For discussion on 29 October 2019

Legislative Council Panel on Information Technology and Broadcasting

The Chief Executive's 2019 Policy Address Policy Initiatives of Innovation and Technology Bureau

BACKGROUND

The Government has been committed to promoting the development of innovation and technology ("I&T"), with a view to injecting new impetus into the economy, improving people's quality of life, and creating quality jobs for young people. The 2019 Policy Address Supplement ("Supplement") published on 16 October alongside with the Chief Executive's Policy Address set out a number of policies and measures to further promote the development of I&T. This paper briefs Members of the Panel on Information Technology and Broadcasting on the relevant content.

PROGRESS OF THE EIGHT MAJOR AREAS

- 2. The Chief Executive announced in the Policy Address delivered in October 2017 that the Government would step up its efforts to develop I&T in eight major areas, including: (a) increasing resources for research and development ("R&D"); (b) pooling together technology talent; (c) providing investment funding; (d) providing technological research infrastructure; (e) reviewing existing legislations and regulations; (f) opening up government data; (g) Government to lead changes to procurement arrangements; and (h) strengthening popular science education. In the past year, the Government has continued to actively work on various areas with good progress. The latest developments of the relevant initiatives are set out in paragraphs 14 to 29.
- 3. With concerted efforts by different parties, the I&T atmosphere in Hong Kong has enhanced continuously. Building on our existing efforts, we will continue to add momentum to the local I&T ecosystem. The Supplement has also proposed a number of measures to strengthen smart city development and further enhance public services. Details are set out in paragraphs 4 to 13 below.

NEW INITIATIVES

Smart City Blueprint for Hong Kong 2.0

- 4. We published the Smart City Blueprint for Hong Kong in December 2017, with over 70 initiatives under six smart areas (smart mobility, smart living, smart environment, smart people, smart government and smart economy). Some major initiatives have been implemented in the past two years, such as launching the Faster Payment System in 2018 and the adoption of various smart solutions at the Hong Kong International Airport. The public response is positive. We are now conducting a review with a view to releasing *Smart City Blueprint for Hong Kong 2.0* in 2020. *Blueprint 2.0* will report on the latest progress of individual initiatives and set out new proposals in further promoting smart city development.
- We will release *Blueprint 2.0* via the dedicated Smart City Portal (www.smartcity.gov.hk). Apart from updating the progress of various initiatives from time to time, the Portal will provide city dashboards to release city statistics and real-time data under different smart areas, hence facilitating members of the public to better understand our work progress and the overall direction in smart city development. The Portal will also provide channels for the public to give their opinions and suggestions. In addition, in the course of formulating *Blueprint 2.0*, the Office of the Government Chief Information Officer ("OGCIO") will organise regular public engagement activities (such as focus discussion groups) and meetings with the industry to better gauge public opinion and the latest technological developments for enhancing smart city initiatives and strategies under different areas.

"iAM Smart" Platform

6. One of the digital infrastructure projects announced in October 2017 was the provision of electronic identity to Hong Kong residents free of charge. The development work of relevant IT system is in progress as scheduled. The Government will launch the relevant digital infrastructure in the fourth quarter of 2020, which will officially be named as "iAM Smart" platform, to provide one-stop personalised digital government services. Over 20 popular online services (including the application for Home Ownership Scheme, eTAX, renewal of full driving licence, registration for employment services by job-seekers, etc.) will be provided upon commissioning of the platform. In addition, the platform will provide other personalised digital services, such as "e-ME" for default form-filling for basic information as well as receiving personalised notifications like outbound travel information, payment of eRVD bills, renewal of vehicle licences, etc.

7. OGCIO will start the promotion and publicity of "iAM Smart" platform in mid-2020 to brief members of the public on the operation of the platform (including registration procedures) and related functions. OGCIO will also brief public and private organisations on the technical design and operating model and encourage them to join and put their online services on the platform to facilitate the public to conduct government and commercial online transactions with a single log-in, hence promoting digital transformation in the society as a whole.

Optimising Traffic Management with Technology

- 8. To promote smart mobility and to tie in with the commissioning of the Government's Big Data Analytics Platform, OGCIO together with the Transport Department ("TD") will make use of big data analytics technology to develop a new "Traffic Data Analytics System". The system will analyse various real-time traffic and transport data including traffic flow, average speed of vehicles and real-time data of public transport and transport facility operators. By enabling more accurate assessment on traffic conditions and providing real-time advice, the system will allow TD to further enhance traffic management through more effective handling of incidents and dissemination of information.
- 9. In addition, the system can analyse the impacts to traffic under various situations in the past, such as adverse weather and traffic incidents, for predicting the additional travel time required for different road sections. The relevant information will be made open gradually via TD's mobile app "HKeMobility" and in machine-readable format on the Public Sector Information ("PSI") Portal starting from the second half of 2022.

Applying Robotics Technologies to Enhance Public Services

10. One of the key tasks of the Smart Government Innovation Lab ("Smart Lab") for the coming year is to explore in conjunction with various government departments the application of robotics technologies (including machine-learning, cognitive systems, intelligent agent, robotic process automation, etc.) to enhance public services. Apart from organising technology fora and workshops, and inviting the industry to submit suggestions for conducting proof-of-concept and technology testing, the Smart Lab plans to develop practical modules of robotic process automation, such as an automated workflow for form processing, a chatbot for streamlining the processing of general public enquiries, maintenance of public facilities, etc., in order to expedite the introduction of relevant technologies and enhance the operational efficiency of government departments.

"Streamlining of Government Services" Programme

To strengthen the Government's role as a "facilitator" of public 11. services, the Efficiency Office ("EffO") has launched the "Streamlining of Government Services" ("SGS") Programme with an aim to remove red tape and unnecessary applications/approvals through streamlining the business processes and widening the adoption of technology. It will cover some 900 government services involving applications and approvals which fall outside the scope of the existing "Be the Smart Regulator" Programme. 2019-20, 36 government bureaux/departments ("B/Ds") have proposed a total of 74 streamlining measures under the SGS Programme, entailing 117 government services with an estimated total annual transaction volume of 27 million. As this is an ongoing initiative, all B/Ds are required to propose and implement SGS measures, and to report the progress and outcome on an annual basis. EffO will co-ordinate the Programme and assist B/Ds in identifying and implementing streamlining measures where necessary. Appropriate measures will also be taken to incentivise B/Ds for bringing continuous improvement to the efficiency, convenience and transparency of the government services.

<u>Funding Injection into the Social Innovation and Entrepreneurship</u> <u>Development Fund</u>

- 12. Established in 2013 with an allocation of \$500 million from the Lotteries Fund, the Social Innovation and Entrepreneurship Development Fund ("SIE Fund") under the Commission on Poverty serves as a catalyst for social innovation in Hong Kong. By facilitating social innovation and cultivating social entrepreneurship, the SIE Fund aims to drive social impact in alleviating and preventing poverty and social exclusion as well as promoting social integration and cohesion. As at end-August 2019, the Fund has allocated about \$190 million to support different initiatives and achieved good results. Nearly 1 400 innovative ideas have been generated and over 4 100 social entrepreneurs nurtured. 189 projects of diverse service nature including healthcare, diet, living, transport, education and learning, job training, job opportunities, community participation, etc. have been funded, benefitting about 170 000 people from different social groups.
- 13. With the launch of the different major initiatives of the SIE Fund in recent years, utilisation of the \$500 million allocation to the Fund is expected to reach nearly 90% (about \$440 million) by end 2019-20 in terms of funding commitment. In view of this, we propose to inject another \$500 million from the Lotteries Fund into the SIE Fund to launch and support more programmes and projects conducive to the development of the social innovation ecosystem so as to enable more social entrepreneurs including young entrepreneurs to

thrive and address social needs through innovative ideas, products and services, thereby creating greater and more lasting social impact. Major initiatives of the SIE Fund in the coming year include engagement of a new batch of intermediaries to launch innovative programmes so as to nurture and incubate social innovators and ventures; engagement of another intermediary to develop and operate a gerontechnology platform to address the challenges arising from an ageing population; and launching of pilot projects for new funding mechanisms for social ventures to meet their different funding requirements.

ON-GOING INITIATIVES

Opening Up Government Data

We announced an open data policy in October 2018 to drive B/Ds and encourage public and private organisations to open up more data in machine-readable formats via the PSI Portal for free use by the public. A total of 700 new datasets will be released in 2019. As at end-September 2019, B/Ds have opened up more than 550 new datasets in accordance with their respective annual open data plans, increasing the number of open datasets to nearly 3 900. A city dashboard function will be added to the PSI Portal by the end of this year to facilitate the public to understand city-related open data. B/Ds are currently updating their second annual open data plans, which will be published on departmental websites by the end of this year.

Smart Government Innovation Lab

OGCIO established the Smart Lab in April this year to assist government departments in sourcing IT solutions to meet their business needs. To date, the Smart Lab has organised two technology for a participated by over 130 companies (mostly local start-ups and small and medium enterprises ("SMEs")). The Smart Lab has also been arranging proof-of-concept trials of different solutions for relevant government departments, including technologies such as anti-bot, intelligent transportation, blockchain, etc. The Smart Lab will continue to strengthen the exchange and collaboration between government departments and the industry, and identify more suitable solutions for testing, thereby creating more business opportunities for local start-ups and SMEs.

Promoting use of technology by government departments

16. Innovation and Technology Bureau ("ITB") rolled out the \$500-million TechConnect (block vote) ("TechConnect") in mid-2017 to provide funding support to Government departments for implementing technology

projects, so as to enhance operational efficiency and improve public services. Another \$500 million was allocated to the TechConnect in the 2018 Policy Address. Since the launch of the TechConnect, it has supported around 70 technology projects proposed by various departments. To date, 47 projects have commenced, of which 10 have been rolled-out or completed.

17. In addition, OGCIO will introduce chatbot functions to the GovHK portal by the end of this year to facilitate search and use of e-Government services by the public. We will also pilot the use of chatbot in 1823 public enquiry services by the end of this year.

Cyber Security

18. ITB will continue to consolidate the information security capability of the Government and Hong Kong as a whole through various measures, including subsidising enterprises to adopt solutions for enhancing their cyber security through the Technology Voucher Programme; providing free website scanning services for SMEs via the Hong Kong Internet Registration Corporation Limited; facilitating sharing of cyber security information among public and private organisations through the Cyber Security Information Sharing and Collaborative Platform; and regularly reviewing and updating the Government IT Security Policy and Guidelines to enable government departments to tackle the latest information security threats effectively, etc.

Government Cloud Facilities and Big Data Analytics Platform

19. OGCIO is implementing the new government cloud facilities and developing the Big Data Analytics Platform to facilitate B/Ds to make better use of cloud services and new information technologies for enhancing operational efficiency and cyber security. The new platform will be launched in the third quarter of 2020.

Wi-Fi Connected City

20. As at end-September 2019, the number of "Wi-Fi.HK" hotspots had exceeded 30 000. OGCIO has also extended the high-speed Wi-Fi access points to 10 popular tourist spots, and will continue to expand the coverage and enhance the service of the "Wi-Fi.HK" brand.

Promoting Information and Communications Technology ("ICT")

21. OGCIO will organise the fifth "Internet Economy Summit" in April 2020, where industry experts and leaders from around the world will take part in in-depth discussions and exchange on the latest development and opportunities of the Internet economy. OGCIO will also continue to organise the annual "Hong Kong ICT Awards" to commend and promote outstanding ICT inventions and applications.

I&T and daily living

- 22. ITB launched the \$500 million Innovation and Technology Fund for Better Living ("FBL") in 2017 to fund I&T projects that bring more convenience, comfort and safety to daily living, or address the needs of specific community groups. The FBL has so far approved 25 applications, involving a total grant of about \$84 million. The approved projects involve different I&T applications and serve different community groups. The latest approved projects include a service platform for persons with rehabilitative needs, an intelligent system for supporting singleton elderly, a sign language system to facilitate communication with the hearing-impaired, a system for swimmer training and drowning detection, etc. So far, eight projects have been rolled out for use by their target groups and ten other projects will be gradually rolled out by mid-2020. In order to encourage more organisations to lodge applications, we have implemented enhancement measures, including relaxing the application eligibility and simplifying progress report requirement.
- OGCIO has been actively promoting digital inclusion in helping the elderly enjoy the benefit from advancement in digital technology in their daily living, including regularising the ICT Outreach Programme for the Elderly and introducing an advanced training programme. In addition, OGCIO will soon launch a web-based learning portal for the elderly and provide training courses and related information to facilitate their learning of IT. Besides, OGCIO will continue to promote the adoption of accessibility design in websites and mobile apps in the community.

Support Start-ups and Tenants in Cyberport

We have injected \$200 million into Cyberport for enhancing support to its tenants and start-ups. The ceiling for the financial subsidy under the Cyberport Incubation Programme ("CIP") has increased from \$330,000 to \$500,000 since the fourth quarter of 2018, which has benefited 304 current incubatees and graduates so far. During the same period, Cyberport introduced the Overseas/Mainland Market Development Support Scheme to provide a maximum of \$200,000 financial subsidy to assist start-

ups in expanding into overseas and Mainland markets. Cyberport has approved 40 applications thus far with a funding subsidy of about \$6 million.

- 25. Furthermore, Cyberport has launched an Easy Landing Scheme to attract multi-national corporations to set up offices there through the provision of rental concessions, with a view to promoting the development of the digital technology ecosystem in Cyberport. Those joining within this year include ZhongAn Technologies International Group Limited and Amazon Web Services (AWS) Hong Kong Limited.
- Under the Government's Space Sharing Scheme for Youth, Cyberport operates Smart-Space 8 co-working space of 20 000 square feet in a revitalised industrial building in Tsuen Wan to meet the needs of start-ups and youth in renting co-working space. It came into operation in July 2018. As at end August 2019, there were a total of 104 start-ups, representing an occupancy rate of 98%. In addition, the start-ups in Smart-Space 8 can apply for financial subsidy under the Cyberport Creative Micro Fund (up to \$100,000). So far, Cyberport has approved five applications.

Promotion of E-sports Development

- We have injected \$100 million into Cyberport for promoting the development of local electronic sports ("e-sports"). The e-sports venue in the Cyberport Arcade was officially opened in July 2019. To date, eight e-sports events have been staged at the venue, including regional tournaments, amateur matches, discussion forums and experiential activities for the public.
- 28. Cyberport has launched the "E-sports Internship Scheme" which subsidises the salary expenditure incurred by employers in the industry on providing internship places and helps match and groom talent. As regards the "E-sports Industry Facilitation Scheme", it supports the industry and relevant organisations in organising and participating in e-sports competitions and activities conducive to industry development. These two schemes have so far subsidised 22 interns and 26 activities, including the Hong Kong E-sports Premier League, E-sports Festival Hong Kong, an e-sports exchange tour to South Korea, etc.

Relief Measure

29. In light of uncertainties in the economic environment, the Financial Secretary announced a series of measures in August and September to "support enterprises and safeguard jobs". Cyberport also announced on 11 September that it would provide its tenants and start-ups with a 50% rental concession from October 2019 to March 2020. This covers existing tenants

and start-ups, benefiting office tenants, incubatees, co-working space users, retail as well as food and beverage operators. The rental concession is capped at 10 000 square feet of rental space. It is expected that 660 tenants/retail tenants will benefit and the estimated rental income forgone is \$44 million.

WAY FORWARD

- 30. All along, there is a keen demand for R&D facilities and relevant supporting services by I&T enterprises and institutions. As Science Park and Cyberport have reached near-full occupancy, the development of the local I&T ecosystem may be restricted. On the other hand, Hong Kong is facing serious challenges from the external environment and internal situation. The uncertainties regarding international trade affect the business environment of local enterprises and is not favourable to I&T development. The recent social situation in Hong Kong is also weakening our competitiveness in attracting I&T talent from over the world.
- 31. The various initiatives announced in the Supplement are all proposed in response to the challenges facing us. The Government will endeavour to take forward the initiatives with a view to making Hong Kong a competitive international I&T centre.

Innovation and Technology Bureau Office of the Government Chief Information Officer Efficiency Office October 2019