# Legislative Council meeting of 5 July 2017 Motion on "Reforming outdated legislation and promoting the development of innovation and technology"

## **Progress Report**

At the Legislative Council ("LegCo") meeting of 5 July 2017, the motion "Reforming outdated legislation and promoting the development of innovation and technology" moved by Hon Charles Peter MOK, as amended by Hon YUNG Hoi-yan, Ir Dr Hon LO Wai-kwok, Dr Hon Elizabeth QUAT and Hon Kenneth LEUNG was passed. The full text of the motion is at <u>Annex</u>. Having consulted relevant bureaux, this report informs members of the progress of the work concerned.

## **Innovation and Technology Development**

- 2. To facilitate innovation and technology ("I&T") development in Hong Kong, the Innovation and Technology Bureau ("ITB") has adopted the nine overarching Key Performance Indicators ("KPIs") put forward by the "Report of the Advisory Committee on Innovation and Technology", including: increasing the gross domestic expenditure on research and development ("R&D") as a percentage of the gross domestic product from 0.76% in 2015 to 1% by 2020, and reversing the ratio of public and private sector expenditure on R&D from 56:44 to 45:55. ITB will regularly review and revise the KPIs in light of the latest development in society. The Government will also continue to communicate with stakeholders in the Government, industry, academia and research sectors; and adopt other indicators as appropriate with reference to the views of the newly established "Committee on Innovation, Technology and Re-industrialisation".
- 3. Regarding the development of Smart City, the consultant commissioned by the Government has submitted a smart city blueprint

consultancy study report ("report") in June 2017. The report provides recommendations covering six areas, namely "Smart Mobility", "Smart Living", "Smart Environment", "Smart People", "Smart Government" and "Smart Economy"; and sets out a series of suggestions and measures of short-, medium- and long- term development, such as developing an appropriate digital framework and information technology infrastructure, and promoting long-term smart city development by both the public and private sectors. The ITB briefed the LegCo Panel on Information Technology and Broadcasting on the contents of the report on 10 July 2017. The report has also been uploaded to the website of the Office of the Government Chief Information Officer ("OGCIO").

- 4. The Government together with relevant bureaux and departments will consider the recommendations in the report, taking into account Hong Kong's unique circumstances and relevant policies and resources. The OGCIO has set up a dedicated webpage on 1 August 2017 to invite all sectors in the society to express views on the findings and recommendations of the report before 30 September 2017.
- 5. In the 2017-18 Budget, the Government announced to commission Cyberport to study the latest development of technologies and associated industries of e-sports and explore to further promote e-sports in Hong Kong. Cyberport is conducting the study and will submit its report to the Government shortly. The Government will duly consider the recommendations in the report as well as the views of all different sectors in the society to formulate appropriate measures.
- On the other hand, the Government has been actively providing the industry with land and developing space. The Town Planning Board has expanded the scope of always permitted uses of industrial and industrial-office buildings in "Industrial" and "Other Specified Uses (Business)" zones, including "Information Technology and Telecommunications Industries" and "Research, Design and Development Centre" uses, such as laboratory inspection and testing centre, data centre, computer/data processing centre, research, design and development centre, and workshop of high technology products. No

planning permission is required for such uses in the above land use zonings.

7. Currently, in respect of the setting up of data centres and testing and calibration laboratories in industrial buildings, the Government may grant a waiver under the land lease and exempt the payment of a waiver fee for cases meeting the policy requirements. As at end June 2017, the Lands Department received a total of 31 waiver applications for the proposed use as data centres (18 approved, 10 under processing and three withdrawn); and seven waiver applications for the proposed use as testing and calibration laboratories in industrial buildings (six approved and one under processing).

#### **Fintech**

- 8. According to the Financial Services and the Treasury Bureau ("FSTB"), the Hong Kong Monetary Authority ("HKMA") will review its supervisory guidelines from time to time in order to promote the use of Fintech by the banking industry. The HKMA introduced the Fintech Supervisory Sandbox ("FSS") in September 2016 to allow authorised institutions and their collaborating Fintech firms to conduct pilot trials in the real world under a controlled environment without the need to achieve full compliance with the HKMA's usual supervisory requirements. Banks can then gather user feedback and real data; and refine their services before full-scale rollout.
- 9. As at July 2017, 18 cases of pilot trials of Fintech products involving eight banks have made use of the FSS, covering biometric authentication, application programming interface service, chatbot, soft token, notification service via social media platforms, and blockchain for use in mortgage valuation, cross-border remittance service and trade financing. A bank even commented that the FSS reduced the lead-time by two to three months for its biometric authentication service to enter the market. Among the 18 pilot trial cases, 10 of which were collaborated projects with Fintech firms. Details of the relevant trial cases are shown

#### below:

Scope of the pilot trials	Number of pilot trials	Number of pilot trials involving Fintech firms
Biometric authentication	5	4
Soft token	2	2
Chatbot	2	2
Blockchain	3	0
Others (e.g. API, notification	6	2
service via social media platform,		
etc.)		

- 10. In general, the banking industry holds positive feedback on the FSS. Taking into account the FSS implementation experience for nearly one year, the HKMA will review how to improve and enhance the FSS.
- 11. On securities regulation, the Securities and Futures Commission ("SFC") does not have any regulatory requirement to pre-vet technologies. As such, brokers, asset managers and other intermediaries are normally free to adopt new technologies without special permission.
- 12. Regarding insurance products, the insurance regulatory regime in Hong Kong is different from those of other jurisdictions in that insurance products are not required to be approved by the Insurance Authority ("IA") before being launched. Therefore, there is no obvious need to establish a sandbox to test insurance products in Hong Kong. Nevertheless, the IA considers that the sandbox concept may be applied for streamlining existing supervisory requirements so as to facilitate the application of new technologies. For example, the IA is discussing with the insurance industry on how to facilitate storing and processing data on a cloud platform.
- 13. In addition, the Government has been actively providing

support to the financial services industry. The HKMA's Fintech Facilitation Office ("FFO") organises industry liaison events regularly for Fintech industry players and interested parties to exchange ideas on market development. Since its inception in March 2016 until July 2017, 15 events have been organised by the FFO with about 3 400 participants from around the world. The FFO also handles incoming enquiries relating to Fintech and regulatory matters. Moreover, from November 2016 to July 2017, five banks and Stored Value Facility licensees used the HKMA-ASTRI Fintech Innovation Hub for proof-of-concept trials, development and demonstration of Fintech solutions involving optical character recognition, biometric authentication, distributed ledger technology, soft-token authentication and trade finance. firms have also made use of the Hub to demonstrate artificial Intelligence-related technologies and hold technical workshops for more than 20 banks.

- 14. Since its launch in March 2016, the SFC Fintech Contact Point has engaged with a wide range of stakeholders including financial institutions, industry organisations and start-ups. It has also handled about 240 enquiries so far. In addition, the SFC is actively exploring how regulation technologies and Fintech can further support the SFC and licensed corporations in achieving positive outcomes for markets in accordance with relevant rules and standards. For example, in advancing its risk data strategy, the SFC is striving to benchmark global regulatory standards and adopt new technology to reinforce its risk identification, monitoring and surveillance capabilities.
- 15. The Office of the Commissioner of Insurance ("OCI") has also established a Fintech Liaison Team to facilitate the Fintech community's understanding of the current regulatory regime and act as a platform to enable exchange of ideas among key stakeholders on Fintech initiatives. The Fintech Liaison Team continues to operate under the IA which took over the statutory functions of the OCI on 26 June 2017. As at end July 2017, the Fintech Liaison Team has handled more than 40 enquiries from start-ups and insurers mainly regarding clarifications on the related regulatory compliance requirements and assistance in

implementation of Fintech initiatives. Besides, the IA has also set up a Future Task Force comprising representatives from the insurance industry, the academia and other stakeholders such as Fintech companies to explore the future development of the industry. One of the key tasks of the Future Task Force is to draw up recommendations on promoting the application of Fintech in the insurance industry.

### **Tax Policy Unit**

16. The FSTB set up the Tax Policy Unit ("TPU") in late April 2017. The TPU is conducting research on the provision of enhanced tax deduction on research and development expenditure. Once the specific proposal has been drawn up, the Government will consult the stakeholders concerned and then commence the legislative exercise.

#### **Government Procurement**

17. The Government procurement regulations encourage procuring departments to adopt performance-based requirements when drawing up tender specifications. No restriction on the use of materials and/or technical specifications should be imposed unless it is absolutely This is to prevent the limitation of innovative proposals or the provision of new technologies or products from tenderers as a result of outdated or rigid tender specifications. In drawing up tender requirements, particularly for mission critical or high-value contracts, procuring departments should research into the market or collect through other effective means information on the features and technological trends of goods or services available in the market, with a view to procuring the suitable goods or services. To encourage tenderers to propose innovative solutions, the Government procurement regulations allow procuring departments, if appropriate, to consider accepting alternative proposals from tenderers that could better meet their tender requirements.

18. The Government will study the possibility of taking into account innovation and technology requirements in the marking scheme of tender evaluation; and propose the appropriate assessment criteria and weightings for consideration to relevant tender boards. If feasible, the Government may consider splitting a large contract into smaller ones to bring in more new tenderers and enhance competition of the tender exercise. This may facilitate companies of smaller scale (including start-up businesses) to participate in bidding Government contracts.

## **Open Data**

- 19. Geographical location is the bridge between information. It can associate relevant information of facilities that are above, on and under ground level. The integration, analysis and application of spatial data are becoming more important to the sustained planning, development and management of Hong Kong, being a cosmopolitan city with amongst the highest density around the globe. Throughout the years, various government departments as well as public and private organisations have already made use of the geographic information systems to facilitate the management of individual geographic-related spatial data and/or the development of different map service platforms.
- 20. The Development Bureau ("DEVB") is studying the overall strategy for the development of a Common Spatial Data Infrastructure ("CSDI") to align and integrate the spatial data of various government departments and even the whole territory. This will provide the government departments as well as the public and private sectors with a geo-platform to integrate and exchange geographic spatial data. The CSDI will promote the sharing and innovation of spatial data; and facilitate the development and application of information technology, so as to provide a reliable basis and information systems for the efficient use of resources, development of a smart city and sustainable development. The DEVB, in collaboration with the Efficiency Unit, commissioned a consultancy study on the overall strategy for the implementation of CSDI in March 2017, to review the current environment, integrate overseas

experience and engage key stakeholders. The study is targeted to be completed in early 2018.

- 21. In respect of the opening of public sector information ("PSI"), the objectives of the Government's open data policy are to encourage development of innovative applications and solutions, bring more convenience and quality living to the public, and drive digital economic development. The OGCIO currently plays the role of coordinator to assist and support departments in releasing PSI in machine-readable The Government, through the PSI Portal, has opened up about 3 000 distinct datasets covering 18 areas of PSI for use by the public free To enable the industry to extract the required information from the large amount of information, the OGCIO has also provided over 1 000 Application Programming Interfaces through the PSI Portal. The OGCIO is now enhancing the PSI Portal with a new function to present open data through a map, which will be available before end 2017. will enable more convenient use of the information by the public and facilitate development of innovative applications and services.
- 22. Regarding the "Code on Access to Information" ("Code"), the Constitutional and Mainland Affairs Bureau said that the Code now specifies different types of information to be published routinely or made available for public inspection. Each department will also, upon request, provide additional information relating to its policies, services, decisions and other matters falling within its area of responsibility.

## **Cyber Crime**

As regards the countering of cyber crime, according to the Security Bureau ("SB"), the Police Force has set "combating technology crime" as one of its operational priorities since 2012; and set up the Cyber Security and Technology Crime Bureau ("CSTCB") in January 2015 to enhance the Police's capability in combating technology crimes and handling cyber security incidents, including detecting syndicated and highly sophisticated technology crimes; conducting timely cyber threat

audits and analyses; enhancing response capability to major cyber security incidents or massive cyber attacks and strengthening relevant thematic researches; and strengthening partnership and information exchange with local stakeholders and overseas law enforcement agencies. The Cyber Security Centre under the CSTCB even operates around the clock to strengthen communication and co-ordination between the Police Force and various stakeholders, with a view to preventing and responding to possible attacks more effectively.

24. The Governments notes the different views raised in the LegCo concerning the relevant prevailing laws on combating cyber crimes. The Secretary for Justice, in his capacity as the Chairman of the Law Reform Commission (LRC), earlier informed LegCo of LRC's plan to review the relevant laws in relation to cyber crimes. The Government will keep in view related development.

## **Closing**

- 25. With ever-changing technology, the communication technology, the Internet, social media and mobile devices have become a part of citizens' daily life. In addition, artificial intelligence, cloud computing, big data and the Internet of things are becoming more established, resulting in changes in enterprises' operation and citizens' living habits. Sharing economy is one of the examples. Government supports and actively promotes I&T, with a view to driving the diversification of our economy and improving the quality of life of During the process, relevant policy bureaux will keep closely citizens. in view the circumstances and latest developments in respect of their policy purview; listen to the views of different stakeholders to formulate the policy objectives; and review the prevailing regulations from time to time in order to keep the legislation abreast of the times.
- 26. We have collated views on different policies or legislations put forward by members at the motion debate and referred them to the relevant bureaux for their follow-up actions. Individual bureaux will

study if there is a need to refine the policies and legislations under their policy purview as a result of technology advancement, so as to promote the sustainable economic and social development of Hong Kong.

Innovation and Technology Bureau
Financial Services and the Treasury Bureau
Development Bureau
Security Bureau
Constitutional and Mainland Affairs Bureau
September 2017

(Translation)

#### Motion on

"Reforming outdated legislation and promoting the development of innovation and technology" moved by Hon Charles Peter MOK at the Council meeting of 5 July 2017

## Motion as amended by Hon YUNG Hoi-yan, Ir Dr Hon LO Wai-kwok, Dr Hon Elizabeth OUAT and HonKenneth LEUNG

That, as many countries and regions in the world have allocated an enormous amount of resources to the proactive development of innovation and technology, this Council urges the Government to coordinate various policy bureaux in reviewing outdated legislation and, in the light of technological development, public expectations and the actual circumstances, formulating policies afresh to support the development of related industries; to achieve the abovementioned objectives, the Government should, through extensive consultation conducted in a timely manner, update obsolete legislation, introduce policies conducive to innovation and formulate innovative regulatory frameworks that maintain a balance among the concerns of stakeholders, thereby enabling Hong Kong to keep pace with the times; given that innovation and technology can promote the development of the game industry, the Government should expeditiously formulate a policy on the development of this industry, determine the policy bureau to be in charge of industry coordination and provide a clear blueprint for the long-term development of the local game industry; this Council also urges the Government to demonstrate to the public an attitude of being willing to listen to views and promoting innovation, and enact legislation suitable for the era of digital economy, in order to develop a smart city and facilitate the development and wider application of innovation and technology, thereby providing more choices for the people and upgrading the competitiveness of Hong Kong, with a view to seizing the opportunities of catching up with the pace of the international community; specific proposals include:

- in regard to implementing various key performance indicators proposed in the Report of the Advisory Committee on Innovation and Technology, formulating specific policies and measures and conducting timely reviews of them;
- (2) requiring the tax policy unit to expeditiously make specific proposals for tax deductions for innovation and technology activities, including the provision of triple tax deductions for expenditures on research and development and design, so as to promote the development of innovation and technology;
- while maintaining market stability, removing various regulations and restrictions for financial innovation and providing relevant legal advice and technical support for financial services enterprises, so as to assist the industry in the development and effective use of financial technology products and services;
- (4) including in the government procurement and tender mechanisms the requirement of promotion of technological development and increasing the weighting of this requirement in the overall score, so as to encourage enterprises to promote the development of innovation and technology;
- using innovation and technology to make planning for transport, healthcare, environmental protection, elderly services, etc., in order to expeditiously put forward a specific blueprint for the development of a smart city;
- (6) reviewing outdated legislation and restrictions on the vetting and approval of amendments to land use as an endeavour to increase the supply of sites for data centres, testing and certification as well as other innovation and technology sectors, so as to promote the development of the innovation and technology industry; and
- (7) amending the scope of information provided by the Government

as defined in the Code on Access to Information and using technology to make a detailed categorization of government information while stipulating requirements for the format and time of dissemination of information, so that various industries can make use of the relevant information to develop high-technology products;

this Council also urges the Government to further study opening up spatial data conducive to people's livelihood and facilitating economic development; in tandem with the enactment of legislation suited to the era of digital economy, the Government should also make adequate preparations for countering threats of cyber crime by, among others, conducting a review of the relevant legislation and policies and study the introduction of electronic identity for individuals and electronic business registration that carry legal effect, so as to protect the legitimate rights and interests of the public and enterprises; the Government should also set up a 'sandbox' system to allow enterprises to apply innovation and technology in a more flexible manner.