

For discussion  
on 29 October 2019

**Legislative Council Panel on Commerce and Industry**

**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 Commerce and Industry 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 15 to 29.

3. With concerted efforts by different parties, the I&T atmosphere in Hong Kong has been enhanced continuously. Building on our existing efforts, we will continue to add momentum to the local I&T ecosystem. The new initiatives proposed in the Supplement are intended to further break through the bottlenecks in I&T development, and strengthen support in terms of talent, technological infrastructure and realisation of R&D outcomes. The relevant measures are set out in paragraphs 4 to 14.

## **NEW INITIATIVES**

4. One of the key components of promoting I&T is to nurture technology talent. We will enhance the nurturing of local talent and at the same time step up efforts in attracting technology talent from overseas and the Mainland. In addition, we will further support the application of local R&D outcomes as well as continue to strengthen local technological infrastructure.

### Enhancing the Researcher Programme and Postdoctoral Hub

5. The Researcher Programme (“RP”) and the Postdoctoral Hub (“PH”) under the Innovation and Technology Fund (“ITF”) were launched in 2004 and 2018 respectively, subsidising eligible companies and organisations in recruiting university graduates and postdoctoral talent to engage in R&D work. As at end September 2019, the RP has subsidised about 4 500 researcher positions with total funding of around \$1.16 billion. The PH has approved over 700 applications involving total funding of around \$400 million.

6. To further enlarge the pool of technology talent in Hong Kong, we will expand the scope of the above programmes to all technology companies conducting R&D activities in Hong Kong, and subsidise these companies to employ university graduates and postdoctoral talent for R&D work. The Innovation and Technology Commission (“ITC”) is working out the relevant details and plans to launch the new measures in the first quarter of 2020.

### Enhancing the Technology Talent Admission Scheme

7. Launched in June 2018, the Technology Talent Admission Scheme provides a fast-track arrangement for the admission of technology talent to conduct R&D in Hong Kong. As at end September 2019, the ITC has allotted 291 quotas and the Immigration Department has approved 86 employment visa/entry permit applications in accordance with the relevant quotas.

8. To support Hong Kong’s technological development, we will extend the applicable technology areas of the scheme from seven (i.e. biotechnology, artificial intelligence, cybersecurity, robotics, data analytics, financial technologies and material science) to 13 (the six new areas are 5G communications, Internet-of-Things, integrated circuit design, microelectronics, digital entertainment and green technology) and extend the coverage to all companies undertaking R&D activities in these 13 areas in Hong Kong. In view that the recruitment cycle for non-local talent is generally relatively long, we will extend the quota validity period from six to 12 months. The enhancements would allow more companies to benefit from the certainty and streamlined procedures offered by the scheme, thus expediting the attraction of talent from

different parts of the world, encouraging cross-fertilisation of local and non-local talent, and contributing to Hong Kong's technological development. We target to implement the enhanced scheme in January 2020.

### Enhancing the Public Sector Trial Scheme

9. The Public Sector Trial Scheme was launched in 2011 to subsidise public sector organisations in trying out R&D outcomes of ITF funded projects and technology enterprises in the Hong Kong Science Park ("Science Park")/ Cyberport. As at end August 2019, 224 projects have been funded with total funding of about \$395 million, enabling 140 bureaux/departments as well as public sector organisations to try out over 300 technology solutions.

10. To enable public sector organisations to use more local R&D outcomes on a trial basis with a view to promoting the realisation and commercialisation of R&D results, we will expand the scope of the scheme to all technology companies conducting R&D activities in Hong Kong. ITC is working out the relevant details and plans to launch the new measure in the first quarter of 2020.

### Establishing the third InnoHK research cluster

11. We are pressing ahead with the establishment of the two *InnoHK* research clusters in the Science Park – one on healthcare technologies (*Health@InnoHK*) and the other on artificial intelligence and robotics technologies (*AIR@InnoHK*). The initiative has received enthusiastic response, with 65 proposals from world top-notch universities and research institutes under process. The two research clusters are expected to be set up progressively in the coming few months.

12. The overwhelming response to *InnoHK* within a short period of time has reflected Hong Kong's edge in promoting global research collaboration. We will explore the setting up of a third *InnoHK* research cluster to further promote global R&D collaboration in Hong Kong.

### Science Park Expansion Programme Phase 2

13. With the progressive development of the local I&T ecosystem, the demand for R&D facilities has been strong. The Government announced in the 2018-19 Budget that \$3 billion would be allocated to HKSTPC for developing R&D-related facilities and good progress has been made. For example, the Robotics Catalysing Centre in Science Park is being expanded from the current area of about 4 000 sq. ft. to about 20 000 sq. ft. The expanded Centre is expected to commence operation by the end of this year. HKSTPC is also

developing a biobank in Science Park, with the first phase expected to commence operation in the first quarter of next year. On the other hand, Stage 1 of the Science Park Expansion Programme has been completed and has been earmarked for use by “*Health@InnoHK*” and “*AIR@InnoHK*”, as well as Incubation Centre, Robotic Catalysing Centre, etc.

14. Separately, HKSTPC will kick-start Phase 2 of the Science Park Expansion Programme. A consultant has been commissioned to conduct a master planning study, which will explore the feasibility of expansion within the current Science Park site as well as development outside the Science Park. In addition, HKSTPC plans to collaborate with local universities to jointly provide incubation services for university start-ups and strengthen the academic-industry linkage. The HKSTPC Western District Hub jointly operated with the University of Hong Kong will commence operation in the first half of 2020.

## **ON-GOING INITIATIVES**

### **Encouraging R&D**

15. To encourage more enterprises to conduct R&D locally so as to promote technological innovation and economic development in Hong Kong, we provide a two-tier rate of tax deduction for expenditures incurred in qualifying R&D activities by enterprises. The deduction is 300% for the first \$2 million of the aggregate amount of qualifying R&D expenditures incurred by enterprises and 200% for the remaining amount. There is no cap on the amount of the relevant tax deduction and it applies to all enterprises. Enterprises can claim the enhanced tax deduction in relation to the qualifying R&D expenditures incurred on or after 1 April 2018.

16. Besides, there are excellent scientific research talent in various local universities. To fully unleash Hong Kong’s strengths in scientific research, foster technology transfer as well as realisation of R&D results, we have, starting from 2019-20, doubled the following funding support –

- (a) the maximum annual funding for the Technology Transfer Office of each designated university has been increased from \$4 million to \$8 million;
- (b) the maximum annual funding for each designated university under the Technology Start-up Support Scheme for Universities has been increased from \$4 million to \$8 million; and

- (c) the annual funding for each State Key Laboratory and Hong Kong Branch of Chinese National Engineering Research Centre has been increased from \$5 million to \$10 million.

### I&T Infrastructure

#### *The Hong Kong-Shenzhen Innovation and Technology Park*

17. The Government is actively developing the Lok Ma Chau Loop into the “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 works contract for the Advance Works of the Loop commenced in June 2018 whereas the consultancy study on detailed design and site investigation of Main Works Package 1 also commenced in September last year.

18. The “Master Planning Study” and “Business Model and Business Planning Study” carried out by the Hong Kong-Shenzhen Innovation and Technology Park Limited (“HSITPL”) for the Park are close to completion. HSITPL is conducting another two studies to assess the technical feasibility of the first batch of superstructures and to analyse its overall impact on the economy.

19. The Government will seek funding approval of the Legislative Council (“LegCo”) at an appropriate time so that construction works for Main Works Package 1 and first batch of superstructures of the Park can commence as soon as possible.

#### *Data Technology Hub and Advanced Manufacturing Centre*

20. HKSTPC is developing the Data Technology Hub (“DT Hub”) and the Advanced Manufacturing Centre (“AMC”) in the Tseung Kwan O Industrial Estate (“IE”). The superstructure work of the DT Hub is close to completion and the project will be completed next year as scheduled. The superstructure work of the AMC has just commenced and is expected to be completed in 2022.

#### *InnoCell*

21. In addition, HKSTPC is constructing the InnoCell adjacent to the Science Park. It will provide around 500 residential units with flexible design and ancillary facilities such as shared working space for leasing to principals of the tenants and incubatees in the Science Park, as well as their Mainland or overseas employees and visiting researchers at an affordable rent. In constructing the InnoCell, HKSTPC is adopting the new modular integrated construction technology, using the concept of “assembly-in-factory/installation-

on-site”, thereby shortening the construction time. The superstructure work of the building is in good progress and completion of the project is expected to be advanced to end 2020.

### *Liantang/Heung Yuen Wai*

22. As the current IEs in Tai Po, Yuen Long and Tseung Kwan O are close to full utilisation, the Government has reserved a site of about 56 hectares near the Liantang/Heung Yuen Wai Boundary Control Point for the long-term development of IEs. The preliminary planning study results have indicated that the development of the site is technically feasible. HKSTPC is carrying out a study on the development vision of the site and will commence the engineering and technical feasibility study in due course.

### Supporting I&T start-ups

23. The Government announced in the 2018-19 Budget that \$7 billion would be allocated to HKSTPC to enhance support for its tenants and incubatees. Since October 2018, HKSTPC has launched a number of new/enhanced initiatives, including expanding its incubation programmes, injecting \$200 million to expand the Corporate Venture Fund, providing financial support and rent free concession to tenants as well as accommodation support to I&T talent in the Science Park.

24. The Innovation and Technology Venture Fund (“ITVF”) was set up to encourage more venture capital (“VC”) funds to invest in local I&T start-ups. The Government co-invests with the VC funds at a ratio of approximately 1:2 in local I&T start-ups. As at early October 2019, the Government has invested over HK\$35 million in five local I&T start-ups through the ITVF. Another investment proposal has been issued with an In-principle Agreement. Their businesses include supply chain management, e-commerce, Fintech and biotechnology. There are three more investment proposals under assessment.

### Promoting “re-industrialisation”

25. We proposed in the Policy Address last year to make an additional allocation of \$2 billion to HKSTPC for converting a factory building in the Yuen Long IE into a “Microelectronics Centre” equipped with dedicated facilities such as high standard super-clean rooms, dangerous goods storage and waste treatment, as well as other shared ancillary facilities. In addition, we proposed to establish a \$2 billion “Re-industrialisation Funding Scheme” under the ITF to subsidise manufacturers on a 1(government):2(enterprise) matching basis to set up smart production lines in Hong Kong. We consulted the LegCo Panel on

Commerce and Industry on these two initiatives in May this year and planned to seek funding approval from the Finance Committee by the end of this year.

26. As regards nurturing technology talent for “re-industrialisation”, we launched the “Re-industrialisation and Technology Training Programme” (“RTTP”) in August 2018 to fund existing staff of local enterprises on a 2(government):1(enterprise) matching basis to receive technology training, especially those related to “Industry 4.0”. As at end September 2019, the RTTP has supported more than 1 400 staff of local enterprises to receive technology training, involving total funding of about \$9 million.

### Promoting I&T Culture

27. To create a fervid I&T atmosphere and encourage the younger generation to pursue an I&T career, we will organise the City I&T Grand Challenge (“Grand Challenge”) to solicit potential technology solutions for specified social issues, so as to tackle vexing problems in communities on the one hand, and facilitate product development of innovative ideas and support technology-based solutions in opening up market opportunities on the other. Participants have to offer I&T-based solutions for the chosen theme, with the objective to improve the public’s daily lives or benefit specific communities. The first Grand Challenge is expected to be launched in the first half of next year.

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

28. The Central Government promulgated on 18 February 2019 the *Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area*, proposing to develop the Greater Bay Area into an international I&T hub. The development of the Greater Bay Area can benefit Hong Kong by facilitating local I&T enterprises to open up new markets and explore more collaboration opportunities.

29. Over the past year, considerable progress has been made in realising the remittance of R&D funding from the Mainland to Hong Kong. Since mid-2019, the Ministry of Science and Technology (“MOST”) and the relevant government agencies at provincial or municipal level on the Mainland have progressively approved over RMB 110 million to three local universities to conduct seven R&D projects or set up laboratory. Some of the approved funds have been successfully remitted across the border. In addition, in collaboration with MOST, we launched the “Mainland-Hong Kong Joint Funding Scheme” in April this year to encourage scientific research cooperation between Hong Kong and different provinces. Both sides are now assessing the 113 applications received under the scheme this year. The Government will continue to leverage on Hong Kong’s advantages in R&D and internationalisation to actively

participate in developing an international I&T hub, which will provide Hong Kong with a broader arena for I&T development.

## **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**  
**Innovation and Technology Commission**  
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