

For Discussion  
on 16 October 2018

**Legislative Council Panel on Commerce and Industry**

**The Chief Executive's 2018 Policy Address  
Policy Initiatives of Innovation and Technology Bureau**

**BACKGROUND**

Innovation and technology (“I&T”) is a key policy agenda of the current-term Government. The 2018 Policy Address announced by the Chief Executive on 10 October has proposed a number of policies and measures to further promote I&T development. This paper briefs Members of the Panel on Commerce and Industry on the relevant measures.

**PROGRESS OF THE EIGHT MAJOR AREAS**

2. The Chief Executive announced in last year's Policy Address 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 been actively working on these eight major areas with good progress. The latest development of relevant initiatives is set out in paragraphs 13 to 29.

3. With concerted efforts by different parties, a fervid I&T atmosphere has been gradually created in Hong Kong. To continue the favourable development, we have to keep on adding momentum to the local I&T ecosystem. The foci of this year's Policy Address on I&T front include: expediting “re-industrialisation”; unleashing the R&D capability of universities and research institutions and fostering technology transfer; bringing I&T into daily lives of citizens; and building a technology-savvy Government. Our goal is to develop Hong Kong into an international I&T hub in the Guangdong-Hong Kong-Macao Greater Bay Area. The relevant measures are set out in paragraphs 4 to 12.

## **NEW INITIATIVES**

4. The Government has been committed to assisting the industry to develop I&T, as well as applying smart technologies and production processes for high value-added manufacturing, thereby creating favourable conditions for "re-industrialisation". Our efforts include providing suitable infrastructure, financial and technical support, training and pooling talent. The current-term Government has launched a series of pertinent measures in the past year.

### ***Re-industrialisation Funding Scheme***

5. To expedite the realisation of "re-industrialisation", we propose to establish a \$2 billion "Re-industrialisation Funding Scheme" to subsidise manufacturers on a matching basis to set up smart production lines in Hong Kong. We are now studying and formulating relevant operational details, such as eligibility criteria, vetting mechanism and criteria, funding ceiling etc.

### ***Developing advanced manufacturing facilities***

6. The Government has been working closely with the Hong Kong Science and Technology Parks Corporation ("HKSTPC") to provide infrastructure and production facilities for "re-industrialisation". HKSTPC refurbished a factory in the Tai Po Industrial Estate into the "Precision Manufacturing Centre" in 2017, a large part of which has already been rented to different smart manufacturers. For example, one of the tenants has established an upcycling production line using innovative spinning technology, thereby relocating textile factory back to Hong Kong. In addition, various industry members have expressed to HKSTPC their interests in moving to the "Advanced Manufacturing Centre" ("AMC") being developed in the Tseung Kwan O Industrial Estate.

7. To complement the implementation of "Re-industrialisation Funding Scheme" and meet the industry's demand for modern manufacturing facilities, we propose to make an additional allocation of \$2 billion to HKSTPC for building manufacturing facilities required by dedicated advanced manufacturing in the industrial estates, so as to encourage manufacturers to set up production bases in Hong Kong.

***Increasing funding support for Technology Transfer Offices of Universities, “Technology Start-up Support Scheme for Universities”, “State Key Laboratories” and “Hong Kong Branches of Chinese National Engineering Research Centres”***

8. There are excellent R&D talents in our universities. Since 2013-14, we have been providing funding support, through the Innovation and Technology Fund (“ITF”), to the technology transfer offices (“TTOs”) of designated universities<sup>1</sup> to enhance their technology transfer capabilities. The “Technology Start-up Support Scheme for Universities” (“TSSSU”) has also been set up under the ITF to support university professors and students to start technology businesses and commercialise their R&D results. Moreover, we provide annual funding to 16 “State Key Laboratories” (“SKLs”) and six “Hong Kong Branches of Chinese National Engineering Research Centres” (“CNERCs(HK)”) to support their research work.

9. To fully release Hong Kong’s R&D capability and foster technology transfer as well as realisation of R&D results, we will double the amount of funding for the above through the ITF –

- (a) the funding support for the TTO of each designated university will be increased from the current ceiling of \$4 million each year to \$8 million each year;
- (b) the maximum amount of funding provided to each designated university under the TSSSU will be raised from \$4 million each year to \$8 million each year; and
- (c) the annual funding for each SKL and each CNERC(HK) will be increased from \$5 million to \$10 million.

***City I&T Grand Challenge***

10. In recent years, the I&T atmosphere in Hong Kong has flourished. Besides the presence of internationally renowned research institutions in Hong Kong, the number of local start-ups has also shown a gradual growth. According to the survey on Hong Kong’s start-up ecosystem conducted by Invest Hong Kong, there are currently more than 2 200 start-ups in Hong Kong, representing a 40% increase as compared to the number of 2015. That said,

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<sup>1</sup> Designated universities are six local universities, namely The University of Hong Kong, The Chinese University of Hong Kong, City University of Hong Kong, The Hong Kong University of Science and Technology, Hong Kong Baptist University and The Hong Kong Polytechnic University.

technology application and promotion are vital in driving I&T development. To further enhance the public understanding and awareness of the importance of I&T, we will allocate \$500 million to organise the annual “City I&T Grand Challenge” in the next five years. We will put up issues that are closely related to our daily living, and openly invite the community to propose solutions with I&T elements. In addition to prize money, the solutions selected will have the opportunity to be tried out in suitable public organisations for application and refinement. This initiative can simulate the interests of the general public, in particular the younger generation, in I&T and encourage them to pursue an I&T career.

### ***Guangdong-Hong Kong-Macao Greater Bay Area International I&T Hub***

11. The development of the Guangdong-Hong Kong-Macao Greater Bay Area (“Bay Area”) is accorded a key strategic planning in the country’s development blueprint, which brings invaluable opportunities to Hong Kong’s I&T development. The Central Government has all along given staunch support to Hong Kong’s I&T development. President Xi Jinping has personally given an instruction affirming that Hong Kong has a solid science and technology foundation and a strong pool of quality technology talents, which support the development of Hong Kong into an international I&T hub.

12. Hong Kong’s work on the development of the Bay Area into an international I&T hub has borne fruits. The national Ministry of Science and Technology (“MOST”) and the Ministry of Finance announced in May this year that higher education and research institutions in Hong Kong could apply for science and technology funding of the Central Government, and the funding granted could be remitted across the boundary for use in Hong Kong. In September this year, MOST and the Innovation and Technology Bureau signed a cooperation agreement fostering the I&T co-operation between Hong Kong and the Mainland. Furthermore, the Chinese Academy of Sciences (“CAS”) will establish a presence of its research institutions in the two research clusters to be established in the Hong Kong Science Park (“Science Park”) to enhance R&D collaboration among CAS, local higher education institutions and R&D centres. A “Bay Area academician alliance” will soon be established in Hong Kong to promote the participation of academicians of the CAS and the Chinese Academy of Engineering in the development of the Bay Area. We will continue to give full play to Hong Kong’s strengths such as scientific research capacities and internationalisation, and actively participate in developing the Bay Area into an international I&T hub.

## **ON-GOING INITIATIVES**

### ***Providing Enhanced Tax Deduction for R&D Expenditure***

13. To encourage more enterprises to conduct R&D locally so as to promote technological innovation and economic development of Hong Kong, we proposed to provide enhanced tax deduction for expenditure incurred by enterprises on qualifying R&D activities. The proposed enhanced tax deduction will be a two-tiered deduction regime. The deduction will be 300% for the first \$2 million of qualifying expenditure incurred by enterprises, and 200% for the remaining amount. There is no cap on the amount of enhanced tax deduction.

14. The relevant Amendment Bill was introduced into the Legislative Council (“LegCo”) in May 2018. We hope that the Bill could be passed before the end of this year such that R&D expenditure incurred by enterprises on 1 April this year and thereafter could be eligible for the enhanced deduction.

### ***Developing technology and innovation platforms***

15. In her Policy Address last year, the Chief Executive proposed to establish key collaborative technology platforms to carry out forward-looking research projects that would benefit the society. Subsequently, the Financial Secretary announced in his Budget speech this year that \$10 billion would be earmarked to support the establishment of two research clusters. The relevant funding proposal was approved by LegCo in July this year.

16. We are now working full steam to establish the two research clusters at Science Park, namely “Health@InnoHK” that focuses on healthcare technologies and “AIR@InnoHK” that focuses on artificial intelligence/robotics technologies. We will proactively attract top-notch universities, research institutions and technology enterprises in the relevant technology areas from local, the Mainland and overseas to establish presence at the two clusters, pooling together R&D talent to undertake more collaborative researches. Good progress has been made. Institut Pasteur from France, as well as the Guangzhou Institute of Biomedicine and Health and the Institute of Automation in Beijing under the Chinese Academy of Sciences have expressed interest in joining the clusters. We envisage that the first batch of research institutions will start moving into the two clusters in the second half of 2019.

## ***I&T Infrastructure***

### **Stage 1 of the Science Park Expansion Programme**

17. To cater for the industry demand and sustain the continued development of the Science Park, Stage 1 of the Science Park Expansion Programme is in good progress, which is expected to be completed one year ahead of schedule in 2019. It will provide an additional gross floor area of about 73,760 m<sup>2</sup> in the Science Park.

### **Data Technology Hub and AMC**

18. To promote “re-industrialisation”, HKSTPC is developing the “Data Technology Hub” (“DT Hub”) and AMC in the Tseung Kwan O Industrial Estate. The foundation works of the DT Hub have been completed, and the construction works are in progress. The whole project is expected to be completed in 2020. The detailed design of the AMC building has been completed and the foundation works are in progress. The whole project is due for completion in 2022.

### **InnoCell**

19. HKSTPC is constructing the InnoCell adjacent to the Science Park, which will provide around 500 residential units with flexible design and ancillary facilities such as shared working space. The design work of the InnoCell building is in progress and the construction works are expected to commence in early 2019 for completion by 2021, bringing convenience to the technology talent working in the Science Park.

### **Liantang/Heung Yuen Wai**

20. The Government has earmarked a site of about 56 hectares near the Liantang/Heung Yuen Wai Boundary Control Point for development of an industrial estate. The preliminary planning study has demonstrated that the proposed development at the site is technically feasible. HKSTPC will carry out a visionary study on the proposed development within this year, followed by technical feasibility and development model studies.

## ***Hong Kong-Shenzhen Innovation and Technology Park in Lok Ma Chau Loop***

21. After signing the *Memorandum of Understanding on Jointly Developing the Lok Ma Chau Loop (the Loop)* by Hong Kong and Shenzhen with the Shenzhen Municipal People's Government in January 2017, the Hong Kong Government has been actively developing the Loop into "Hong Kong-Shenzhen Innovation and Technology Park" ("the Park") as a key base for co-operation in scientific research. We are taking forward the relevant planning and infrastructure works. The Hong Kong-Shenzhen Innovation and Technology Park Limited ("HSITPL") responsible for the construction of the superstructure, operation, maintenance and management of the Park is conducting a Master Planning Study and a Business Model and Business Planning Study. Both studies are expected to be completed by the first half of 2019. Findings of the studies will provide important reference for working out the development strategy and timetable for the Park.

22. Meanwhile, the contract for the construction of the Advance Works of the Loop commenced in June this year, and the contract for the consultancy on detailed design and site investigation of Main Works Package 1 commenced in September this year. If the works progress smoothly, the first batch of land parcels for development of superstructure and associated facilities will be available as early as by 2021 or before for superstructure construction by HSITPL.

## ***Reinforcing the role of the Hong Kong Science Park as our flagship I&T infrastructure***

23. HKSTPC has been the Government's major executive agent that manages our flagship I&T infrastructure i.e. Science Park and industrial estates. The Budget this year has announced that the Government would provide a funding of \$10 billion to HKSTPC, of which \$3 billion will be used to make available research-related infrastructure and facilities (e.g. pilot batch production facility, animal research and drug testing facility and robo standard testing laboratory etc.) to reinforce Hong Kong's R&D capabilities in healthcare technologies and artificial intelligence and robotics technologies. The remaining \$7 billion will be used to strengthen HKSTPC's support to its tenants/incubatees. These include, for example, expansion of its Corporate Venture Fund and Incubation Programmes to support start-ups, attract international technology enterprises to establish presence in Science Park, develop a "Smart Campus" and improve its ancillary facilities, etc.

24. The LegCo Finance Committee has approved the Government's funding proposal in July 2018. HKSTPC is formulating the implementation details of various initiatives. We target to arrange for the first tranche of equity injection, amounting to \$2 billion, by early 2019.

### ***Admitting and Nurturing I&T Talent***

25. In June this year, we rolled out the "Technology Talent Admission Scheme" ("TechTAS") to provide a fast-track arrangement for admitting overseas and Mainland technology talent to undertake R&D work in Hong Kong. Under TechTAS, tenants and incubatees of HKSTPC and Cyberport that are engaging in the technology areas of biotechnology, artificial intelligence, cybersecurity, robotics, data analytics, financial technologies and material science are eligible to apply for quotas to admit technology talent. It is also required that, for every one to three non-local persons admitted under TechTAS, the technology company/institute concerned would need to employ one new local full-time employee plus two new local interns in technology-related work. As at end September 2018, we have approved 123 quotas.

26. In addition, we launched the "Technology Talent Scheme" in August 2018 to nurture and bring together more technology talent. The scheme comprises the Postdoctoral Hub ("PH") programme providing funding support to eligible organisations/companies to recruit postdoctoral talent for R&D work; and the "Re-industrialisation and Technology Training Programme" ("RTTP") subsidising local companies to train their staff in advanced technologies. As at end September 2018, we have received 151 applications for the PH, of which 124 applications have been approved with total funding of over \$56 million. The RTTP has received over 115 applications for public course registration, of which 54 have been approved.

### ***Support for Technology Start-ups***

27. The Hong Kong Productivity Council established the "Inno Space" in October 2017 to provide users with workspace and technical support, assist them in developing innovative ideas into industrial design and producing prototype products, thereby promoting "re-industrialisation". The "Inno Space" has also organised a series of relevant activities, including workshops on equipment and machinery, safety training orientations and seminars etc. to promote start-up culture in Hong Kong.



28. To encourage investment from venture capital (“VC”) funds in local I&T start-ups, the Government has established the \$2 billion “Innovation and Technology Venture Fund”, under which the Government will co-invest with VC funds in local start-ups at a ratio of approximately 1:2. The selection of co-investment partners was completed in mid-2018 and a total of six VC funds were selected as co-investment partners.

### *Promoting an I&T Culture*

29. The Innovation and Technology Commission will continue to organise “InnoTech Month” this year, in collaboration with universities, R&D institutions, government departments and non-governmental organisations, to promote I&T to the general public and increase their understanding of the importance of I&T to Hong Kong’s future development. Under this year’s theme of “Innovate for a Smart Future”, the “InnoTech Month” will comprise a variety of programmes to start from 20 October, including the “InnoCarnival” to be held from 3 to 11 November in the Science Park. The event this year will continue to provide the public with first-hand experience of the latest I&T development and accomplishments of Hong Kong through various activities including large-scale carnival, roadshows, exhibitions, seminars and workshops, etc.

## **WAY FORWARD**

30. Leveraging our existing advantages, including “one country, two systems”, internationalised business environment, research capabilities, judicial system, protection of intellectual property etc., coupled with various breakthrough policy measures carried out by the Government in the past three years as well as the Bay Area development, Hong Kong is facing unprecedented opportunities ahead for I&T development. The new initiatives put forward by the Policy Address this year will further enhance the local I&T ecosystem; provide universities, research institutions, I&T enterprises, technology talent and the youth with a wide room for development; move forward social and economic development; and improve the daily lives of citizens. The Government will endeavor to take forward the initiatives, with a view to making Hong Kong a competitive international I&T centre.

**Innovation and Technology Bureau  
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