Budget Speech by the Financial Secretary (7)

Innovation and Technology

90. In the past three years, the Government allocated over $100 billion to support the development of I&T. We already have eight unicorns, making Hong Kong comparable to many larger economies. Despite the huge challenges imposed by the epidemic as well as the internal and external environments, I am convinced that the promotion of I&T is the right direction for the long-term development of Hong Kong.

Nurture and Pool Talent

91. In recent years, the number of research personnel and the number of staff members of start-ups in Hong Kong have increased substantially. To nurture I&T talent, the Education Bureau has implemented a number of measures to promote STEM education, including curriculum updating, providing professional training for teachers, subsidising and organising large-scale learning activities, such as the STEM Education Fair. The Standing Committee on STEM Education of the Curriculum Development Council steers and promotes the long-term development of STEM education in primary and secondary schools, as well as reviews continuously the relevant curriculum.

92. The IT Innovation Lab in Secondary Schools Programme has received positive response since its launch. I will set aside over $200 million to extend the programme to primary schools. Funding of up to $400,000 will be provided to each subsidised primary school in the coming three school years, thereby rolling out a “Knowing More About IT” Programme to enhance students’ interests and knowledge in information technology and their applications through extra-curricular activities, so as to prepare them for integration into the knowledge-based economy and participation in the development of a digital society. The OGCIO will set up a one-stop support centre to provide assistance for primary schools.

93. Last year, I earmarked $40 million to implement a pilot scheme, under which subsidies are provided for students who study science and technology in local universities to enrol in short-term I&T related internships. More than 1 600 students and over 1 000 enterprises participated in the scheme. Eighty per cent of the interns indicated that they would consider pursuing a career in I&T after graduation. Given the overwhelming responses, I announce that the scheme would be regularised.

94. The Government will launch a Global STEM Professorship Scheme in the first half of this year to support universities in attracting world-renowned I&T scholars and their teams to Hong Kong to participate in STEM teaching and research. The scheme will involve an expenditure of about $2 billion, which will be borne by the Government, the universities and the Hong Kong Jockey Club Charities Trust.

95. Job opportunities and continuous training are also crucial for nurturing the I&T talent. In the past three years, the Research Talent Hub has funded over 3 700 R&D positions. Among those engaged, about 1 400 are postdoctoral talent. The Re-industrialisation and Technology Training Programme provided on-the-job training for over 3 500 employees of some 1 800 enterprises so as to enable them to have a better grasp of the development of the new economy and I&T. The Greater Bay Area Youth Employment Scheme launched early this year also provides around 700 I&T places to encourage enterprises to employ Hong Kong's university graduates so that the latter can undertake I&T-related work and receive on-the-job training in Hong Kong and another city in GBA.

Innovation and Technology Infrastructure

96. Over 80 per cent of the areas in the two buildings under Stage 1 of the Science Park Expansion Programme has been occupied. As for the Data Technology Hub (DT Hub) in the Tseung Kwan O Industrial Estate, since its commencement of operation in the fourth quarter of last year, 16 enterprises have already set up offices there or signed tenancy agreements. Besides, quite a number of enterprises have expressed interest in setting up offices in the DT Hub. The InnoCell adjacent to the Science Park was completed at the end of last year, providing around 500 residential spaces with flexible design and facilities such as shared work spaces for the research personnel in the Science Park. Leasing activities will commence and a trial run will be held in the first half of this year.

97. The supply of R&D and working spaces in the Hong Kong Science Park and Cyberport falls short of demand. In the last two Budgets, resources were set aside for the Science Park expansion and Cyberport 5 development, which will respectively provide about 28 000 and 63 000 square metres of floor area mainly for R&D or operation of I&T enterprises.

98. We are also pressing ahead with the development of the Hong Kong-Shenzhen Innovation and Technology Park (the Park) in the Lok Ma Chau Loop. A provision of about $32.5 billion has been approved for the project. Works have already commenced. The first batch of facilities is expected to be completed in phases from 2024 to 2027, the economic contribution to Hong Kong of which is expected to reach $5.5 billion per annum, with about 4 800 jobs to be created. Upon full development, the Park will be the largest ever I&T platform in Hong Kong, providing a gross floor area of 1.2 million square metres, which is approximately three times that of the Science Park. Its economic contribution to Hong Kong is expected to reach $52 billion per annum, with about 52 000 jobs to be created.

99. On digital infrastructure, the coverage of 5G network in Hong Kong is now over 90 per cent . The subsidy scheme for expanding fibre-based network to villages in remote areas will be completed in phases from this year onwards. The Government will continue to support the development of 5G networks and applications; release more 5G spectrum in different frequency bands; facilitate the setting up of radio base stations by operators at suitable government venues and public facilities; assist in the relocation of the Tai Po satellite earth stations; and provide land at Chung Hom Kok Teleport for the development of infrastructure to connect with external

telecommunications facilities.

Promote Research and Development

100. Over the past few years, we have been dedicated to promoting R&D but it takes time to deliver results. These efforts are gradually bearing fruits with a rising gross domestic expenditure on R&D activities in recent years, boosting our confidence in promoting R&D.

101. Amendments were made to the Inland Revenue Ordinance in late 2018 to provide for enhanced tax reduction for qualifying R&D expenditure so as to encourage enterprises to devote resources to local R&D. The total amount of R&D expenditure for which claims for tax deduction were made in the first year of assessment has more than doubled since the implementation of this measure. Seventy per cent of this amount enjoyed enhanced tax deduction. The measure has delivered notable results.

102. Since permission was granted for the remittance of Mainland R&D funding to Hong Kong, the Ministry of Science and Technology, Guangdong Provincial Government and Shenzhen Municipal Government in the past two years have approved over RMB 340 million for universities and research institutes in Hong Kong to conduct R&D or set up laboratories, thereby adding impetus for local R&D activities.

103. The "InnoHK Research Clusters" is our flagship project. It comprises Health@InnoHK on healthcare technologies and AIR@InnoHK on artificial intelligence and robotics technologies, and has attracted many top-notch universities and research institutions in the world. The first batch of about 20 R&D laboratories will commence operation progressively in the first quarter of this year. This will further consolidate Hong Kong's position as a global research collaboration hub.

104. Funding under the Innovation and Technology Fund (ITF) increased by over seven times in the last seven years. I will inject $4,750 million per year to the ITF two years in a row to sustain its 17 funding schemes as well as the work of over 50 R&D laboratories in the next three years.

Start-ups

105. Hong Kong's start-up ecosystem has become increasingly vibrant, with an increase in the number of start-ups from around 1 100 in 2014 to over 3 300 last year. Investment from venture capital funds in Hong Kong also increased from $1.24 billion in 2014 to $9.9 billion in 2019, representing an increase of over seven times. Over the past three years, I&T enterprises in the Science Park and Cyberport have attracted over $41 billion of investment. Besides, some 600 start-ups are being incubated by the Science Park and Cyberport on top of the nearly 1 300 start-ups already graduated from the programmes.

106. The Innovation and Technology Venture Fund (ITVF) has invested more than $100 million in 19 local start-ups over the past two years, attracting more than $500 million private investment. The ITVF appointed three new co-

investment partners late last year. We will continue to partner with venture capital funds to invest in local start-ups.

107. In the past three years, the Hong Kong Science and Technology Parks Corporation (HKSTPC) has invested over $100 million in 13 technology enterprises through its Corporate Venture Fund, attracting about $1,350 million private investment. The Cyberport Macro Fund set up by Cyberport also invested more than $120 million in 16 companies, attracting over $860 million private investment. The HKSTPC and Cyberport will inject $350 million and $200 million into the two Funds respectively and extend their scope to cover Series B and later stage investments.

108. The Technology Start-up Support Scheme for Universities has provided funding of about $120 million to 139 start-ups in the past three years. Among those start-ups which have benefited from the Scheme since inception, over half of them have launched their products in the market, more than 40 per cent have earned revenue and about 60 per cent have received capital injection from investors with a total amount of some $530 million.

Financial Technology

109. The epidemic has speeded up digital transformation of the Hong Kong financial market. On top of many Fintech start-ups, there are eight virtual banks, four virtual insurers, and a virtual asset trading platform having been authorised to operate in Hong Kong.

110. With a view to fostering the development of more novel financial products, the HKSTPC and Cyberport will collaborate with the HKMA to attract more financial, technology or research institutes to set up laboratories in Hong Kong, with a focus on such areas as regulatory technology and cyber security, where Hong Kong enjoys clearest advantages. In addition to the Fintech Proof-of-Concept Subsidy Scheme announced in January this year, the HKMA is considering enhancing its Fintech Supervisory Sandbox by providing “through-train” vetting and funding arrangements for those promising Fintech solutions to reduce the time for the launch of innovative financial products in the market.

Foster Re-industrialisation

111. The Re-industrialisation Funding Scheme, which was launched in July last year, provides subsidies, on a matching basis, to manufacturers for setting up new smart production lines in Hong Kong. The scheme has received 12 applications so far.

112. The Advanced Manufacturing Centre in the Tseung Kwan O Industrial Estate and the Microelectronics Centre in the Yuen Long Industrial Estate, being developed by the HKSTPC, will be completed in the coming years. The two centres will provide a total gross floor area of over 140 000 square metres for smart production and high-end manufacturing industries. Quite a number of enterprises have expressed interest in setting up establishments in the two centres.

(To be continued.)