

LCQ10: Provision of free Wi-Fi services in public hospitals

Following is a question by the Dr Hon Pierre Chan and a written reply by the Secretary for Innovation and Technology, Mr Nicholas W Yang, in the Legislative Council today (May 30):

Question:

Report No. 70 of the Director of Audit published in April this year pointed out that the progress of the Government in expanding the coverage of Wi-Fi.HK services had been slow. For instance, Wi-Fi.HK services were provided in only 12 (about 29 per cent) of the 42 public hospitals. Regarding the provision of free Wi-Fi services in public hospitals, will the Government inform this Council:

(1) of the (i) number, (ii) daily average usage, (iii) installation cost and (iv) daily expenditure of the Wi-Fi hotspots currently provided in the various public hospitals concerned, with a tabulated breakdown by name of hospitals and location of such hotspots in the hospitals;

(2) of the reasons why Wi-Fi.HK services are so far not provided in most public hospitals; whether the authorities have drawn up a timetable for the provision of such services in all public hospitals; if so, of the details (including the number of Wi-Fi hotspots to be provided in various hospitals and the estimated expenditure);

(3) as the aforesaid Report pointed out that no Wi-Fi signages had been put up at certain venues equipped with Wi-Fi hotspots, whether Wi-Fi signages have been put up near each Wi-Fi hotspot in the various public hospitals concerned at present, so that members of the public are aware of the availability of such services at those places; if so, of the details (including the names of the hospitals); if not, the reasons for that; and

(4) as the information on the Wi-Fi.HK website shows that the distribution of Wi-Fi hotspot locations in various public hospitals is varied (e.g. Wi-Fi hotspots are available at the accident and emergency (A&E) departments, outpatient clinics, pharmacies, canteens of Pamela Youde Nethersole Eastern Hospital and Prince of Wales Hospital, whereas Wi-Fi hotspots are available only at its A&E department and certain specialist outpatient clinics of Princess Margaret Hospital), whether the authorities will consider providing Wi-Fi hotspots at places in hospitals where more patients and their family members stay (including A&E departments, outpatient clinics, pharmacies and canteens); if so, of the details (including the timetable); if not, the reasons for that?

Reply:

President,

In consultation with the Food and Health Bureau and the Hospital Authority (HA), our reply is as follows:

(1), (2) and (4) To dovetail with the implementation of the Wi-Fi.HK Public-Private Collaboration (PPC) programme by the Government, the HA has provided suitable venues at its public hospitals for participating service operators to install related facilities. These service operators participate in the programme on a voluntary basis and bear all the costs for installation, equipment, operation and maintenance, etc. The PPC programme has provided 223 Wi-Fi hotspots at 12 public hospitals for providing free Wi-Fi service starting from 2015. Details are set out below:

	Name of hospital	No. of hotspots	Location of hotspots	Daily average usage
1	Queen Elizabeth Hospital	13	Accident and emergency (A&E) department, walk-in clinic and ambulatory care centre	83
2	Yan Chai Hospital	22	A&E department and specialist out-patient clinic	55
3	Caritas Medical Centre	49	A&E department and specialist out-patient clinic	83
4	Kwong Wah Hospital	20	A&E department and specialist out-patient clinic	86
5	Hong Kong Eye Hospital	23	Eye out-patient clinic	23
6	Princess Margaret Hospital	62	A&E department and specialist out-patient clinic	94
7	Pamela Youde Nethersole Eastern Hospital	5	A&E department, pharmacy, specialist out-patient clinic, 1/F of main building and restaurant	50
8	Queen Mary Hospital*	2	A&E department and pharmacy	NA
9	Tseung Kwan O Hospital	4	A&E department, pharmacy and restaurant	34
10	Prince of Wales Hospital	5	A&E department, restaurant, cancer centre, pharmacy and blood taking centre	33
11	Tuen Mun Hospital	4	A&E department, pharmacy and restaurant	38

12	Tin Shui Wai Hospital	14	A&E department, radiology department, G/F lift lobby, specialist out-patient clinic, pharmacy, endoscopy investigation department, restaurant, allied health department and medical social services department	45
	Total	223		

* The Wi-Fi service provided at the Queen Mary Hospital will be launched in June 2018.

The Office of the Government Chief Information Officer launched another round of the Wi-Fi.HK PPC programme in April this year and invited service providers to provide free Wi-Fi service at more than 3 000 government venues, which include all public hospitals under the HA. The service areas cover public waiting areas of public hospitals, including A&E departments, out-patient clinics, pharmacies, restaurants, etc. It is expected that the service providers will install hotspots and roll out free Wi-Fi service progressively at the venues from 2019 onwards.

(3) In the two rounds of the PPC programme in 2015 and 2017, the HA has put up signage near the free Wi-Fi hotspots in the 12 aforesaid public hospitals to inform the public of the services. Details of the location of all Wi-Fi hotspots in these public hospitals are also available on the Wi-Fi.HK website and the Wi-Fi.HK mobile app.

[Lifesaving services suspended at Silverstrand Beach](#)

Attention TV/radio announcers:

Please broadcast the following as soon as possible and repeat it at regular intervals:

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Speech by SFST at Luncheon co-organised by HKETO in San Francisco and Plug and Play Tech Center (English only)

Following is the speech by the Secretary for Financial Services and the Treasury, Mr James Lau, at the luncheon co-organised by Hong Kong Economic and Trade Office in San Francisco and Plug and Play Tech Center on May 29 (San Francisco time):

Distinguished guests, ladies and gentlemen,

Good afternoon. I am delighted to be back at Plug and Play after my last visit in early 2016 as Under Secretary. I like in particular your mission statement "To make innovation open to anyone, anywhere" because Fintech knows no boundaries and this is why I am back to look for more opportunities for collaboration with you.

When I talk about Fintech, I am all very excited because after my graduation in 1977 from the University of Waterloo in Canada with my two degrees in computer science, I worked in IBM for only two years before I left the IT work stream and joined the Administrative Service of the Government of Hong Kong. I thought I had left IT for good but Fintech has brought me back

to Tech again, especially given my current appointment and responsibilities for the development of financial services in Hong Kong.

Much has happened in Hong Kong over the last two years in the Fintech scene. These developments have been very exciting for us, and we expect the momentum to continue.

As the world's third largest international financial center, after New York and London, Hong Kong plays a unique role of bridging the East and the West in Fintech, as it also does in trade and commerce. I would welcome you to come to Hong Kong to see what we have to offer.

Let me begin by speaking about the core strengths of Hong Kong as an international financial center. A key characteristic of Hong Kong is that we are very much an inclusive and cosmopolitan city, with a diverse mix of international talents. For example, next week, Supercharger, a Fintech accelerator based in Hong Kong and started by an Austrian, will host a Demo Day to showcase the solutions of ten companies from their 2018 cohort. These include start-ups from Hong Kong, Canada, India, Ireland, Korea, Poland, Switzerland and the UK and they cover work on RegTech, trade finance, wealth management, AI analytics and credit scoring.

Indeed, professionals of many nationalities have come to set up office in Hong Kong due to our financial infrastructure, ample presence of financial institutions, our sound legal system, a low and simple tax regime, and also access to the huge market in China and the rest of Asia.

Hong Kong is one of the top IPO hubs in the world, where our stock market capitalisation is at around 11.5 times our GDP. Over the last nine years, Hong Kong topped the world's IPO league table five times. We are also by far the leading offshore RMB center globally, managing 70% of global offshore Renminbi payments.

Out of the world's top 100 banks, 70 have operations in Hong Kong. And 70 of the world's 100 largest global money managers have a presence in Hong Kong. Hong Kong is the largest hedge fund hub in Asia and the second largest private equity center in the region, after Mainland China. We are also a leading private wealth management center and we have one of the most open insurance centers in the world.

Hong Kong has always taken pride in our rule of law and sound legal system based on common law. Under the principle of "one country, two systems", Hong Kong's judicial system is independent of that of China. Hong Kong maintains a robust regime for intellectual property rights. In the latest World Economic Forum Global Competitiveness Report published in September last year, Hong Kong ranked ninth in IP protection among the 137 economies covered by the report.

Our tax regime is simple and low. The maximum salaries tax that one pays is a standard rate of 15%. As for profits tax, this year we have just introduced a competitive two-tier regime that charges half of our standard

tax rate of 16.5%, that is, 8.25%, for the first HK\$2 million of profits. HK\$2 million is around US\$250,000. This will be particularly beneficial for start-ups and small and medium enterprises.

Finally, Hong Kong has an unrivalled geographical location in the heart of Asia. In fact, within five hours, you can reach half of the world's population. Our connections to Mainland China, the second largest economy in the world and one of the most happening places for Fintech globally, are strong and continue to strengthen.

In terms of land transportation, the Hong Kong-Zhuhai-Macao Bridge set to open later this year will shorten the travelling time between Hong Kong and the Western part of Guangdong from four hours to only 45 minutes. The bridge spans 55 km, so you can actually run a marathon over there!

Another exciting development is the Hong Kong section of the Guangdong-Shenzhen-Hong Kong High Speed Rail which is slated to start service also later this year. At the end of 2017, China's High Speed Rail lines were over 15,500 miles long, accounting for about two-thirds of the world's high speed rail tracks in commercial use. The 16-mile section in Hong Kong links up with the rest of China and provides high speed and quality travel to complement air transportation.

But connectivity goes far beyond physical connectivity through air, land or rail transportation. Connectivity is also about flow of people, goods, services, capital and information. And here is where the Guangdong-Hong Kong-Macau Greater Bay Area comes in as an initiative which will strengthen Hong Kong's position as the gateway to Mainland China and Guangdong Province in particular.

This Greater Bay Area in the south of China represents a huge market of over 67 million people spread over nine cities in Guangdong Province plus Hong Kong and Macau. And this is more than the population of Italy or the UK.

The Greater Bay Area is already a substantial economic powerhouse. The GDP of the Greater Bay Area is around US\$1.4 trillion, comparable to that of Australia and South Korea. Currently, the Tokyo Bay Area, with a population of 44 million, has a GDP of US\$1.8 trillion. The San Francisco Bay Area, with a much smaller population of 7.6 million, has a GDP of US\$0.8 trillion. Of course, the San Francisco Bay Area has the highest GDP per capita among the three, and the other bay areas would have some catching up to do.

Yet another feature of the Greater Bay Area is its entrepreneurial culture. Indeed, private enterprises have thrived in Guangdong since China opened up its markets in 1978. According to a list of the Most Valuable Chinese Brands in 2018 compiled by global communications firm WPP and research agency Kantar Millward Brown, 30 of the top 100 Chinese companies on the list are headquartered in the Greater Bay Area.

In particular, Shenzhen, which is often called "the new Silicon Valley," is home to large high-tech companies and rising start-ups. Familiar tech

giants like Huawei and Tencent are headquartered in Shenzhen, which as a city spends over 4% of its GDP on research and development. In fact, companies in Shenzhen file more international patents than those in France or Britain.

Indeed, Shenzhen has played a significant role in China's emergence as a major player in Fintech. This is particularly true in the payments space, which is dominated by Tencent's WeChat Pay and Alibaba's Alipay. Official figures suggest that China had a total of 527 million mobile payment users at the end of last year. Online payment transactions totaled around US \$24 trillion (RMB 150 trillion), for the first ten months last year, ranking first in the world.

In 2014, Tencent launched its WeChat Red Packet campaign – a digital version of the old Chinese custom of giving out good fortune money to friends and family members during Chinese New Year. This year, a record 768 million people used the platform during the six-day holiday period of Chinese New Year.

Alibaba's Singles' Day Shopping Festival is another good example of the popularity of mobile payments in China. This Festival can be summed up with several mind-boggling numbers. Over 140,000 brands and 15 million products took part in the Festival, and some 812 million orders were made, with total sales of roughly US\$ 25.3 billion (RMB 168 billion). All of this in just one day!

But while the likes of Baidu, Alibaba and Tencent are the biggest tech players in China, millions of medium-sized enterprises are seen as hidden champions that may become tomorrow's heroes. According to a report released by the Hurun Research Institute in April this year, China had more than 150 "unicorns" at the end of March, with a combined value of over US\$630 billion (RMB 4 trillion). These include quite a few "unicorns" from Shenzhen. In comparison, data from CB Insights suggests that the US is home to around 235 unicorns worth US\$812 billion.

What is interesting is that the start-ups in China appear to be scaling up faster than those in the US. A report by the Boston Consulting Group suggests that Chinese tech start-ups on average take four years to reach the US\$1 billion mark for unicorns but their US counterparts would take seven years.

There is much collaboration between Hong Kong and our neighbouring city Shenzhen in terms of innovation and technology. We are currently developing an 87 hectare Hong Kong-Shenzhen Innovation and Technology Park, which is 4 times the size of the existing Hong Kong Science Park and is expected to inject more than US\$7 billion a year into Hong Kong's economy once it is up and running.

In June 2017, Hong Kong's central bank and banking regulator, the Hong Kong Monetary Authority, and the Office of Financial Development Service of the Shenzhen Government agreed to strengthen co-operation in Fintech between Hong Kong and Shenzhen. The goal is to create a more favorable environment

for banks and other financial institutions to develop and use Fintech applications.

Along with Cyberport, which is Hong Kong's "creative digital community", the two regulators in Hong Kong and Shenzhen are exploring the feasibility of establishing cross-border soft landing facilities in Shenzhen, encouraging Hong Kong fintech firms to expand their business to the Mainland, and Mainland firms to establish themselves in Hong Kong.

Let me now turn to the many opportunities in Fintech in Hong Kong. The high concentration of banks, securities firms and insurance companies in Hong Kong is such that there is a market with big potential for Fintech start-ups that wish to take a collaborative approach with incumbent financial institutions.

Our three regulators – the Hong Kong Monetary Authority, Securities and Futures Commission and the Insurance Authority – have all established dedicated Fintech liaison platforms to enhance communications with the Fintech industry.

The Hong Kong Monetary Authority launched its Fintech Supervisory Sandbox in September 2016. In September 2017, the Securities and Futures Commission and the Insurance Authority launched sandboxes for their respective industry.

A number of financial institutions have also set up Fintech accelerators in Hong Kong. For example, DBS Bank from Singapore has an accelerator program in Hong Kong which focuses on five areas: digital channel experience, compliance monitoring, credit digitisation, customer engagements and cybersecurity. These are basically services revolving around the DBS product offering.

Commonwealth Bank of Australia also has an Innovation Lab in Hong Kong that connects start-ups with a talent pool of experts and provides ongoing mentorship. Accenture's Fintech Innovation Lab Asia Pacific, based in Hong Kong, gives selected start-ups access to senior decision-makers at more than 20 financial institutions.

In April this year, Standard Chartered Bank announced the opening of its Hong Kong innovation lab, the eXellerator, to promote innovation within the Bank and to tap emerging fintech and data science in the region. The eXellerator has an area of over 10,000 square feet and will serve as a collaboration space for business units, clients, technology companies and industry partners to solve business problems and explore opportunities.

In distributed ledger technology, or DLT, Deloitte officially opened its Asia Pacific Blockchain Lab in Hong Kong last year. The Lab will implement and deploy DLT applications for corporate clients across the region. This is Deloitte's third global blockchain lab, in addition to two others located in Dublin and New York.

In fact, a lot is happening in Hong Kong in the field of DLT applications. The Hong Kong Applied Science and Technology Research Institute (ASTRI) supports the development of Blockchain technology, with a focus on enhancing Blockchain consensus algorithm and network security. Apart from publishing white papers on DLT, the Institute has also been involved in designing real world applications.

For example, the Institute developed a Property Valuation Blockchain System for the Bank of China Hong Kong, which provides a more secure and efficient way to digitise the process of property valuation in the lengthy mortgage loan application process. The System simplified the entire property valuation process and led to a sizeable reduction in the operating cost.

Another project is a DLT based trade finance system developed by the ASTRI in collaboration with the Hong Kong Monetary Authority and a number of local and international banks, including HSBC, Bank of China Hong Kong and Standard Chartered Bank. This project has great potential to simplify the existing paper-based trade finance operations, and will be able to provide real time visibility that prevents double financing fault among the participating financial institutions.

The Hong Kong Monetary Authority and the Monetary Authority of Singapore are also jointly developing a cross-border blockchain solution for trade finance. Named the Global Trade Connectivity Network, this will be an open architecture platform that enables the seamless transfer of digital data and documents across borders. While this will begin with the Hong Kong-Singapore trade corridor, the platform is expected to be rolled out to other markets relatively quickly.

Furthermore, Hong Kong's connectivity to China and the rest of Asia makes us an ideal launch pad for companies eyeing international expansion to our part of the world.

As mentioned earlier, not only does our Guangdong-Hong Kong-Macao Greater Bay Area present a huge consumer market for start-ups in Hong Kong, the entire bay area is a super eco-system for innovation and technology with Hong Kong and Shenzhen as two focal points.

A good example of the synergies between Hong Kong and Shenzhen in nurturing start-ups is DJI, the first "unicorn" drone company which now ranks as the world's largest drone maker with 70% global market share for civilian and commercial use drones. This company was founded by Frank Wang, a graduate of the Hong Kong University of Science and Technology. His start-up was first conceived in Hong Kong, which is strong in research and development, but is now based in Shenzhen, which gave it support for making prototypes and commercialising the products.

Let me share with you a couple more examples. Leverate, an Israeli company in foreign exchange trading, set up its Asian headquarters in Hong Kong to capture opportunities especially in Mainland China. Since 2012, the company has experienced a business boom thanks to customer confidence in its

cutting edge brokerage technology solutions. Hong Kong serves as their Asian headquarters and they now serve clients in the entire region, including Mainland China, Japan, Indonesia, Singapore, Taiwan and Australia.

In addition, Austreme, an Australian Fintech company, set up its regional headquarters in Hong Kong to capitalise on the growing demand for cloud-based, big data enabled e-commerce monitoring services. And NTT Data, a Japanese IT services provider with business operations in over 40 countries, chose Hong Kong as the Global Payment Hub for its payments business to serve merchant customers around the world.

Last but not least, a homegrown example is TNG, an e-wallet company which provides a range of electronic payment services to consumers all over Asia. Founded by a Malaysian entrepreneur, the company provides electronic payment services in 14 jurisdictions including Hong Kong, China, Australia, most ASEAN countries and South Asia too.

Of course, the most important element for capturing all these opportunities is talents. So let me conclude by referring to the Technology Talent Admission Scheme that Hong Kong has just rolled out. The Scheme provides fast track arrangement for the admission of overseas and Mainland research and development talent in the areas of Fintech, artificial intelligence, cybersecurity, robotics, data analytics, biotechnology and material science.

You are all welcome to explore opportunities in Hong Kong, and the dedicated Fintech team at our investment promotion agency InvestHK will be happy to share the details on the practicalities.

Ladies and gentlemen, Hong Kong has emerged as the link between the East and the West in the ever-exciting and ever-expanding area of Fintech. As a fast-growing hub for start-ups and the gateway to China and the rest of Asia, we are truly a place where you can say that the world is your oyster! Talking about the treasure in the oyster, Hong Kong is also known historically as the Pearl of the Orient. Thank you all for coming today and I hope many of you would come out to Hong Kong soon!

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In particular, Shenzhen, which is often called "the new Silicon Valley," is home to large high-tech companies and rising start-ups. Familiar tech giants like Huawei and Tencent are headquartered in Shenzhen, which as a city spends over 4% of its GDP on research and development. In fact, companies in Shenzhen file more international patents than those in France or Britain.

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The Hong Kong Monetary Authority and the Monetary Authority of Singapore are also jointly developing a cross-border blockchain solution for trade finance. Named the Global Trade Connectivity Network, this will be an open architecture platform that enables the seamless transfer of digital data and documents across borders. While this will begin with the Hong Kong-Singapore trade corridor, the platform is expected to be rolled out to other markets relatively quickly.

Furthermore, Hong Kong's connectivity to China and the rest of Asia makes us an ideal launch pad for companies eyeing international expansion to our part of the world.

As mentioned earlier, not only does our Guangdong-Hong Kong-Macao

Greater Bay Area present a huge consumer market for start-ups in Hong Kong, the entire bay area is a super eco-system for innovation and technology with Hong Kong and Shenzhen as two focal points.

A good example of the synergies between Hong Kong and Shenzhen in nurturing start-ups is DJI, the first "unicorn" drone company which now ranks as the world's largest drone maker with 70% global market share for civilian and commercial use drones. This company was founded by Frank Wang, a graduate of the Hong Kong University of Science and Technology. His start-up was first conceived in Hong Kong, which is strong in research and development, but is now based in Shenzhen, which gave it support for making prototypes and commercialising the products.

Let me share with you a couple more examples. Leverate, an Israeli company in foreign exchange trading, set up its Asian headquarters in Hong Kong to capture opportunities especially in Mainland China. Since 2012, the company has experienced a business boom thanks to customer confidence in its cutting edge brokerage technology solutions. Hong Kong serves as their Asian headquarters and they now serve clients in the entire region, including Mainland China, Japan, Indonesia, Singapore, Taiwan and Australia.

In addition, Austreme, an Australian Fintech company, set up its regional headquarters in Hong Kong to capitalise on the growing demand for cloud-based, big data enabled e-commerce monitoring services. And NTT Data, a Japanese IT services provider with business operations in over 40 countries, chose Hong Kong as the Global Payment Hub for its payments business to serve merchant customers around the world.

Last but not least, a homegrown example is TNG, an e-wallet company which provides a range of electronic payment services to consumers all over Asia. Founded by a Malaysian entrepreneur, the company provides electronic payment services in 14 jurisdictions including Hong Kong, China, Australia, most ASEAN countries and South Asia too.

Of course, the most important element for capturing all these opportunities is talents. So let me conclude by referring to the Technology Talent Admission Scheme that Hong Kong has just rolled out. The Scheme provides fast track arrangement for the admission of overseas and Mainland research and development talent in the areas of Fintech, artificial intelligence, cybersecurity, robotics, data analytics, biotechnology and material science.

You are all welcome to explore opportunities in Hong Kong, and the dedicated Fintech team at our investment promotion agency InvestHK will be happy to share the details on the practicalities.

Ladies and gentlemen, Hong Kong has emerged as the link between the East and the West in the ever-exciting and ever-expanding area of Fintech. As a fast-growing hub for start-ups and the gateway to China and the rest of Asia, we are truly a place where you can say that the world is your oyster! Talking about the treasure in the oyster, Hong Kong is also known historically as the

Pearl of the Orient. Thank you all for coming today and I hope many of you would come out to Hong Kong soon!