For discussion on 7 February 2017

Legislative Council Panel on Information Technology and Broadcasting

2017 Policy Address Policy Initiatives of Innovation and Technology Bureau

Background

The Government is committed to promoting innovation and technology ("I&T") development and set up the Innovation and Technology Bureau ("ITB") in November 2015 and introduced a number of initiatives with a view to driving the diversified economic development by I&T. These initiatives include building a Wi-Fi connected city, developing smart city, promoting big data application, supporting start-ups, using I&T to improve the daily living of citizens, etc. With the efforts of the stakeholders, the I&T atmosphere is gradually taking shape. The Chief Executive announced the 2017 Policy Address on 18 January, introducing a number of new initiatives to further promote I&T development and setting out the latest progress of the initiatives introduced last year. This paper briefs Members of the Panel on Information Technology and Broadcasting on the details of the relevant measures.

New Initiatives

"Hong Kong-Shenzhen Innovation and Technology Park" in the Lok Ma Chau Loop

- 2. On 3 January 2017, the Hong Kong Special Administrative Region ("HKSAR") Government and the Shenzhen Municipal People's Government signed the "Memorandum of Understanding on Jointly Developing the Lok Ma Chau Loop by Hong Kong and Shenzhen", agreeing to cooperate in developing the Lok Ma Chau Loop ("the Loop") into a "Hong Kong-Shenzhen Innovation and Technology Park" ("the Park"). The Park will be developed with I&T as the main focus, where a key base for cooperation in scientific research, and relevant higher education, cultural and creative and other complementary facilities will be set up.
- 3. The Park will attract top enterprises, universities and scientific research institutions from the Mainland and overseas to set up laboratories and

branches for carrying out research projects either on their own or in collaboration with others. The Park will also promote small and medium start-ups to develop new enterprises and provide young people in both Hong Kong and Shenzhen more opportunities for development and high-quality employment. This will help nurture talents and strengthen the competitiveness of both cities. As a "super-connector", Hong Kong can bring new opportunities to the economy by fostering the exchange and cooperation of talents, capital and technology among Hong Kong, the Mainland and overseas.

- 4. The HKSAR Government will construct the infrastructure within the Loop (including site formation and infrastructural facilities) and will suitably lease the formed land within the Loop to the Hong Kong Science and Technology Parks Corporation ("HKSTPC"). HKSTPC will set up a wholly-owned subsidiary company which will be vested with the responsibility to build the superstructure of the Park, as well as to operate, maintain and manage the Park.
- 5. At present, preparatory work of the statutory outline zoning plan is underway, while other statutory procedures for the road and related works will be conducted in parallel. The Government will consult the relevant Panels of the Legislative Council ("LegCo") in the first quarter of this year to explore the possibility of early start of the related works, including development of the Loop by phases.

Smart City and Big Data

- 6. We are committed to developing Hong Kong into a smart city by using I&T to address urban challenges, enhance city management and improve quality of living. In September 2016, the Office of the Government Chief Information Officer ("OGCIO") commissioned a consultancy study to formulate a smart city blueprint for Hong Kong. The content of the blueprint includes policy objectives and strategy, governance arrangements, digital framework, technical standards, legal framework and public-private partnership models. We have set up a dedicated portal (www.smartcity.gov.hk) to collect views from the industry, stakeholders and the general public. The consultancy is expected to be completed in mid-2017.
- 7. The smart city blueprint will propose long-term development plans in different policy areas and sectors. The consultant has conducted preliminary studies on some important areas such as environment, healthcare and transport, with a view to incorporating various smart city elements in the city development process, making Hong Kong a more livable international city.

- 8. The blueprint will also map out the digital infrastructure and technical standards to facilitate the Government, public organisations and the business community to achieve wider and safer adoption of the most advanced technology products and knowhow, including Internet of Things, big data, cyber security technology, etc.
- 9. "Big data" is now the core of technology and business innovation. We will continue to promote big data analytics and application among Government departments to enhance public services. The "Public Sector Information Portal" (data.gov.hk) currently provides over 6 000 datasets and some 200 Application Programming Interfaces ("API") under 18 categories in different policy areas for free public use. OGCIO will continue to introduce new APIs, and the objective is to provide about 1 000 APIs by mid-2017. Furthermore, OGCIO will enhance the "Public Sector Information Portal", including the addition of geo-referenced data and historical data within 2017 to facilitate the community to develop more innovative applications and services.

Promoting the Government's use of I&T to improve public services

- 10. I&T can help different organisations, including Government departments to enhance efficiency and improve service quality. As technology advances, better services can be provided to the public when appropriate technology is introduced at the right time. The Government has earmarked \$500 million for ITB to assist departments in using technology to enhance the quality of public services. We will include and reflect the funding for the proposal in ITB's Draft Estimates of 2017-18 and beyond.
- 11. ITB will fund departments to take forward technology proposals to enhance the efficiency and effectiveness of public services. The earmarked funding will support technology projects conceived and taken forward by departments, including pilot projects. The maximum funding for each individual project is \$10 million. We will establish an internal committee to vet the technology proposals submitted by departments.

On-going Initiatives

Promoting information and communications technology ("ICT")

12. To identify talented young people and to cultivate young information technology ("IT") professionals and even entrepreneurs, OGCIO has launched the eight-year "Enriched IT Programme in Secondary Schools" since the 2015/16 school year. Through collaboration among the Government,

schools, tertiary institutions and the industry, enriched IT classes are offered in eight partner secondary schools to provide in-depth IT training for students who are interested and talented in IT. In the 2016/17 school year, there are around 700 enriched IT class students.

- 13. In addition, we provide support annually to other secondary schools to organise IT enhancement activities outside the school curriculum, in order to offer more opportunities for students to access and apply IT knowledge, as well as to nurture their creativity. In 2016, we funded 85 secondary schools to organise enriched IT activities covering aerial photography, 3D design, robotics control and mobile application programming, etc. About 9 500 students participated in these activities.
- Launched in 2013, the "International IT Fest" showcases Hong Kong's achievements and strengths as a leading ICT hub in the region. The "International IT Fest 2017" will be held from 7 to 30 April and will comprise more than 30 exciting events, including the second "Internet Economy Summit". During the three-day Summit, industry experts and enterprise leaders from across the world will be invited to share their insights into the development trends and opportunities of the Internet economy. In addition to the main forum, the Summit will include four thematic sessions to explore the future development and applications of financial technology ("FinTech"), big data, smart city and e-commerce.
- 15. OGCIO has been organising the "Hong Kong ICT Awards" ("HKICTA") since 2006 to recognise and promote outstanding ICT inventions and applications, thereby encouraging Hong Kong's ICT talents and enterprises to pursue innovation and excellence. The preparatory work of the 2017 HKICTA, with eight award categories, has begun. Selected local industry associations and professional bodies will participate in organising the event.
- Data centres are critical technology infrastructure to facilitate the digital development of various industries. They support the development in technology areas such as cloud computing, big data and artificial intelligence, which in turn promote the growth of high-value added economic activities, including finance, trade, logistics and e-commerce. Hong Kong is the prime location for setting up data centres in the Asia Pacific Region. Many multi-national corporations have set up data centres in Hong Kong. To facilitate the development of data centres, the Government has introduced the following measures –

(a) Use of existing industrial buildings and industrial lots for development of data centres

In June 2012, the Government introduced two concessionary measures for to encourage the conversion of industrial buildings into data centres and development of high-tier data centres on industrial lots. Having regard to the positive market response, the Government announced in March 2016 to continue with the above concessionary measures. As at December 2016, we received 30 applications for conversion of existing industrial buildings into data centre use and approved one application regarding development of data centre on an industrial lot; and

(b) Support Services

Through its Data Centre Facilitation Unit, OGCIO provides support and cross-departmental coordination to enterprises that are interested in setting up data centres in Hong Kong, with a view to assisting the industry's development of data centres.

Wi-Fi Connected City

17. In May 2016, the Finance Committee of LegCo approved a funding of \$500 million for the implementation of the "Wi-Fi Connected City" programme to progressively expand the coverage of free "Wi-Fi.HK" service. Apart from continuing to provide Wi-Fi service at some government venues, the programme seeks to encourage public and private organisations to participate in "Wi-Fi.HK" to provide Wi-Fi service at more non-government venues; and to provide Wi-Fi service at suitable government venues through public-private collaboration. The programme will also provide subsidies for youth service centres and study rooms run by non-profit-making organisations to provide Wi-Fi service, thereby facilitating the public, in particular students, in using Internet resources and in learning. Since the commencement of the programme in mid-2016, the number of free hotspots has increased from 17 000 to 18 400. It is expected that the number of hotspots will reach 34 000 by 2019.

Supporting technology start-ups

18. Over the past year, Cyberport has implemented all the initiatives in the 2016 Policy Address and 2016-17 Budget to enhance support for start-ups. These include the setting up of a \$200 million "Cyberport Macro Fund" to invest in Cyberport's start-ups; increasing the Cyberport incubation programme's annual quota from 50 to 100 and establishing new clusters such as FinTech and e-commerce; expanding Cyberport's Smart-Space small offices

and workstations by 60% to 122 900 square feet; and designating specific space for FinTech start-ups, etc. These measures further foster the thriving growth of the local IT industry and develop Hong Kong into a global I&T hub.

I&T and Daily Living

- 19. The Finance Committee approved in June 2016 a funding of \$500 million to set up the Innovation and Technology Fund for Better Living ("the Fund"), which aims to make the daily life of Hong Kong people more convenient, more comfortable and safer; or address the needs of specific groups. We have set up a Secretariat to prepare for the rollout of the Fund. The Fund will accept applications from mid-2017 and we hope that the first batch of I&T projects can be launched in 2018 to benefit citizens.
- 20. In the past year, we continued to take forward a number of digital inclusion measures to use ICT to assist communities with needs, such as students from low-income families, the elderly and the disabled. These measures include "Internet Learning Support Programme", "ICT Outreach Programmes for Elderly", promoting web accessibility and funding the development of digital inclusion mobile applications, etc.

E-Government

- 21. Through the Government Cloud Platform ("GovCloud"), we will continue to allow bureaux and departments ("B/Ds") to develop more e-Government services in a flexible way, in order to meet the rising public expectations and demand for quality e-Government services. We have requested all B/Ds to first consider adopting cloud services when developing new systems or upgrading existing systems. We will also continue to promote the provision of more common e-Government services on GovCloud.
- 22. We are carrying out the pre-construction works for the construction of the Government Data Centre Complex. Upon completion of these works, we will seek funding approval from the Finance Committee of LegCo for the actual construction works, the construction consultancy and supervision services, testing and acceptance, and post-handover services, so that construction works can commence.
- 23. To allow citizens to browse Govenrment information and use e-Government services more conveniently and quickly, we have updated the GovHK portal with a fresh look to make it visually more appealing and easier to use. The new design has adopted responsive web design and other

user-friendly features to enhance the browsing experience of mobile device users.

- 24. Currently, there are already over 1 100 Government forms which support electronic submission. We will continue to upgrade the Government forms which are commonly used by the public to support electronic submission, in order to provide more convenient e-Government services to the public. We also ask B/Ds to consider re-engineering their business processes when developing new e-Government services or upgrading existing services to support electronic submission of application forms and information by the public.
- 25. In view of the aggravating cyber threats, we will step up cyber security compliance checks on B/Ds, update security best practices with reference to international standards, conduct safety checks on web services and drills on information security incidents, and strengthen the Government's overall awareness in cyber security, in order to uphold the Government's information security policies and practices. We will also set up a cyber security information sharing platform to facilitate B/Ds' sharing of information on risks of cyber threats and contingency arrangements, in order to raise the Government's overall awareness in cyber security and defense capability.

Way forward

In 2016, we injected additional resources to introduce a number of measures, with a view to perfect the I&T eco-system in Hong Kong and to embrace the challenges and opportunities brought about by the digital age. In the coming year, we will continue to implement various measures to assist Government departments, enterprises and different organisations to use I&T to enhance efficiency and improve services, enhance the quality of living of citizens and build Hong Kong into a competitive and liveable smart city.

Innovation and Technology Bureau Office of the Government Chief Information Officer January 2017