



Comments of the
Computing Technology Industry Association (CompTIA)
For Hong Kong 2004 Digital 21 Strategy

Introduction

In 1998, the Government of Hong Kong published the first Digital 21 Information Technology Strategy. Digital 21 was reviewed and updated in 2001. Since the first publication of Digital 21 in 1998, Hong Kong has gained wide international recognition as a leading digital city. Recently, a draft 2004 Digital 21 Strategy has been circulated for comment. This document sets forth the vision of the Hong Kong government for IT strategy for the next five years. The Computing Technology Industry Association (CompTIA, www.comptia.org) hereby submits the following comments and questions regarding the 2004 Digital 21 strategy. We look forward to working with Hong Kong to develop and implement a successful IT strategy.

Background – CompTIA

CompTIA is the world's largest information and communications technology (ICT) trade association with over 13,500 member companies in nearly 90 countries. CompTIA's members consist of software developers, hardware manufacturers, application service providers, Internet service firms, distributors, retailers, resellers, training, service, and telecommunications companies. The Association's members collectively employ thousands of people and produce billions of dollars worth of goods and services each year.

The promotion of policies that enhance growth and competition within the computing world is central to CompTIA's core function. Further, CompTIA's mission is to facilitate the development of vendor-neutral standards in e-commerce, customer service, workforce development, and ICT workforce certification. These standards enable businesses to simplify practices, reduce expenses, and compete more effectively in an increasingly complex and competitive world. More than 500,000 individuals worldwide have earned CompTIA ICT skills certifications in PC service, networking, document imaging, training, security, Internet and PC server technologies.

Among the coalitions managed by CompTIA is the Initiative for Software Choice (ISC, www.softwarechoice.org). The ISC is an international coalition of more than 280 companies and industry associations that believes in the importance of allowing multiple software and hardware development models to compete on their merits, without government mandates or preferences that automatically prefer one model over another. The ISC is organized around four principles which urge governments to: procure software and hardware on their merits, not through categorical preferences; promote broad availability of government funded research; promote interoperability through platform-neutral standards; and maintain a choice of strong intellectual property protections.

CompTIA has an active Public Policy Department with an office in Hong Kong opening in December 2003. The Public Policy Department works to protect and advance the interests of the international technology community before legislative, executive and judicial branches of government, and regulatory agencies.

Workforce Development Activities

CompTIA applauds the Hong Kong government for making workforce development issues an important component of the 2004 Digital 21 Strategy. Specifically, Digital 21 states that Hong Kong will “work with educational and vocational training institutions and the industry to enhance the training and skills of our workforce and the next generation.”

CompTIA’s Workforce Development organization provides the ICT industry with the information, tools and resources necessary to be successful in the recruitment, training, certification and retention of information technology workers, worldwide. CompTIA has been leading a collaborative effort between the U.S. Government, leaders in the ICT industry, and academia to develop one set of ICT skill standards endorsed and adopted by the industry. These skill standards have provided the framework for the National IT Apprenticeship System (NITAS), the first and only apprenticeship program to be developed for IT. Benefits of the system to ICT professionals include:

- A structured approach to career development based on current ICT industry standards, certifications, and contextual learning; and
- A portable career transcript that presents all aspects of job performance to current and prospective employers.

CompTIA Workforce Development has also developed the TechCareer Compass (TCC, <http://tcc.comptia.org/>), a worldwide information technology portal for jobs, skills and career paths, and other resources critical to attract, train and develop skilled ICT workers. The TCC is the first ICT career guidance portal developed that houses the ICT skill standards data as identified by the industry for the U.S. government. The TCC

includes job banks, assessments, resume & interviewing tools, other ICT-specific sites and educational conferences.

We note that the Education and Manpower Bureau (EMB) will lead Hong Kong's strategic direction for the development of ICT in education. CompTIA welcome's the opportunity to assist EMB in this area.

CompTIA is engaged with education through the Education-to-Career (E2C) CareerPrep Program. E2C provides resources for the secondary and post-secondary education system to train and certify the next generation of ICT workers and to help bridge the ICT gap.

The CompTIA-led Technology Workforce Coalition (TWC, www.techcoalition.org) is playing an important role in helping the U.S. Department of Labor secure reauthorization of the \$11 billion Workforce Investment Act, with a strong emphasis on ICT skills development. In addition, the TWC is working to provide real solutions to the challenges of global sourcing that have become increasingly evident within the U.S. ICT industry.

We are working with governments other than the U.S. to assist them in developing ICT skills standards. CompTIA is currently working with the Danish government to develop a taxonomy of ICT skill standards. We are also working with the Canadian Federal and Ontario governments to develop an ICT apprenticeship program in Canada. CompTIA's eSkills Certifications Consortium (eSCC, www.comptia.org/sections/publicpolicy/escc.asp) is working closely with the European Commission and member state governments to integrate private sector ICT training and certification into the EU's efforts to advance ICT workforce development and

competitiveness. We welcome the opportunity to work in a similar fashion with Hong Kong to advance the Digital 21 workforce development agenda.

Public Procurement Policy

The draft discusses Hong Kong's intention to:

continue to promote open source software (OSS) technologies and solutions as viable options for adoption within the Government through showcases and trials organized through ITSD's IT Solution Centre. We will also promote OSS development and adoption in the private sector through provision of funding support from the SME Development Fund and ITF for projects that develop OSS or assist small and medium enterprises in using OSS. We will conduct a survey on OSS adoption and measures to promote wider adoption.

“Open Source” and “Commercial” Software

It is helpful at the outset to clearly define what we mean when we say “open source” and “commercial” software as these terms are often applied differently at different times. Software, essentially being intellectual property, is not normally sold but, instead licensed to users through an agreement conveying usage rights rather than ownership of a program.

Open source software refers to a development model that uses a communal programming system. Open source software is commonly developed by a relatively fluid group of volunteer programmers. The software source code – or instructions that programmers write – is typically available for anyone to review, study, make changes to or add new features and functionalities. This source code is then made available to the public through a number of open source licenses. Generally these licenses fall into two main categories, although other variations are possible. These categories include:

- The General Public License (GPL): The GPL is the most restrictive open source license. Products like Linux are distributed under the GPL. Licensees are given broad rights to copy, modify and sell source code. In addition, downstream licensees are given the same rights to copy, modify and sell the code and are required to make their changes available to the public.
- The Berkeley Software Distribution License (BSD): This license is the most permissive open source license. It permits modification, distribution and commercialization of source code with limited qualifications, such as requiring that any derivative products clearly note that some of the code came from the original open source program. Licensees may redistribute modified software as part of a commercial product subject to standard commercial licensing terms.

The commercial software model is the development model used by the vast majority of software companies. Commercial software is made available to the public to use through commercial software license arrangements. Under these arrangements, specific rights to use the software program are granted for a fee to cover the development costs and earn a profit. License fees create incentives for additional investment and innovation in the software sector.

Increasingly, the lines between open source and commercial software are blurring. In some cases, commercial software companies are permitting users to view source code. Some ICT companies are using open source code to build a hardware and/or services

business. Other companies are considered “hybrid” and offer both open source and commercial software models to their customers.

Neutrality

CompTIA strongly supports the development and adoption of all kinds of software: be it open source, hybrid or commercial. For this reason, we believe that government regulations that give a preference to a particular software development model weaken the overall software marketplace, biasing the choice of viable options available to public authorities. Only when all software options are available can the specific needs of each ICT project be met, driven by a flexible range of factors such as cost, reliability, security, functionality and availability.

It is important to note that the purchase price or licensing cost of software is only a small fraction of the total cost of ownership (TCO). In many cases, maintenance, upgrades, technical support and user training contribute far more to the TCO than the initial purchase price. As a result, it is important for public authorities to evaluate the cost of software procurement over the lifetime of the project.

CompTIA believes that there are some general principles of technical neutrality, non-discrimination and transparency that should be followed in the public procurement for all sectors, including the ICT sector for both hardware and software. Neutral procurement policies best benefit governments, constituents and the ICT industry because they enhance choice rather than limit it. Neutral ICT procurement policies maximize the universe of options for government procurement officers, allowing them to find and employ the best, most cost effective ICT solutions for the given need. Not only do such policies make state-delivered ICT services the best they can be, they perpetuate

competition in the ICT industry because they do not arbitrarily cut any one segment of the industry out of the picture for government business.

With this in mind we pose the following questions:

1. Will the Hong Kong Government continue to procure software that best meets its needs based on value, total cost of ownership, performance and security regardless of the development or licensing or, will ICT procurement criteria change with the implementation of the Digital 21 Strategy, to favor open source software-based solutions over proprietary or hybrid-based solutions?
2. If Digital 21 signals a change in government ICT procurement policy, what new criteria will the government use for ICT procurement?
3. Will the Hong Kong Government maintain a policy for ICT procurement and government funded research & development that is technology neutral, or does 2004, Digital 21 Strategy signal a shift towards OSS preferences?
4. Going forward, will the IT Solution Centre and SME Development Fund provide funding for proprietary software projects in addition to OSS?

CompTIA looks forward to working with the Hong Kong S.A.R. government authorities in the adoption of fair rules that ensure unrestricted choice of, and competition between, all software products.

Sincerely,

A handwritten signature in black ink, consisting of several overlapping, fluid strokes that form a cursive name, likely 'Bob Kramer'. The signature is positioned above a long, thin horizontal line that extends across the width of the signature.

Bob Kramer
Vice President, Public Policy
CompTIA