



10 June 2009

## **THE WEST KOWLOON CULTURAL DISTRICT**

Submission by Cisco to

### **Joint Subcommittee to Monitor the Implementation of the West Kowloon Cultural District**

Cisco Hong Kong is pleased to make a submission on the proposed development plans for the West Kowloon Cultural District. The Hong Kong SAR government's aim to build a hub for high culture, promoting freedom of expression and accessibility for all, will be an important substantiator in building out Hong Kong's credentials as a World City.

We make note of the overarching principles of people-focussed development, in particular **Sustainability, Accessibility and Connectivity**. As one of the world's leading players in building out and managing collaborative networks, Cisco would like to urge the government to keep note of the important role of information and communications technology (ICT) in achieving these three principles. It has been established around the world that building in ICT right at the design stage of the project will make it more economical, better structured and more effective. Piece-meal buildout after the project is completed will necessitate extra expense, disruption and most importantly might in some instances require planners to compromise on their objectives in order to be pragmatic.

#### Sustainability

There are three elements that fall under sustainability – environmental sustainability, economic sustainability and social sustainability.

Around the world today, the benefits of ICT are being felt in improving the environmental performance of buildings of all types.

The integration of information and electrical technologies can dramatically improve the environmental performance of a campus. With the West Kowloon Cultural District, for example, a virtuous circle would be created of lower building operating expenses, reduced administrative land use, increased energy efficiency and reduced greenhouse gas emissions. Today's technologies allow the computer systems that control heating, air-conditioning and digital infrastructure systems to be integrated, allowing them to automatically monitor and regulate the energy supplied based on the environment.

Smart buildings equipped with sensors can monitor the amount of sunlight coming into a room and adjust indoor lighting accordingly, or turn off air conditioning and lights when rooms or floors fall empty. They can also oversee other building functions such as security, fire suppression and elevator operations. Telecoms equipment such as PCs and phones can be networked to automatically shut down or proceed to energy standby mode when idle. ICT could truly underscore the West Kowloon Cultural District's leadership in cultural provision, ICT and energy-efficiency.

From an economic perspective, early and strategic incorporation of ICT elements during the design stage of the West Kowloon Cultural District will help drive visitation through efficient venue allocation, virtual venue tours, scheduling, ticketing and more effective planning. Such advantages not only will help attract local and overseas spectators, but also artists and



performers, creating a sustainable flow of attractions and exhibits at the District and further driving visitation.

Finally, from a social perspective, the artistic community is already leading the way with respect to collaborating, sharing ideas and finding inspiration through the Internet. The West Kowloon Cultural District should incorporate ICT infrastructure that takes this to the next level by enabling artists and culture lovers from around the world to collaborate more seamlessly than ever before. For example, high-definition video technology such as TelePresence provides real-time, face-to-face communication for people in different parts of the world and is already widely used in the business world. The intent to provide a forum for face-to-face collaboration is already clear in the government's plans, but adding a real-time element to this would allow artists in Hong Kong to collaborate with their counterparts on the other side of the globe just as effectively.

### Accessibility

ICT will play a central role in achieving the aim of making the District accessible to all. In thinking about improving the accessibility of the West Kowloon Cultural District it is essential to think beyond the confines of the District and into the modes of transport leading to it.

Transportation networks of today have become so complex that it is virtually impossible to implement an effective and overarching accessibility system without using ICT from the planning stages.

ICT can help virtually every participant in the transportation network. For example, systems that offer real time traffic information so that visitors can find the best way to commute; systems can also help operators and management control crowds after major performances; and in general help improve the experience of travelling to and from the venue.

Smart bus stops are already in use in some overseas countries offering real time traffic information – to the benefit of passengers – who can avoid bottlenecks, drivers who can effectively reach their passengers and bus operators who can now better manage their fleet. An overview of traffic conditions can direct drivers to available parking. A networked and effective network of IP-based CCTV cameras is crucial for crowd control, to monitor traffic congestion and provide emergency support.

Apart from physical accessibility, ICT offers easy access to information. From information about ongoing and upcoming activities at the venue to real-time feeds of artists' activities or emotions as they prepare for a show to ticketing information. "Digital signage" in key spots can be used not only for advertising purposes but also provide real-time information about shows, instructions to visitors, etc.

Cisco is working with urban planners worldwide on its Smart Transportation project, which consists of future initiatives to help reduce traffic congestion on all modes of transportation. These include flexible road pricing based on time and location; an integrated payment system for congestion charging, parking, and public transport; and effective mobile enforcement using automatic number plate recognition technology.

A concept under development in San Francisco is The Connected Bus – a prototype hybrid bus with Wi-Fi access and a global positioning system (GPS) updating passengers with the status of bus routes and connections. An automated maintenance system reduces its environmental impact.



## Connectivity

ICT can help connect Hong Kong with the rest of the region and the world, and even connect the local art and non-art communities.

The artistic community around the world has embraced the Internet whole-heartedly as a platform to express itself and collaborate. With its high broadband penetration Hong Kong should take the lead in the provision and use of online platforms to promote art / culture within and outside Hong Kong. Current technology allows a lot of media-rich content to be put online for fans from around the world to enjoy – from Chinese opera, major stage performances, orchestra, to visual arts exhibitions etc – creative output can be stored and shared with interested parties both within and outside Hong Kong on demand. Planners need to think of the IT infrastructure considerations to provide high-definition media-rich content on demand. Bandwidth requirements, storage capacity and network management requirements must all be considered at the design stage to be effective.

Cisco is currently engaging with four of the world's most vibrant cities on different continents – San Francisco, Amsterdam, Seoul and Singapore — to develop and promote innovative ICT practices to reduce emissions. Areas of focus include: improving public and private transport and easing vehicle congestion, increasing energy efficiency and using public space intelligently, and facilitating flexible working practices. As a result of this engagement we have access to a blueprint of best practices that can be used as a reference by other cities.

In Korea for example, the Songdo International Business District (IBD) – a newly developed city near the airport, features ICT elements built in from the earliest stages of the project. The project uses ICT effectively to save on long-term operating costs, increase real estate value and improve energy efficiency. A key feature will be the ability to make the buildings in the district 'Green Aware'. By being Green Aware, the building gathers, analyzes, and displays real-time building energy use and resource consumption. Hence users in Songdo IBD are armed with information to help them become environmentally conscious and contribute to the sustainability of their surroundings.

In Amsterdam, Smart Work Centers are being developed – an approach that enables local residents to work in remote stations without having to travel into the heart of the city, saving both time and energy in emissions.

In summary, cities of the future—and innovative cities today—are addressing the challenges and opportunities of sustainable development by thinking of the Internet network as the fourth utility. This is not only about installing broadband in the home so citizens can access the Internet. It is more about putting the network at the center of how we plan a city's transportation, buildings, entertainment, healthcare and more.

The West Kowloon Cultural District is an opportunity to create an iconic landmark not only for the artistic content displayed within it, but also for the way ICT is deployed from the very design stage to achieve the principles of sustainability, accessibility and connectivity.

Yours faithfully,

A handwritten signature in black ink, appearing to read "Barbara Chiu".

Barbara Chiu  
General Manager, Hong Kong and Macau