

For discussion
on 17 October 2017

Legislative Council Panel on Commerce and Industry

**The Chief Executive's 2017 Policy Address
Policy Initiatives of Innovation and Technology Bureau**

BACKGROUND

The Government is committed to promoting innovation and technology (“I&T”) development. Since the establishment of Innovation and Technology Bureau (“ITB”) in November 2015, we begin to see results in the promotion of I&T development. The 2017 Policy Address, announced by the Chief Executive on 11 October, has outlined clear directions for the Government to further promote I&T development. This paper briefs Members of the Panel on Commerce and Industry on the relevant measures.

DEVELOPMENT DIRECTIONS

2. As announced in the new Policy Address, 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. We will implement various new initiatives and strengthen the on-going initiatives, in order to diversify our economy, enhance Hong Kong’s competitiveness and improve people’s quality of life.

NEW INITIATIVES

Provide Enhanced Tax Deduction for Expenditure Incurred by Enterprises on R&D

3. R&D is the fountain of I&T. We have set a goal to double the Gross Domestic Expenditures on R&D as a percentage of the Gross Domestic Product to 1.5%, which equates to about \$45 billion, by the end of the current Government's five-year term of office; and to gradually reverse the ratio of public sector expenditure versus private sector expenditure on R&D from government-led to public-private participation, which will make R&D funding more sustainable. To encourage enterprises to conduct more research activities, we will introduce enhanced tax deduction for local R&D expenditure incurred. The first \$2 million of qualified R&D expenditure will be eligible for a 300% tax deduction, and a 200% tax deduction will be provided for the remaining balance.

4. Under the prevailing tax regime, R&D expenditure incurred by enterprises can only enjoy a 100% tax deduction. Compared with other countries which provide more than 100% tax deductions for R&D activities conducted by their local enterprises, the existing practice in Hong Kong does not provide sufficient incentive for enterprises to carry out R&D activities. Therefore, we propose substantially increasing the deduction in this respect in order to encourage more enterprises to conduct R&D activities in Hong Kong. This has a positive effect on attracting overseas scientific research personnel to Hong Kong and nurturing local R&D talents. We have already started the relevant law drafting work. Should the proposal be supported by the Legislative Council ("LegCo"), the initiative is expected to be rolled out as soon as in Q3 2018.

Collaborative Platforms in Key Technology Areas

5. We will actively assume the role of a promoter and facilitator in setting up key collaborative technology platforms in our focused technology and research areas (namely biomedicine, financial technology, robotics and smart city) and providing stakeholders with quality hardware and software support, with a view to attracting top-tier technology enterprises, R&D institutions and renowned universities from the Mainland and overseas to set up branches in Hong Kong for carrying out research projects. This will help create an environment conducive to the development and application of I&T, which will not only enhance Hong Kong's capabilities in developing into an innovation-driven economy, but also create more quality jobs and improve the quality of living of our citizens.

Technology Talent Scheme

6. To nurture and bring together more technology talents and encourage them to pursue a career in innovation and scientific research, we will earmark \$500 million under the Innovation and Technology Fund (“ITF”) to launch a “Technology Talent Scheme”, which comprises -

- (a) establishing a “Postdoctoral Hub” programme to provide organisations undertaking ITF projects as well as incubatees and tenant companies of the Hong Kong Science and Technology Parks Corporation (“HKSTPC”) and Cyberport with funding support for the recruitment of postdoctoral talents for R&D work in order to cultivate world class technology talents.

The “Postdoctoral Hub” programme will provide a maximum monthly allowance of \$32,000 for organisations to recruit postdoctoral researchers to assist in R&D work. Each ITF project or eligible applicant organisation can engage up to two postdoctoral researchers with a maximum period of 24 months;

- (b) subsidising local enterprises on a matching basis for training their staff in advanced manufacturing technologies, especially those related to “Industry 4.0”, thereby encouraging enterprises to equip their staff with high level technology training and to drive “re-industrialisation”. We anticipate that the scheme can help nurture more advanced technology talents and encourage them to contribute to I&T and “re-industrialisation”, as well as to expand our I&T talent pool.

7. In addition, we will enhance the Internship Programme through increasing the monthly internship allowances and further expanding its coverage to all I&T tenants of HKSTPC and Cyberport, as well as start-ups¹ to be invested by the upcoming Innovation and Technology Venture Fund (“ITVF”) in order to benefit more enterprises and STEM (i.e. Science, Technology, Engineering and Mathematics) graduates.

8. The allowances under the Internship Programme were last adjusted in early 2016. Having regard to the recent wage indices and the

¹ At present, the Internship Programme supports R&D projects under the ITF, as well as incubatees and small and medium enterprise (“SME”) tenants of the HKSTPC and Cyberport.

need to encourage more local graduates to pursue a career in I&T, we have increased the monthly allowances of interns from the date of announcement of the 2017 Policy Address (i.e. 11 October 2017), from \$14,000 to \$16,000 for interns with a Bachelor's degree, and from \$16,500 to \$19,000 for interns with a Master's or higher degrees. Separately, we expect to implement the further expansion of the Internship Programme to cover all I&T tenants of HKSTPC and Cyberport within this year.

Innovation and Technology Steering Committee

9. As I&T development involves various sectors, inter-bureau cooperation and coordination are necessary. The Government will establish a high-level, inter-departmental "Steering Committee on Innovation and Technology", which will be chaired by the Chief Executive, to examine and steer measures under the eight areas of I&T development and Smart City projects, with a view to driving the I&T development of Hong Kong in a highly effective manner.

ONGOING INITIATIVES

Promoting R&D

10. The Midstream Research Programme for Universities ("MRP") was launched in December 2016 to encourage universities to collaborate with leading research institutions worldwide to conduct more inter-disciplinary and translational R&D work in focused technology areas, such that more research outcomes could be made available for further downstream research work or product development. The first round of MRP invited project proposals under the theme "Elderly Health and Care", particularly those related to dementia. An expert panel comprising members from the academia and industry completed the assessment and supported in-principle eight projects, seven of which involve collaboration across multiple disciplines or institutions. The total funding approved was about \$34.5 million.

11. There are currently 16 Partner State Key Laboratories and six Hong Kong Branches of Chinese National Engineering Research Centres ("CNERCs") in Hong Kong. Given their research excellence in specific technology areas, they have been recognised by the Ministry of Science and Technology ("MOST") as R&D partners of the corresponding State Key Laboratories and CNERCs in the Mainland. We will continue to

provide an annual maximum funding of \$5 million to each of these institutions and have, since last financial year, extended the funding scope from manpower and equipment to include consumables.

Investing in I&T Infrastructures

(a) *Hong Kong-Shenzhen Innovation and Technology Park in the Lok Ma Chau Loop*

12. The Hong Kong Special Administrative Region (“HKSAR”) Government and the Shenzhen Municipal People’s Government (“SZ Government”) signed the “Memorandum of Understanding on Jointly Developing the Lok Ma Chau Loop by Hong Kong and Shenzhen” on 3 January 2017 to jointly develop the Lok Ma Chau 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, creative and cultural and other complementary facilities will be set up.

13. The HKSAR Government and SZ Government agreed to have HKSTPC established a wholly-owned subsidiary company, which will be vested with the responsibilities to construct, operate, maintain and manage the Park. The subsidiary company, named “Hong Kong-Shenzhen Innovation and Technology Park Limited”, has been incorporated early this month.

14. The draft Lok Ma Chau Loop Outline Zoning Plan was gazetted on 9 June 2017. Representations submitted by the public and relevant organisations are being processed by the Planning Department for consideration by the Town Planning Board. Statutory procedures of the road work and other related engineering works are also being carried out. According to the current work plan, upon completion of the detailed design of the advance works, we will seek funding from the LegCo for the relevant works (mainly comprises works on the connecting roads, decontamination and setting up the ecological area) and detailed design of the Main Works Package 1 (site formation and infrastructure work) to be carried out. Should the project funding be approved by the LegCo by Q2 2018, the advance works could be commenced thereafter with a view to providing the formed land for construction of the super-structures gradually by Q4 2021.

(b) *Data Technology Hub and Advanced Manufacturing Centre*

15. To promote “re-industrialisation”, HKSTPC will develop a

Data Technology Hub (“DT Hub”) and an Advanced Manufacturing Centre (“AMC”) in Tseung Kwan O Industrial Estate, which are expected to be completed in 2020 and 2022 respectively. The relevant financial arrangement was approved by the Finance Committee of LegCo in May 2016. The foundation works of the DT Hub has commenced and the design work of the AMC is in progress.

(c) *Development of the InnoCell*

16. The Government announced in the last Policy Address announced that it would support HKSTPC in developing an InnoCell adjacent to the Science Park. The InnoCell will provide residential units with flexible design and ancillary facilities, such as shared working spaces, for leasing to the principals of tenants and incubates in the Science Park, as well as employees or visiting researchers from the Mainland or overseas. Should the funding arrangement be supported by this Panel and approved by the Finance Committee within this fiscal year, the InnoCell is expected to be completed by 2021.

(d) *Liantang/Heung Yuen Wai*

17. The Government has reserved a 56-hectare site near the Liantang/Heung Yuen Wai Boundary Control Point for the development of Industrial Estate. HKSTPC has engaged consultants to conduct preliminary planning study on this site. Interim result of the study indicates that the proposed development in the site is technically feasible. The preliminary planning study will be completed by Q4 this year.

Supporting I&T Start-ups

18. We launched the Technology Start-up Support Scheme for Universities (“TSSSU”) in September 2014 to provide an annual funding of up to \$4 million to each of the six local universities in supporting the university teams in starting technology businesses and commercialising their R&D results. Since the inception of TSSSU, 227 applications have been approved and about \$89.5 million has been provided for 155 start-ups. In late 2016, this Panel supported the Government to continue TSSSU till 2019-20 to provide continued impetus to the I&T ecosystem.

19. The Hong Kong Productivity Council will establish an Inno Space by end of this month to nurture the start-up culture in Hong Kong and support “re-industrialisation”. The Inno Space will provide workspace and technical support to assist users in developing their

innovative ideas into industrial design, which may subsequently be translated into products through prototyping.

20. Moreover, the 2016 Policy Address announced that the Government would set aside \$2 billion to set up the ITVF to encourage venture capital (“VC”) funds to invest in local I&T start-ups. The ITVF was launched in mid-September 2017. VC funds, whether incorporated in Hong Kong or overseas, can apply to become co-investment partners under the ITVF scheme. The selection of VC funds will be based on a number of established criteria and the advice of an independent advisory committee. Each selected VC fund will enter into an agreement with the Government, in which the details of co-operation, rights and obligation of each party will be set out.

21. Through the ITVF, the Government and individual VC funds will invest in eligible local I&T start-ups concurrently at an overall ratio of approximately 1:2. Carried interests and other performance incentives will be provided as appropriate. ITVF is now open for application by VC funds until 15 January 2018. We expect to announce the selection result in April 2018.

Supporting SMEs

22. We launched the \$500 million Technology Voucher Programme (“TVP”) on a pilot basis in November last year to subsidise local SMEs in using technological services and solutions to improve productivity, or upgrade or transform their business processes. The TVP provides cumulative funding of up to \$200,000 on a 2:1 matching basis for each eligible SME to carry out a maximum of three approved projects. Since its launch, the TVP has received an encouraging response from SMEs. As at end September, 200 applications have been assessed, 184 of which were granted funding support, representing a success rate of 92%. The total funding approved was about \$23.8 million, averaging about \$130,000 per project. Compared with similar schemes overseas, both the success rate and the funding amount of the TVP are higher. We have organised 39 briefing sessions in collaboration with industry bodies or SME associations to explain the details of the TVP, attracting over 3 600 attendees.

Promoting I&T Culture

23. We organised in collaboration with MOST the Hong Kong Innovation and Technology Forum 2017 on 25 September 2017 at the

Hong Kong Science Park to facilitate exchanges and collaboration between the two places on I&T. The Forum was themed “Collaborate, Complement, Co-Create” and included panel sessions. Representatives from relevant Mainland authorities and provincial and municipal governments, as well as universities, R&D institutions and enterprises in Hong Kong were invited to exchange views on how to further promote I&T development in Hong Kong and the Mainland.

24. In addition, the Innovation and Technology Commission will continue to organise “InnoTech Month” in collaboration with various programme partners, including universities, R&D institutions, government departments and non-governmental organisations to promote I&T to the society and enable the public to understand the importance of I&T to Hong Kong’s future development. Under the theme of “Live Smart, Be Innovative”, the “InnoTech Month 2017” has commenced on 30 September. This year, a specially designed promotional truck named “InnoForce” roved in different districts of Hong Kong for two weeks starting from late September, aiming to interact with the community and elevate the I&T ambience. Meanwhile, “InnoCarnival 2017”, the anchor event of “InnoTech Month”, will also be running from 21 to 29 October at the Hong Kong Science Park to foster the I&T culture in the community. Like previous years, “InnoTech Month” will continue to give the public first-hand experience of the I&T accomplishments in the city through activities including large-scale carnival, roadshows, exhibitions, seminars and workshops, etc.

Continue facilitating the development of the testing and certification industry

25. The Government and the Hong Kong Council for Testing and Certification will continue to adopt a market-oriented approach to support the development of the testing and certification (“T&C”) industry and assist in exploring business opportunities. Since the signing of Supplement VII to the Mainland and Hong Kong Closer Economic Partnership Arrangement (“CEPA”) in 2010, the Mainland has been gradually opening up its market to Hong Kong’s T&C industry.²

² For instance, accredited testing organisations in Hong Kong are allowed to cooperate with designated Mainland organisations to undertake testing of various products for the China Compulsory Certification (“CCC”) System. These products include products processed in Hong Kong, or products in the ‘audio and visual apparatus’ category of the CCC system that are designed and prototyped in Hong Kong as well as processed or manufactured in Guangdong Province. As of September 2017, 11 Hong Kong testing organisations have been accredited by the Hong Kong Accreditation Service for undertaking CCC testing. Six of these have since entered into co-operation agreements with designated Mainland organisations.

Promulgated in September this year, the Implementation Guide on T&C-related measures in the CEPA Agreement on Trade in Services has included products that are processed or manufactured in the China (Guangdong) Pilot Free Trade Zone and required China Compulsory Certification into the scope of liberalisation. According to the CEPA Agreement on Economic and Technical Cooperation signed in June this year, considerations will be given to recommending a certification body located in Hong Kong to become a National Certification Body of China under the International Electrotechnical Commission System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (“IECEE”). These measures will bring the sector more development opportunities in the Mainland and internationally. We will continue to sustain an environment conducive to industry development, and support the sector through local and overseas promotion work.

WAY FORWARD

26. I&T is the new driving force for Hong Kong’s development, bringing new industries and creating wealth, as well as providing more quality employment for young people and improving citizens’ quality of life. With our advantages of “One Country, Two Systems”, geographical location, business environment, legal system, intellectual property, R&D capability, financial services, etc., and the opportunities brought by the National 13th Five-Year Plan and the Guangdong-Hong Kong-Macao Bay Area development, Hong Kong has huge potential to become an international I&T hub. We must keep reinforcing and upgrading our capability, cultivate the soil and provide the conducive ecosystem for the development of I&T, so as to drive entrepreneurship, foster diversified economic development and lift the overall competitiveness of Hong Kong.

**Innovation and Technology Bureau
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