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Hong Kong

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Overview

Hong Kong's information and communication technology (ICT) sector is one of the most developed not just in the region but also globally, as evidenced by a number of recent reports. For example, in the World Economic Forum's latest *Global Information Technology Report*, published in March 2007, Hong Kong was ranked 12th out of 122 economies in terms of Network Readiness. The report's Network Readiness Index examines the preparedness of countries to use ICT effectively on three dimensions: the general business, regulatory and infrastructure environment for ICT, the readiness of the three key stakeholders—individuals, businesses and governments—to use and benefit from ICT, and their actual usage of the latest information and communication technology available.

Hong Kong fared even better in the Economist Intelligence Unit (EIU) e-readiness rankings, where it jumped from 10th place in 2006 to fourth in 2007, behind only Denmark, Sweden and the US. The EIU places more importance on connectivity and the quality of infrastructure, with more weight given to broadband access than dial-up, for example, while it also rates the affordability of such communications. According to the report, Hong Kong owes much of its e-readiness success to strong government policy.

This is not to suggest, however, that Hong Kong is rigidly regulated. One of the main success stories of the regulatory environment has been to create a liberalized and competitive market for services, something that is easier to do in this highly urbanized environment than it might be in less densely populated countries. Situated on the eastern side of the Pearl River Delta, bordering the South China Sea and Mainland China, Hong Kong has 6.9 million people living in an area of just 1,104 square

Population	6.9 million (2006)
GDP per capita	HK\$ 214,710 (2006) (about USD 27,500)
Key economic sectors	Banking and finance, tourism, import/export trade, logistics
Fixed-line telephones per 100 inhabitants	95.6 (2007)
Mobile phone subscribers per 100 inhabitants	135 (2007)
Domain names registered under '.hk'	138,952 (March 2007)
Broadband subscribers per 100 inhabitants	72.8 (2007)
International bandwidth	698,106 Mbps (2006)
International Internet bandwidth (not including to Mainland China)	59,522 Mbps (2007)

Sources: GovHK portal (www.gov.hk) and Office of the Telecommunications Authority.

kilometres, making it one of the most densely populated places on earth. As a result, it provides a concentrated and economically viable market that has been seized upon by ICT providers to quickly and efficiently build a critical mass of customers while lowering prices.

First-grade infrastructure is also required by the country's business sector, particularly as Hong Kong's GDP is now predominantly derived from the provision of services. Hong Kong is the 11th largest trading economy in the world and operates the busiest container port in the world in terms of throughput. It is the 10th largest banking centre in terms of external banking transactions and its stock market is Asia's second largest in terms of market capitalization and the eighth largest in the world. These international logistic, trade and finance services rely on Hong Kong's excellent telecommunications infrastructure.

ICT indicators

Since 2000, the Census and Statistics Department has published annual ICT statistics, with the most recent, titled *Hong Kong as an Information Society*, coming in November 2006. According to the report, 71.7 per cent of Hong Kong's 2.3 million households had PCs at home, compared with 70.1 per cent in 2005. The PC penetration rate has hovered around the 70 per cent mark since 2004. The number of households with PCs connected to the Internet increased from 64.6 per cent in 2005 to 67.1 per cent in 2006, with the majority connecting through a broadband connection.

The highest rate of computer use was in the 10–14 age group, with 98.2 per cent using a PC at least once in the 12 months

before the survey. Usage among those aged 65 and over was lowest, with just 5.3 per cent of those surveyed having used a PC in the 12 months prior to the survey, although this was up from 2.2 per cent in 2003. The increase in the number of senior persons using computers was a result of intervention at the community level. Now, almost all centres for the elderly within the territory offer computer equipment or training classes. Gender disparity among the senior citizens was high in terms of computer usage—almost two men to one woman. This could be because of the comparatively low literacy rate of women in that age group.

The report suggested that computer users are likely to be more educated and economically more active. Utilization of electronic business such as the Octopus card, ATMs and e-cash was also quite high. Around 97.4 per cent of those aged 15 and above claimed that they had used such services before the survey. However, only 8.8 per cent of all persons in that age group had made an online purchase. E-government services had also been used by 34.6 per cent of those aged 10 and over.

The report did not indicate the utilization of PCs and Internet by disadvantaged members of the population. However, such a survey was conducted by the University of Hong Kong and the Hong Kong Council of Social Service between April 2005 and February 2006. Six disadvantaged groups were identified and investigated: Single Parents with at least one child aged below 18, adults aged 60 or above, children in households with income lower than half of the median household income, new arrivals, female homemakers whose highest level of education was primary school, and Persons with Disabilities and/or Chronic Illness (PWD/CI). The data was collated to create a Comprehensive Digital Inclusion Index (CDII), where a rating of 1.0 is the level of access for the mainstream or non-disadvantaged population in society. The figures are shown in Table 1.

Due to the compulsory nine-year education system in Hong Kong and the fact that all schools now provide access to the Internet, the situation of children in low income families was better compared to other disadvantaged groups. Older people in society were the least 'included' compared to other disadvantaged groups, followed by people with disabilities.

The findings of the Digital Inclusion Index (DII) study have been quoted by the Hong Kong Government in its Digital 21 Strategy public consultation paper, which suggested that further investigation would be required to understand the specific needs of and barriers experienced by different groups of people with disabilities. The DII study was also the first of its kind in Hong Kong and if continued could be used as a tool to monitor and narrow the digital gap.

ICT infrastructure

One of the hallmarks of Hong Kong's ICT infrastructure is the breadth of competitive service providers. As of April 2007, there were 11 fixed network operators (one of which offered fixed wireless services), five mobile operators, six providers of satellite service, 22 cable operators, 255 external telecommunications operators and 179 Internet Service Providers (ISPs).

Despite widespread competition, incumbent operator PCCW-HKTC has a universal service obligation to provide a good, efficient and continuous basic service to consumers anywhere in Hong Kong within a reasonable period of time. The other local fixed-line providers are New World Telecommunications, Wharf T&T, Hutchison Global Communications, Hong Kong Broadband Network, Towngas Telecommunications, CM TEL (HK), TraxComm, HKC Network and Hong Kong Cable Television (HKCTV).

Also remarkable is the quality of the network, with the majority (72.8 per cent) of Hong Kong households accessing broadband services rather than dial-up, while in the mobile sector four of the five operators have widespread 3G (W-CDMA) coverage and are starting to offer higher-bandwidth mobile access through a 3G upgrade known as High Speed Packet Access (HSPA). The regulator has also announced its decision to go ahead with the assignment of spectrum for a CDMA 2000 network in 2007.

The ADSL network of incumbent operator PCCW covers 98 per cent of households, while cable modem service covers

Table 1

<i>Sub-indexes</i>	<i>Older people</i>	<i>New arrivals</i>	<i>Single parents</i>	<i>Women</i>	<i>Children (low income)</i>	<i>Disabilities &/or chronic illnesses</i>	<i>All disadvantaged persons</i>
Accessibility Sub-Index	0.50	0.70	0.71	0.75	0.72	0.53	0.62
Usage Sub-Index	0.04	0.50	0.19	0.06	0.88	0.17	0.26
Knowledge Sub-Index	0.04	0.52	0.41	0.05	0.92	0.14	0.26
Affordability Sub-Index	0.50	0.71	0.48	0.62	0.00	0.54	0.52
CDII	0.27	0.61	0.45	0.37	0.63	0.35	0.41

Source: CDII

more than 90 per cent. The customer access networks of other operators cover 71 per cent of households. Due to the widespread broadband coverage, services such as Voice over IP (VoIP) and IP-TV are popular. Hong Kong boasts the highest penetration of IP-TV in the world with a household penetration of 25 per cent.

Throughout Hong Kong Wi-Fi hotspots are common in coffee shops, office buildings, public transport facilities and so on. The Office of the Telecommunications Authority (OFTA) has a search service to locate registered access points on its website, which can be searched by name, area or district. It lists 29 licensed organizations that offer 1,299 Wi-Fi access points across Hong Kong.

In terms of satellite and submarine cable facilities, Hong Kong is one of the major hubs in Asia Pacific. Satellite-based telecommunications and television broadcasting services are provided via a multitude of satellites in the region with more than 50 satellite earth station antennas operated by Reach Networks Hong Kong, Reach Cable Network and Reach Global Services, Asia Satellite Telecommunications, APT Satellite and a number of external fixed operators and broadcasters.

The Hong Kong Government is also taking steps to prepare its infrastructure for the next generation of Internet Protocol, IPv6. The Internet Engineering Task Force (IETF) has proposed IPv6 because of its far greater address space, which will be needed to connect a multitude of mobile devices and consumer electronics equipment in the future. The Government believes it will generate new business opportunities for the ICT and other sectors.

As a result, the Government will take the lead in migrating to IPv6. The Internet backbone of the local universities has already been upgraded to a high-speed network of 10 Gbps in support of IPv6. The new protocol will be adopted in the Government’s internal network by 2008. The Government will also encourage Internet service providers to prepare for the migration.

In 2007, Hong Kong also started the transition to digital terrestrial television (DTT). While digital television stations are already available through cable and satellite networks, the two terrestrial TV broadcasters, Asia Television Limited (ATV) and Television Broadcasts Limited (TVB), will migrate their analogue services to digital. Digital services offer better reception, the ability to offer high-definition TV (HDTV) and new interactive services.

At the end of 2006, ATV and TVB submitted a proposal to the Broadcasting Authority to adopt the national standard announced by the Standardization Administration of China (SAC) called ‘GB 20600–2006: Framing Structure, Channel Coding and Modulation for Digital Television Terrestrial Broadcasting System’. Under the transition framework, the two stations will

broadcast both analogue and digital signals in 2007 and aim to extend the coverage of their digital networks to at least 75 per cent of Hong Kong by 2008. Subject to further market and technical studies, the Government will direct ATV and TVB to switch off analogue broadcasting within five years after the commencement of dual broadcasts.

The Broadcasting Authority has approved ATV and TVB’s investment plans for digital TV programme service and network rollout. ATV has committed an investment totalling more than HKD 400 million (about USD 51 million) up to 2009 to provide a hybrid digital service of HDTV and multichannel broadcasting, while TVB has committed an investment totalling more than HKD 400 million up to 2009 to provide an HDTV channel starting from end 2007. This HDTV channel will include at least 14 hours of HDTV programmes per day.

Key national initiatives

Digital 21

In July 2004, the Office of the Government Chief Information Officer (OGCIO) was set up to provide leadership for the development of ICT within and outside of the Hong Kong Government, as a single focal point with responsibilities for ICT policies, strategies, programmes and measures under the Digital 21 Strategy.

First drawn up in 1998, the Digital 21 Strategy for information technology is the highest-level policy initiative by the Hong Kong Government in the area of ICT development. The strategy is currently under review and a new version will be published in 2007. Previous reviews of Digital 21 were undertaken in 2001 and 2004. The most important areas of focus in the new strategy will include expanding the use of advanced IT in citizen services like a ‘one-stop portal’ for e-government services, health care and transportation, as well as further investment to achieve better digital inclusion.

In a consultation paper on the Digital 21 Strategy, the government notes that innovation and technology will continue to play a key role in helping Hong Kong to compete by enabling businesses to transform and provide goods and services of increasing value and harnessing the role of Hong Kong as a business hub for Mainland enterprises to attract foreign investments and participate in the global economy. There is also a clear vision of moving towards an inclusive, knowledge-based society in which the benefits of ICT adoption are widely available to different segments of the community. In addition, the consultation paper points out that issues relating to data standards, information management and intellectual property rights protection are becoming areas of increasing focus.

Aimed at making Hong Kong a world digital city, the Digital 21 Strategy has initiatives around four areas:

1. Promoting advanced technology and innovation, including initiatives such as the strengthening of the Cyberport, Science Park and newly established R&D centres.
2. Developing Hong Kong as a hub for technological co-operation and trade, including initiatives to boost the ICT workforce by developing competency standards and strengthening training leading to professional recognition.
3. Enabling the next generation of public services, including initiatives such as the establishment of a new government portal, GovHK, as the single entry point to online government information and services.
4. Building an inclusive, knowledge-based society through provision of broadband connectivity for every citizen and other initiatives.

Digital solidarity fund (DSF)

The Digital Solidarity Fund (DSF) was established as a platform to engage government, the private sector and NGOs in the work of narrowing the digital divide. The government and private sectors contribute financially and are also heavily involved in direction setting and project selection. NGOs contribute their expertise in project implementation and are also engaged in fundraising and fund management.

Of around 120 applications for funding, DSF has granted more than USD 256,000 to 13 community programmes. Projects supported are mainly for providing access and capacity building services such as training and technical support for specific groups. Mobilization of volunteers was a major part of almost all programmes.

The response from stakeholders has been positive. DSF sponsors have noted that their direct involvement in the management of the fund and occasional participation at the community level on a voluntary basis was a rewarding experience. Community organizations have found it encouraging to learn that their expertise is being acknowledged and that disadvantaged people in the community would be able to participate in the information society effectively through their help. The Government has already proposed to include its support for DSF in the Digital 21 Strategy.

However, despite its achievements, financial support for DSF remains a big constraint. The USD 130,000 raised annually is slightly below 50 per cent of the expected target. DSF is expected to do better at attracting public and private funds in the future.

Public Wi-Fi services

In May 2007, the Legislative Council approved the release of USD 217.6 million to fund the provision of Wi-Fi facilities at about 350 government premises for free use by the public. Priority sites will be set up at premises frequently visited by members of the public by mid-2008. These premises include libraries, public enquiry service centres, community halls/centres, parks and government buildings. The OGCIO will centrally oversee, coordinate and manage the programme, but installation, provisioning and operations will be outsourced to the private sector.

The Government will specify the security requirements in the tender document to ensure that the contracted service providers will provide the necessary hardware, software and technology with appropriate security features. The Government will also require service providers to install various security measures to safeguard user data, such as encryption, intrusion prevention and detection systems, and filtering software. Security consultants will be engaged to perform security risk assessment on the Wi-Fi network designs and conduct security audits after the networks have been put into full operation.

The Government expects the initiative to stimulate the development of wireless and mobile applications that will be conducive to the development of the ICT industry and the wider economy.

Research and development

Hong Kong has two key centres for ICT R&D: the Cyberport situated in Telegraph Bay in the Southern District of Hong Kong island, and the Science Park located in the Tai Po area of the New Territories.

The Cyberport, a USD 2 billion project managed by Hong Kong Cyberport Management Company Limited and wholly owned by the Hong Kong government, is seen as the territory's main ICT hub. It is a strategic cluster of more than 100 IT companies and more than 10,000 IT professionals. The clustering of local and overseas companies and professional talent is envisioned as a catalyst and hub for the growth of local and regional IT digital entertainment industries, with particular emphasis on IT applications, information services and multimedia content creation. Cyberport also provides IT education for the broader community.

The Science Park is dedicated to applied research and development. It is also being developed along a clustering concept, with four clusters of electronics, IT and telecommunications, biotechnology and precision engineering. The first phase of

the Science Park was opened in 2002, while phase two is to be completed in stages in 2007 and 2008.

In the latest Digital 21 consultation paper, the Government stated that it would continue to strengthen both the Cyberport and the Science Park. It has also set aside USD 2 billion under the Innovation and Technology Fund to set up a further five R&D centres which are described as dynamic hubs forging partnerships among multiple players, including the ICT industry, different industrial sectors, academia and overseas/Mainland enterprises in the development, application and commercialization of new technology. In particular, the new R&D centres will undertake industry-oriented research in technologies demanded increasingly in Mainland China. The five focus areas are R&D for ICT, automotive parts and accessory systems, textiles and clothing, logistics and supply chain management enabling technologies, and nanotechnology and advanced materials research.

Regulatory environment

One of the strengths of Hong Kong’s ICT sector, as noted in the EIU e-readiness survey, is its enlightened and forward thinking regulatory policies. Key to this is a fully liberalized market where service providers are free to adopt the technology that best meets market demands. All sectors of Hong Kong’s telecommunications market have been liberalized and there are no foreign ownership restrictions.

In the fixed network sector, there is no preset limit on the number of licences issued, nor a deadline for applications. There is also no specific requirement on network rollout or investment. The level of investment is determined by the market. Similarly, in the satellite sector Hong Kong adopts an ‘open sky’ policy in regulating the provision of satellite services. The only limits on operators are in wireless services where there is a physical constraint such as spectrum availability.

Number portability has been introduced in both the fixed and mobile sectors to promote competition by allowing consumers to retain their existing telephone numbers if they change providers.

Charged with overseeing the sector and enforcing such competition measures is the Office of the Telecommunications Authority (OFTA), which was established as an independent government department on 1 July 1993 as the executive arm of the Telecommunications Authority, the statutory body responsible for regulating the telecommunications industry in Hong Kong. The Government also plans to set up a Communications Authority by merging the existing Telecommunications Authority and Broadcasting Authority. This is to recognize the convergence of the telecommunications and broadcasting industries.

OFTA is vested with all of the necessary powers under the Telecommunications Ordinance to administer licence conditions, make determinations and impose sanctions for breaches. Its role can be broken down into six main areas: regulating public telecommunications services, enforcing fair competition in the telecommunications sector, tracking down illegal telecommunications activities, managing the radio frequency spectrum and coordinating satellite orbital positions, advising the Government on telecommunications matters, and representing Hong Kong in international telecommunications organizations and forums.

OFTA is also looking at new measures to ensure a more competitive environment. In April 2007, it published a new spectrum release plan that will make available further radio spectrum over the next three years through an open bidding or tendering process. OFTA said the publication of the plan, which will be updated annually, is also for increasing the transparency of the supply of radio spectrum.

The new spectrum is expected to be used for the deployment of broadband wireless access (BWA). In May 2007, OFTA announced proposals for the allocation of the 2.3 GHz band for BWA and also requested feedback from interested parties to assess the potential demand for spectrum in the 2.5 GHz band. An auction is planned for 2008.

Further measures are intended to remove restrictions on incumbent operator PCCW with reference to unbundling the local loop and pricing tariffs. This is because the Government thinks that there is now effective competition in all sectors of the market, both through a variety of network operators and network technologies (ADSL, cable, satellite, etc).

In the past, the regulator required approval on tariffs set by the incumbent so as not to reduce competition through pricing pressure. As of 2005, however, this was removed and all operators are free to set their own tariffs. OFTA is also in the process of removing requirements on unbundling the local loop, whereby the incumbent is required to provide new players access to its telephone exchanges. Due to adequate network coverage by others and the future likelihood of fibre being deployed, OFTA no longer regards the local loops of the incumbent as essential facilities. To promote facilities-based competition, OFTA has set the end of June 2008 as the termination date for phasing out mandatory unbundling of local loops at the telephone exchanges of the incumbent. After this date, unbundling can still be available through commercial agreement or as mandated by regulation in the small number of locations where the local loops remain as ‘essential facilities’.

OFTA has also reviewed its regulations regarding VoIP. It allows such services, both from facilities-based and services-based

operators. Telephone numbers will be made available to both types of operators. Additionally, broadband access providers are not allowed to block their customers’ access to VoIP services. Moreover, with the introduction of VoIP services and new radio technologies that can economically reach customers in remote areas, OFTA is currently reviewing its universal service obligations to make sure that its system is efficient and more fairly shares costs between operators.

Content and services

DigitalCopyright.hk

With the support of the Innovation and Technology Fund, a Digital Rights Management (DRM) infrastructure employing state-of-the-art technologies was set up at the Cyberport in November 2005 to provide a channel for digital content creators to distribute their products to consumers efficiently and at low cost. The two-year programme starting from June 2006 promotes the use of DRM among ICT system developers, digital content developers and consumers, particularly young people, to cultivate a legal software download culture in the community.

DigitalCopyright.hk aims to provide the infrastructure to facilitate protection and distribution of digital content. In other words, it provides the backend infrastructure for content protection, license issuing and tracking for audio-visual and Flash-based multimedia content. For content owners/distributors, a portal at www.iresource.hk has been built for distribution of protected digital content and is aimed at content partners with no existing e-commerce network.

The project aims to facilitate the distribution of legitimate digital content across all platforms and devices and accelerate the adoption of intellectual property protection technology by lowering the technological, investment and management barriers. For digital artists and independent content producers, the platform acts as a safe place for permanent archival of their works and as a creative space to deliver innovative products. The project also strives to stimulate more research and development in digital asset management and related technologies.

IP service centre

An Intellectual Property Servicing Centre was established in June 2006 as part of the Integrated Circuits Design Centre at the Science Park. The Intellectual Property Servicing Centre provides a platform to support and facilitate the wider use of

semi-conductor intellectual property and to protect the technological investment of integrated circuit design companies.

Software

A key component of the IT services sector is the software industry. Although most of the local software developers are small firms with less than 20 employees, they are able to produce competitive customized software to support local and foreign clients in various sectors such as finance and banking, transportation and logistics, supply chain management, transportation, trading and telecommunications.

Some recent examples of Hong Kong’s successful and pioneering software development include the Smart Identity Card, which is given out to all residents in Hong Kong—the first of its kind in the world—and the Octopus card, the largest cash payment card in circulation in the world. Octopus was introduced in 1997 to provide a simple and unified way to pay fares on public transport in Hong Kong. Soon after, Octopus extended its reach into simple micropayments for purchases in retail outlets and became a simple way for cardholders to gain access to buildings and schools and to identify themselves. Today, over 500 service providers accept Octopus, and there are more Octopus cards in circulation than there are residents in Hong Kong.

HK ICT awards

There are 38 professional bodies related to the ICT industry in Hong Kong. Most have sought funding from the Government to organize events such as awards nights. In 2006, the OGCIO consolidated Government support for these events and sponsored a single HK ICT Awards programme. The programme was considered a success and will be continued in 2007.

The six categories for the first ICT Awards were a Digital Entertainment Award won by a project called Moving Music whereby images of human movement are used to control sounds produced in games; an e-Business Award won by a Next Generation Terminal Management System; an e-Government Award won by the Immigration Department’s e-Channel, an automated passenger clearance and vehicle clearance system that uses biometrics to enhance public service; the e-Learning Award won by GoChinese, an online Chinese learning platform; an e-Youth Award won by ‘Flaber’, a Flash-based Web building tool; and the Digital Inclusion Award won by the IT Inclusion Community Project where a secondary school student mobilized community resources to help new migrants and other disadvantaged families learn to use ICT.

Electronic Health Records (e-HR)

The Hospital Authority (HA) is a government statutory body established in 1990 to manage all public hospitals in Hong Kong. Among the successful IT implementations at the HA is its Clinical Management System (CMS), which links the entire HA network, allowing seamless access to a centralized IT system and database for health professionals. More recently it has been piloting a scheme for electronic patient records (e-PR). Patient participation in this pilot scheme is voluntary and a number of encryption and other security measures have been set up to ensure information privacy.

Public and private hospitals are now discussing whether to use the e-PR service as the basis for a territory-wide electronic health record (e-HR) system. Subject to confidentiality and security safeguards and the patient's consent, e-HR could be accessed by a health care professional in public and private hospitals, clinics and residential care homes for the elderly. The availability of comprehensive records will enable timely and informed decisions to be made at the point of care. However, before it is introduced a number of questions need to be addressed. These include a body to oversee or regulate the e-HR operation, whether legislative backing is needed, financing of the capital investment and recurrent costs, ownership of the records and limitations on access to these records, security and privacy protection of individual data and the entire system, and whether any penalty should apply to proven cases of unauthorized use of the data. In the meantime, the HA has embarked on a pilot project to share its e-HR system with a number of private hospitals and private medical practitioners.

Open source community

In the area of open source software (OSS), the Hong Kong Government and the industry in general take the practical approach of adopting open and interoperable standards, as opposed to having any officially imposed preference for a particular technology platform. Since 2002, the Government has set up an Interoperability Framework (IF) to reflect major changes in the industry and set out government standards and practices to ensure data and technical interoperability among its IT systems and e-government services.

The Government's policy on procurement of software products is based on objective criteria, such as value for money, functionality, security, system compatibility and the availability of reliable technical support. However, the Government has stated

in its policy that it will promote the use of OSS technologies and solutions within the Government in order to widen product choice and maximize the potential for cost savings.

Future trends

While it already boasts one of the best ICT infrastructures in Asia Pacific, Hong Kong looks set to improve its digital outlook. It continues to introduce measures designed to improve the competitiveness of the ICT sector, such as freeing up radio spectrum and looking at new areas of technology, such as fixed-mobile convergence. For example, the regulator is examining the existing regulations, including interconnection charges and carrier licensing arrangements, to facilitate the convergence of the two sectors.

The Government is also progressive in providing electronic access to its services. A new Web portal, GovHK, was introduced in September 2006 to replace the Government Information Centre (www.info.gov.hk) as the entry point to online government information and services. The portal, which provides access to some 1,200 existing government electronic services, is undergoing constant development. One enhancement planned is the provision of geospatial information to underpin information and services. Efforts are also under way to develop a youth portal that will provide access to a range of public services for youth aged 15–24.

Another potential strength is Hong Kong's links with Mainland China. The Government has established channels for cooperation with the relevant Mainland authorities and Guangdong province in areas such as innovation and technological development. Identified areas for cooperation include software development, wireless and mobile technology, automotive parts and accessory systems, integrated circuit design, digital entertainment, digital certificates cross-recognition and the development of standards and applications in emerging technologies such as RFID and next-generation Internet. The Government is also looking to participate in the Mainland's technology development plans and the formulation of national standards through the Mainland/Hong Kong Science and Technology Cooperation Committee. The ICT industry, professional bodies and academics from both sides are expected to be involved in these initiatives.

If it can also continue to act on 'digital inclusion' measures through the Digital Inclusion Index and other measures outlined in its latest Digital 21 Strategy proposals, Hong Kong will remain one of the most significant ICT players in Asia Pacific.

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