland in its formulation of industry support policy at various level of government.   An example is the "enterprise IT adoption projects" where enterprises are encouraged to adopt IT with government assistance, thereby contributing to the development of the local software and IT industry.   The pitch in Hong Kong is usually only one-sided, where IT is positioned as a

tool for other industries, but the government has not coordinated industry adoption to such an extent that would assist the healthy development of the IT sector targeting those industries.

- Investing in R&D to stay ahead of the market: R&D activities in Hong Kong are too often "market-driven," to the extent that the results of these activities have fallen behind the rest of the world. One case in point is the development of Chinese domain names, in which the local registry in the past has not invested because of a perceived lack of market demand. Indeed, a market will not emerge unless after investments into early generations of trials and even errors have taken place.

- Innovation and Technology Fund: We believe the funding criteria and administration of the Innovation and Technology Fund should be reviewed as soon as possible. The administration of the Applied Science and Technology Research Institute and what role it should play with the industry and academia also have not been clearly defined and communicated to the industry.

- Open source technology: Besides digital entertainment, wireless applications, etc., we believe that open source technology may also warrant attention by the government to encourage its development, due to various regional effort or joint development programs, including of course the emphasis placed on open source technology by China.

16. Therefore, we believe Hong Kong must adopt a "technology first" attitude toward innovation and adoption of IT. No longer can we view technology, and in particular IT, as just a tool and application, with little or no regard for the healthy and supported development of the IT industry itself as a key industry for Hong Kong. This is also obviously not consistent with the national strategy and policy of fostering IT development as a key target industry.

17. Hong Kong possesses the many key underlying factors for the successful development of a technology industry focus, including an advanced IT and telecommunications infrastructure and a free market economy. What the industry and the government often focus on is how to foster inward investment and promote export or entry into other markets. But we apparently may be missing on building the link in between, i.e. the development of innovative enterprises and then their clustering. To achieve this, the government must take the initiative to actively plan for the shape of development of the IT sector as a whole.

18. The government must acknowledge and actively promote IT as a key industry that will contribute first and foremost to the transformation of Hong Kong into a knowledge economy. IT must no longer be considered merely as a support service industry, but a core competency area on its own. Moreover, the government must establish quantifiable targets for the industry and measures to ensure the reaching of such targets, for instance a percentage goal for the IT industry to reach as part of Hong Kong's GDP.

### *Integrating with China's National IT Strategy*

19. We recommend several steps for Hong Kong's IT industry to create our role and positioning and access opportunities in China and world-wide:

   - CEPA and Pearl River Delta (PRD) cooperation: Hong Kong has the opportunity now to form a base for IT and software business with our partners in the PRD region, achieving critical masses in market, manpower and infrastructure. In the telecommunications area, we support the proposal to establish a PRD Telecom Special Zone, to allow Hong Kong telecommunications and Internet service companies to operate cross-border businesses in cooperation with mainland partners, creating a special zone as a test-bed for a partially liberalized telecommunications market. In addition, HKITF has signed agreements to work with Tianhe Software Park in Guangzhou to jointly establish an IT industry database that will position Guangzhou-Hong Kong as a center for the IT and software business with local and international partners, e.g. including those countries that the government has signed MOUs for IT cooperation in the past. We believe these initiatives will substantiate CEPA's proposals for trade and investment facilitation in IT and e-commerce development.

   - IT outsourcing: China holds immense potentials in developing to be a powerhouse in IT outsourcing, like India, the current leader. However, it faces a number of problems, including the lack of international exposure, quality assurance and project management skills, and an immature legal and intellectual property system. These are areas where Hong Kong can play a role to help facilitate the development of IT outsourcing for China's companies, especially in PRD. HKITF is working with our partners in PRD to pursue these opportunities, and hopes to be supported by the Hong Kong government in our effort to promote the branding of "HK+PRD" in IT outsourcing.

We welcome the government's endorsement of our strategy in this area.

20. But Hong Kong cannot merely continue to be a "middle man" only between China and the rest of the world, as the lifespan of such a role must be limited. Indeed, Hong Kong should proactively work out a positioning in China's development in certain focus technology industry sectors, like software, electronics, outsourcing, wireless and Internet technologies, etc.

21. Over the years, China has identified the IT industry, including software and services, semi-conductor and micro-electronics, as key development targets, as a matter of national priority. With the release State Council document #18 in 2000 and later #47 in 2002, a number of policy directives were passed out to governments at all level to actively encourage and support the development of the software industry, for instance. Recently, the Ministry of Information Industry has also released its policy initiatives to develop the next generation Internet in China, including IPv6, support the development of a sustainable economic and industry model for the e-commerce sector, and also the directives to enhance the level of China's participation in international standards and governing organizations of the Internet. Unfortunately, Hong Kong has not been taken into consideration by the MII when formulating these strategy and action plans, yet for the benefit of both the country and for Hong Kong itself, we should be engaged and play an active role in these industry development plans. The government here should actively establish a regular communications channel with MII, under CEPA or other separate sectoral arrangement, to engage the local industry in contributing to the national development, and align our local policies accordingly.

**The Council**
**Hong Kong Information Technology Federation**
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