



Comments of the
Computing Technology Industry Association (CompTIA)
For Hong Kong 2007 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 and 2007. Since the first publication of Digital 21 in 1998, Hong Kong has gained wide international recognition as a leading digital city. Recently, a draft 2007 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 2007 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 (IT) trade association with over 20,000 member companies in 102 countries, serviced by office in 15 major cities on all 6 continents. 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 US 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 IT 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 IT 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 300 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 a regional office in Hong Kong since December 2003. The Public Policy Department works to protect and advance the interests of the international technology community in policy initiatives that deal with

Intellectual property protection, IT security, trade and market access including e-commerce, and other issues that are vital for technology innovation before legislative, executive and judicial branches of government, and regulatory agencies.

CompTIA's Comments and Recommendations

Chapter 3 Facilitating a Digital Economy

COMPTIA supports and applauds the Government's initiatives in facilitating investment in the IT sector. However, for Hong Kong to maintain its leadership and build 'a world digital city', we believe that there are a number of key success factors which we believe will enable Hong Kong to stand out;

- Maintaining the government 'procurement on merit' policy for IT
- Backing this with strong Intellectual Policy (IP) protections.
- Supporting Technical Neutrality in Standards
- Enhancing access by the Public to eGov and services, including access by wireless devices and for the disabled and mobility impaired
- Fiscal innovation by government that will allow accelerated depreciation of IT assets.

Chapter 3 Promoting Advanced Technology and Innovation

3.1 COMPTIA applauds the Government's focus on investment in R&D, and technology promotion, including communications technologies, digital content, sensor and identification technologies, software development and packaging, and the next generation Internet (IPv6).

Now more than ever, governments and industry are seeking to gain maximum value from their information communications technology (IT) investments. Over the past 40 years, government and enterprise IT infrastructures have become increasingly multi-platform, multi-vendor, widely distributed and complex. At the same time, business processes and government services have become more and more complicated, interdependent and dependent upon IT technologies.

COMPTIA was pleased to note that Hong Kong was one of the inaugural signatures of the "APEC Technology Choice Principles" signed at the 18th APEC Ministerial Meeting in Hanoi, where Ministers recommended that leaders embrace policies that facilitate regional trade by and emphasis on the promotion of technology choice in a market-opening, trade-liberalizing manner. We believe that this will spur the virtuous cycle of innovation and promote trade and development in the Asia – Pacific region.

3.2 Technical Neutrality in Procurement

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 IT sector for both hardware and software. Neutral procurement policies best benefit governments, constituents and the IT industry because they enhance choice rather than limit it. Neutral IT procurement policies maximize the universe of options for government procurement officers, allowing them to find and employ the best, most cost effective IT solutions for the given need. Not only do such policies make state-delivered IT services the best they can be, they perpetuate competition in the IT industry because they do not arbitrarily cut any one segment of the industry out of the picture for government business. A model Procurement Policy for IT assets may be downloaded at our website <http://www.softwarechoice.org>

3.3 Interoperability

Given this current state of affairs, the IT industry recognizes the increasing importance of systems and software interoperability to enable business processes and government services to change and grow. Further, the IT sector is responding to these needs. There is a high level of interoperability in today's information technology (IT) sector and it is constantly improving. Indeed, it is in the interest of the information

technology industry to ensure that the industry continues to respond to customer needs in this area.

However, while there may be agreement on the *need* for interoperability, the scope and implementation as well as the means to encourage it remain controversial, politicized, and confusing. This paper seeks to highlight the role of the IT sector in economic growth, the nature of the IT market and intellectual property protection, a better understanding of interoperability and open standards, and the means by which government can help to ensure interoperability in its own IT acquisitions.

A model Interoperability and Open Standard framework may be downloaded at our website <http://www.softwarechoice.org>

Chapter 5. Developing Hong Kong as a Hub for Technological Cooperation and Trade.

5.1 - 6 Strength of Hong Kong as a technology hub

Hong Kong has the ‘software’ in terms of highly educated, qualified and most importantly experienced business professions in law, accounting and management that have proven in general trade in services and business in Hong Kong. Hong Kong is now perceived as inseparable from the Greater PRD region and is therefore a natural entrepot for overseas technology companies to base themselves and reach into the Mainland market. COMPTIA would like to see CEPA expanded further into technology services.

We would encourage the Government to recognize accelerated depreciation of both IT hardware and software - due to the rapid pace of technological change – from seven years to three years as IT assets have faster obsolescence in the 21st century than the revenue producing assets of the 20th century. Such a regime would encourage greater investment both from existing Hong Kong companies and those looking to place FDI.

5.7 A Vibrant IT industry

COMPTIA’ agrees with the Government that a vibrant IT industry must be backed by a knowledgeable and versatile workforce, both at tertiary and vocational levels.

Further, such a workforce must have skills that are both in demand by the IT Industry and that qualifications and certifications are mapped to recognized international standards

5.8 Workforce Development Activities

COMPTIA applauds the Hong Kong government for taking a leadership role in making workforce development issues an important component of the 2007 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 IT industry with the information, tools and resources necessary to be successful in the recruitment, training, certification and retention of information technology workers, worldwide.

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 IT workers. The TCC is the first IT career guidance portal developed that houses the IT skill standards data as identified by the industry for the U.S. government. The TCC includes job banks, assessments, resume & interviewing tools, other IT-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 a Qualifications Framework (QF) in IT education. COMPTIA welcome's the opportunity to assist EMB in this area.

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 IT 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. IT industry.

We are working with governments other than the USA to assist them in developing IT skills standards. For example, COMPTIA worked with the Danish government to develop taxonomy of IT skill standards. We are also working with the Canadian Federal and Ontario governments to develop an IT apprenticeship program in Canada. CompTIA's eSkills Certifications Consortium ([eSCC, www.COMPTIA.org/sections/publicpolicy/escc.asp](http://www.COMPTIA.org/sections/publicpolicy/escc.asp)) is working closely with the European Commission and member state governments to integrate private sector IT training and certification into the EU's efforts to advance IT 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.

Creating a conducive business environment

With regard to the various areas discussed in the consultation, we offer the following observations:

5.9 1-2 Information Security and Privacy

COMPTIA Considers the above to be inseparable, in particular given the well publicized data breach of confidential information from the Independent Police Complaints council e.g. names, address and HK Identity card, on 20,000 people who filed complaints against the police. Such a breach of data privacy - is indicative of lax or non-existent security policies or lack of trained and certified staff

The current Data Protection Ordinance do not address security training or qualifications of those entrusted with personal Data, moreover technically we have moved in with email being ubiquitous, as is IM and mobile data use and access. Legislation relating to both the Private and Public sector in Hong Kong continues to be updated to take into account both training and qualifications of those dealing with the technological requirements of business.

COMPTIA would urge the Government to take concrete steps to ensure that current legislation is updated that will ensure as far as possible, such breaches are minimized.

Given the importance of data education should start at form 7 upwards as children are most influenced and thus vulnerable. With guidelines for the public on how to handle sensitive information and data made available whenever they interact with government or a financial institutions. Budget needs to be made available for specific training for government IT systems administrators and users validated by independent examination/certification. Industry consultations and an open communication channel with the private sector via industry associations on security-related issues will also enhance this. Finally specifying security requirements in software procurement will also enhance trust.

These measures are all aimed at increasing the public's trust and confidence in online transactions and encourage more opportunities for e-commerce. When this is combined with an education and guidance programme in this regard we believe will be welcomed by SME's in particular.

5.9.3 Enhanced Protection of Intellectual Property Rights

COMPTIA strongly supports efforts by the Government to work together with other economies to achieve a practical degree of harmonization of patent requirements. Doing so will enable patent offices around the world to share resources and expertise, and to more expeditiously grant patents on deserving inventions. Agreements of this type will help software innovators reliably obtain effective protection for their innovations around the world, consistent with existing international standards, such as the WTO TRIPS Agreement.

With respect to the eligibility of software inventions for patents, COMPTIA strongly supports the recognition of the eligibility of software for patents in those countries outside the EU where it is currently not recognized. For example, COMPTIA supports improvements to the EU Software Directive that will ensure more consistent requirements for software patents between EU member states provided those improvements include broad eligibility for software inventions.

COMPTIA supports comprehensive patent protection for software innovation. We believe more efficient patent granting procedures can be devised that will reduce the time it takes to evaluate patent applications, while preserving patent quality. We strongly support efforts by the United States Administration to reform the practices of the Patent and Trademark Office to yield these improvements. COMPTIA also supports efforts to implement legislation to provide an efficient, fair and cost-effective administrative procedure for reviewing the validity of patent claims.

5.9.4 COMPTIA has provided a submission to the Government detailing our views on the recent Copyright (Amendment) Bill 2006 and is encouraged by this move but would also recommend that the Patent ordinance also be re evaluated in the light of CII's

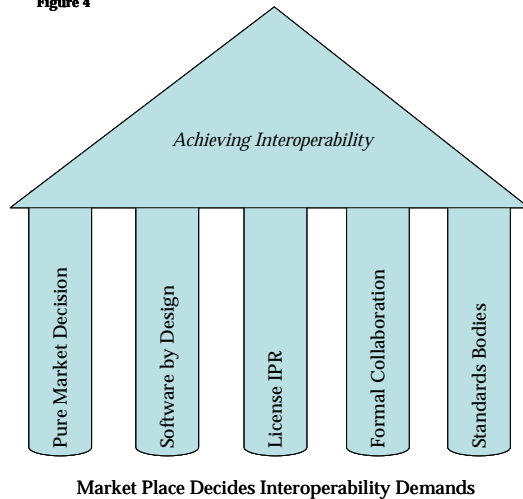
5.9.5 Development of Data Standards

COMPTIA agrees fully with the need for Data Standards to enable interoperability of diverse hardware and software systems. Just as interoperability is a goal of government and the private sector, it is also a business imperative for the information technology sector. As demand for interoperability has increased, the IT sector has responded. Numerous national and international bodies—formal and informal—have developed in the market to help promote interoperability.

The goals of interoperability can be accomplished through a variety of independent and interdependent means, including:

- Implementation of market driven standards through market competition;
- Development of software that is “interoperable by design”;
- Voluntary publication and licensing of proprietary technologies and intellectual property; and formal collaborations among businesses and governments to create interoperable systems.

Figure 4



Each of these methods to achieving interoperability is discussed below. It is important to emphasize – particularly for policy makers– that these options are simply a means to an end; ultimately, the goal is interoperability.

In addition, it is important to note that these methods of achieving interoperability often evolve over time. As industry and consumer needs change, the nature of the interoperable element or “standard” may evolve. For example, the pursuit of a proprietary standard by a group of companies may make the most sense under certain circumstances because the standard can be adopted more quickly and because it is likely that only a few organizations will rely on the standard to achieve interoperability.

Later, if that proprietary standard becomes more broadly known and implemented by other organizations, it may rise to the status of a de facto market standard. At that point, the standard may also be contributed to an open standards organization, such as the International Telecommunications Union (ITU) or the International Standards Organization (ISO), for ratification as a formal open standard in order to achieve wider implementation, for example XML, a proprietary technology that has gained broad popularity, has been accepted by the European Computer Manufacturer's Association (ECMA) for formal open standardization.

Given this potential evolution through the various methods of achieving interoperability, it is important that governments embrace all methods to achieve interoperability in order to promote maximum flexibility and efficiency in the market place.

Implementation of market driven standards. Consumer choice is a powerful tool to drive interoperability. The market place has delivered a number of de facto technology standards. For example, Adobe's market strategy to give away its PDF reader, coupled with the product's ability to maintain document integrity on the worldwide web, drove consumer choice to PDF. Today, this is a globally accepted file format for transfer of electronic documents. There are many other examples. The IT sector depends heavily on market-driven development of such de facto standards, given the speed of technological development and the relatively slow pace of formal standards proceedings.

As governments consider policies to achieve interoperability, they should keep in mind that the marketplace has been an important force in selecting technology winners and losers. Indeed, consumers and not government are the best judge of how and if

technology works for them. In each of the listed means of achieving interoperability, there is a necessary element of market testing required to ensure the success of an interoperability effort.

Products that are interoperable by design. The marketplace is driving interoperability demands. As legacy systems and new systems increasingly need to interact, customers – whether they are government, businesses, or individual consumers – want all of their components to interoperate. In government, the tax authority’s computers should be able to speak to the department of motor vehicles. In business, headquarters in Mumbai should be able to seamlessly access documents created in the London office. And for consumers, their MP3 player should be able to talk to their PC. Businesses are responding by building products that are interoperable by design. Standards are addressed in our model Interoperability and Open Standard framework and may be downloaded at our website <http://www.softwarechoice.org>

5.9.6 Unsolicited electronic messages

COMPTIA submitted comments to OFTA on the proposed anti-spam ordinance in July 2005 and is pleased that Government responded to the industry by commencing the legislative process of putting in place a pragmatic and robust piece of legislation that will significantly strengthen the rights of both businesses and individuals to stop receiving unwanted commercial emails. As COMPTIA has already made its submissions in respect of the Unsolicited Electronic Messages Bill which are unchanged.

4 Enabling the Next Generation of Public Services

COMPTIA supports the Government in enhancing the appropriate use of IT adoption within the Government, in particular to adapting such services being developed with private sector participation. We would encourage the next wave of e-government services to focus on multiple device accessibility including mobile access and services for the disabled. COMPTIA would also refer to our comments on technology neutrality and the adoption of robust proven technology standards that are used by the citizens of Hong Kong on their chosen devices. The Government has therefore chosen the right course in ensuring that government services and projects are to be developed on an open platform. Our comments on security and privacy are also relevant is the success of NextGen services, be they public or private.

7 -7.1 Building an Inclusive Knowledge-based Society/Digital Inclusion

COMPTIA as representatives of the IT private sector, supports the facilitation of information sharing relative to the action lines, focusing on the true exchange of experiences, on information-sharing and also on forming new partnerships. We believe that such facilitation can best be accomplished by use of an online platform and other online tools that enable all stakeholders to share their activities related to the action lines and, by reducing the time and costs needed for traveling, also maximizes the impact despite limited human and financial resources. All stakeholders who are already

involved in activities related to the action lines, regardless of whether they are able to attend planning meetings, can bring their activities into the fold and also make others involved in that particular action line or sub-items aware of what they are doing.

COMPTIA believes the Government has a key role to play in addressing and revising regulatory issues for the telecoms sector to fully realize the potential of a digital society. COMPTIA member companies seek a future in which technology users – no matter where they are or time of day - possess the ability to access, create, and share information.

The continued development of the Internet – including IPV6 that enable an ‘internet of things’, - machine to machine communication - have provided the foundation to make the Web a global platform for connectivity, business productivity, personal creativity and digital entertainment.

Therefore affordable access to Internet – in particular mobile access - as a utility service available to every Hong Kong resident is essential to foster this. The adoption of established and merging wireless technologies such as; WiMax, HSDPA and Mesh networking will further establish this. Taipei, for example has a city wide WiFi access that is both cheap and ubiquitous, via prepaid cards from convenience stores.

The Government should also be mindful that while options for the initial acquisition costs of software solutions would be an important factor in driving IT adoption by SME’s, like any asset it is the total costs of ownership of IT assets that

matter in the long run – long term support and maintenance costs, training costs as well as ease of use and productivity gains.

5.2 Bridging the digital divide

COMPTIA is encouraged to see that the Government supports the aims encapsulated in the objectives of the Tunis Agenda and the WSIS Geneva and Tunis commitments is to promote partnerships, initiatives and activities that further the objectives of the action lines. The private sector IT Industry appreciates having the opportunity to participated in the WSIS process and to co-facilitate some of the action lines and welcome the recognition in the WSIS documents of the important role that the private sector continues to play in both in terms of investing in the Information Society and by providing innovative products and services that will contribute to advance many of the goals established by the Geneva Plan of Action.

Private sector representatives recognize the continued opportunities presented by the post-WSIS processes for building even better ties to other Information Society stakeholders, particularly with regard to issues related to the developmental aspects of IT. In this regard, we understand that, wherever practical, these activities should also link to activities related to the Millennium Declaration Goals as these represent the ultimate objective of the WSIS, and the Government.

6 Conclusion

COMPTIA would like to thank the office of the OGCIO and Government for preparing their vision of the digital future on Hong Kong and for asking for comments. We stand available as always to assist in providing industry views for building a robust IT Infrastructure and a knowledge based economy for Hong Kong.

As the Strategy notes, boundaries between traditional media and new media are converging through digitalization. It is therefore vital that Government should exercise caution and consultation with all stakeholders on any action in the IT arena to ensure a level playing field for all players, both businesses and consumer. Policies that are restrictive or limit choice or development of new technologies in a connected world would be a step backwards for Hong Kong which is a proven dynamic and forward thinking economy.

We look forward to hearing your response to our above comments in due course.
Submitted with respect.

Sincerely,

Michael R K Mudd. (麦米高)
Director of Public Policy, Asia - Pacific.
(业协会公共政策主任 - 计算机技术工业协会)
COMPTIA Hong Kong Limited.

www.comptia.org www.softwarechoice.com