The Internet as a Utility – *"The Fourth Utility"*

We at Cisco Systems Hong Kong are pleased that the Government is committed to enabling the next generation of public services. Your commitment is very similar to our own commitment to utilize technology to improve the human condition around the world. We believe the most important contribution we at Cisco have to offer today is not the mere supply of technology itself, but the more meaningful contribution to educate the world on how technology can in essence become a "human network" in which anything is possible. Because once we provide the right technology to eliminate today's barriers, then we can create an environment in which we are all truly connected… and we're more powerful than we ever could be apart.

e-Government: The Need for a Common Intelligent Platform

The Government has made clear its desire to deploy ICT (Information and Communication Technology) to improve the productivity and competitiveness of the city. Today, however, only several online Government services are commonly used by the public and only by very few citizens. Why? Because many regard the current e-Government services as cumbersome, in particular those services which require authentication. We've all experienced the excitement at the prospect to complete a transaction or service online, only to be frustrated by systems that are not user friendly, and in some cases, simply not functional. Unfortunately, this is what many Hong Kong citizens experience when they attempt to use e-Government services.

Why is this happening today? As with many developed countries, the network infrastructure of the Hong Kong Government and its various departments have been created with legacy systems. In other words, yesterday's technology is attempting to respond to today's consumer demands and expectations.

If the Government is to deploy ICT to improve the productivity and competitiveness of the city, the network infrastructure and architecture must be intelligently integrated into the various processes of the Government agencies so that agencies can serve the citizens seamlessly.

The critical first step is that the Hong Kong Government must have the determination to build a common intelligent platform. By building and enabling such a platform, we can transcend e-Government services from their current state to provide a portal of "no wrong door" which allows citizens and businesses to gain access to efficient services through the widest possible array of channels. Citizens will be able to be self-serviced through the e-Government platform in an efficient and convenient manner.

How do we get started? The current plan to build a central government headquarter is an excellent opportunity to start building a common intelligent platform. This is an opportunity to create a 'Connected Building' with the network as a platform for integrated applications and services.

Why a Connected Headquarter? A state-of-the-art "connected" Government headquarter makes achieving our larger ICT goals much easier by designing the necessary technology from the very start. Such an "intelligent building" regards communication-

related services such as telecommunications, broadband, security circuits, and fire systems as an integral part of the overall infrastructure similar to life necessities such as water, electricity and gas. In essence, the Internet becomes *"The Fourth Utility"*.

Here are several creative solutions implemented by governments in other parts of the world to address this issue which have been made possible through the use of a common intelligent platform:

- A best practice example is the extension of the government's portal to include common non-government services. For example, if someone changes their residence, they could access a government portal to enter their new home address information and at once notify all the government as well as non-government services such as banks, telephone and utilities.

- Governments around the world today are actively implementing internal shared service models to free individual government agencies from such routine administrative functions as payroll, HR, and facilities management to focus on their core mandates. Such shared services allow different government departments to consolidate administrative tasks into web-based, integrated services that can be shared by multiple agencies thereby allowing civil servants to focus exclusively on their core responsibilities.

- Another key area focuses on solutions that help emergency services improve their response time and procedures to effectively manage accidents and tragedies. One obvious example is to integrate services from police, fire and ambulances to work more closely when just a few precious moments can mean the difference between life and death. For example, Chicago and Los Angeles have enabled boroughs that have implemented mobile IP video surveillance technology in police cars that allow officers to view what is actually happening as they approach potential crime scenes.

All of these useful applications are only possible when the information network is built with a common intelligent platform, and truly becomes *"The Fourth Utility"*.

We hope that we have explained in more practical terms why we believe that only through deploying an intelligent network platform with a holistic systematic approach will the government be able to implement e-Government which will ultimately improve the citizens' quality of life. This requires a strong positioning of the Government to regard the Internet infrastructure and applications with a systematic approach in which all government entities can benefit when effectively deployed.

Finally, we understand that investment of public funds must be held accountable as a matter of course. Therefore, as a measure of the success of e-Government, we recommend to measure the utilization of the Internet for public services against the Internet penetration of the city as a whole.   With ongoing measurement of this kind, the Government can truly understand how successful we have been to implement e-Government to enable the next generation of public services.

ICT for the Youth: Encouraging the positive use of the Internet for the Connected Youth

We all understand how profoundly today's young people differ from those of previous generations, from how they view the world as a whole to specifically how they act in their everyday lives. Today's youth are particularly different in that they are growing up with technology as a matter of course, not as new entertainment or a new challenge to overcome. As a result, they will become adults with the skill sets necessary to fully leverage the advanced technology that will exist in the future.

Cisco believes technology is important for all youth, not just a select few.   Cisco is not only concerned about those students who take IT or Internet Networking courses as a career path.   We take a special look at the much larger group of students who are growing up with the Internet in ways that impact nearly every aspect of their lives. A typical secondary school student today has been on the Internet for over 10 years. They are already veterans in the collaborative and interactive aspects of the Internet.

We agree with the Government's vision to build an inclusive, knowledge-based society. In the area of education, however, the focus has been primarily on providing students with suitable ICT facilities to support their learning inside the school hours.

We believe that policy makers must expand their current view of IT in education. We believe policy makers must make a paradigm shift in how they regard the Internet generation to broaden the focus beyond technology to focus on the larger goals of interaction and collaboration. Hong Kong's educators cannot only teach "ICT" in schools, they must integrate technology and the internet into the everyday curriculum across all studies to ensure that teaching and learning is relevant to the way the networked generation studies, lives, learns and plays.

In addition, we believe the government can also take a leading role in educating the public on ways that can help the next generation positively use the Internet. For example, there are many services available in the private sector that protect children from accessing or being exposed to inappropriate content on the Internet. Government, educators, parents and private industry can work together to demonstrate the benefits of measures that protect young people from inappropriate use of the Internet, and then to step aside to allow private industry to compete in providing the most effective, affordable services. Just as the government accepts responsibility to educate the public in such areas as preventing illness from transmittable disease or automotive safety, they can take the same initiative with the internet.

We strongly recommend that our Digital 21 Strategy must include the vision to encourage the positive use of the Net for our next generation, in order to truly and successfully build an inclusive, knowledge-based society in the foreseeable future.

Digital Life: Building a municipal Wi-Fi Network to enhance competitiveness

More than 150 municipalities around the world have either deployed or are in the process of deploying a municipal Wi-Fi network. If Hong Kong were to follow this path, such an outdoor wireless solution would be able to integrate with applications such as real-time data access and video surveillance across the wired and wireless infrastructure to deliver a much higher level of city-wide *responsiveness, safety* and *efficiency* by enabling people, both Hong Kong citizen and visitors, and information to be *mobile* and secure.

As one of the most progressive cities in the world, Hong Kong cannot afford to lose its competitiveness without a plan to deploy such a municipal Wi-Fi network and advanced mobile digital services. If effectively deployed, a Wi-Fi network transforms the way communities deliver services, provide public safety, and drive economic development via a solution framework that truly connects government with business and citizens.

Paragraph 7.12 outlined the most fundamental concern of ICT in digital life – far too many people in Hong Kong do not regard ICT as a powerful tool to transform their lives. Despite the far-reaching benefits that ICT has clearly demonstrated throughout the world, a large percentage of the current local working generation, including policy makers, have not fully adopted the use of the Internet to enhance the ways they work, live, play and learn. However, in contrast, Hong Kong's youth generation knows otherwise. Internet IS is their primary tool to study, live, play and learn.

By adopting a city-wide municipal Wi-Fi, Hong Kong government is taking a leading role to encourage daily use of the Internet for digital life, as well as laying the foundation to significantly enhance public services, and connected youth Internet applications.

We strongly urge the Government of the HKSAR to place this initiative as a priority in its development of the Digital 21 Strategy in order to further enhance its competitiveness – a factor should not be overlooked.

Conclusion…

We, at Cisco, are privileged to work with many of the world's leading governments and companies and have learned a great deal with such leaders about how and where productivity and competitiveness can be improved.

We have established our operations in Hong Kong for over 10 years and, for many of us at Cisco Hong Kong, we regard this city as our home.   We sincerely hope to provide our expertise and knowledge to contribute to the betterment of our community, so that today's citizens and our next generation will continue to enjoy the benefits of the connected human network through effective and positive use of technology.

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