Fifty-fourth Meeting of the Business Facilitation Advisory Committee

Agenda Item 2: Enterprise-oriented Funding Schemes under the Innovation and Technology Fund

Purpose

This paper briefs Members on the New Industrialisation Acceleration Scheme (NIAS) under the Innovation and Technology Fund (ITF) and the latest progress of various enterprise-oriented funding schemes.

The ITF

- 2. Established as a statutory fund under section 29 of the Public Finance Ordinance (Cap. 2) by a resolution of the Legislative Council on 30 June 1999, the ITF is administered by the Innovation and Technology Commission (ITC). All along, the ITF has been financing projects that contribute to the innovation and technology ("I&T") upgrading in our manufacturing and services industries to promote the long-term development of Hong Kong.
- 3. At present, the ITF supports 18 funding schemes and provides funding for the work of more than 60 research and development (R&D) centres/laboratories, in order to provide comprehensive support to the local I&T force. Each of the 18 funding schemes has its own objective, scope, and modus operandi, supporting five I&T areas, namely supporting R&D, facilitating technology adoption, nurturing I&T talent, supporting technology start-ups, and fostering an I&T culture. Members will be briefed on the soon-to-be-launched NIAS in paragraphs 4 to 12 below and the latest progress and operation of the enterprise-oriented funding schemes out of the 18 funding schemes in paragraphs 13 to 17 below.

NIAS

Background

- 4. With the rapid growth of the I&T industry in recent years, Hong Kong has to formulate industry development strategies that suit our own development needs according to local conditions, thereby generating new quality productive forces and contributing to Hong Kong's economy. The Government promulgated the "Hong Kong Innovation and Technology Development Blueprint" in December 2022, in which eight major strategies were developed based on the four broad development directions, including continuing to enhance the I&T ecosystem and promoting interactive development of the upstream, midstream and downstream sectors so as to build up a comprehensive I&T ecological chain.
- 5. In order to promote the development of downstream industries, the Government is actively attracting top-notch strategic enterprises from overseas and the Mainland to set up or expand businesses in Hong Kong as well as encouraging local enterprises to upgrade and transform with the use of I&T. Substantial investment is required for enterprises to establish production facilities. In order to enhance the competitiveness of Hong Kong in attracting strategic enterprises to set up production facilities in Hong Kong and to bring in more advanced manufacturing technology and management experience, it is necessary to provide both financial incentives and other support to these enterprises for them to embark on relevant projects in Hong Kong.

Framework of the NIAS

- 6. The Chief Executive announced in the 2023 Policy Address that the NIAS will be launched to provide a number of targeted facilitation measures for enterprises which set up new smart production facilities in Hong Kong with an investment of not lower than \$200 million in industries of strategic importance (i.e. life and health technology, artificial intelligence (AI) and data science, advanced manufacturing and new energy technologies). These measures include:
 - (a) Matching funds on a 1 (Government): 2 (enterprise) matching basis will be provided to cover one-third of the approved project expenditure for setting up new production facilities or a maximum of \$200 million, whichever is lower. The Government will provide a minimum funding of \$100 million for each project;

- (b) Funded companies under the NIAS, in addition to the quotas of engaging four research talents with a total engagement period of 144 months under the existing Research Talent Hub (RTH), may engage 36 additional research talents for an additional total engagement period of three years on a 1 (Government): 1 (enterprise) matching basis under the new stream of the RTH-NIAS; and
- (c) Funded companies under the NIAS are allowed to employ non-local technical personnel who possess the required skills/know-how and relevant experience in setting up and operating new production facilities in Hong Kong. By allotting a maximum of five quotas for admitting the technical personnel, these companies are provided with certainty to proceed with the procurement, installation and operation plan for necessary equipment and machinery in Hong Kong.

Eligibility Criteria and Funding Principles

- 7. All applicant enterprises are required to fulfill the following eligibility criteria
 - (a) a company that is incorporated in Hong Kong under the Companies Ordinance (Cap. 622);
 - (b) commit an investment of no less than \$200 million of funding that is within the approved funding scope in the setting up of new smart production facilities in Hong Kong in the three designated technology areas, namely, life and health technology, AI and data science, and advanced manufacturing and new energy technologies; and
 - (c) the smart production facilities proposed in (b) above should involve high-end and advanced technology, i.e. the integrated and intelligent use of smart technologies such as IoT, real-time data acquisition, application of data analytics and advanced human-machine interfaces, AI/machine learning/deep learning, automation and robotics, sustainable technology, sensors and actuators, etc. in the production process.
- 8. The funding under the NIAS can be used for covering expenses directly related to the establishment of a new production line in Hong Kong, including the costs of procurement, set-up, installation and commissioning of the machinery/software and equipment/apparatus/experimental and testing equipment, etc., as well as fees for engaging technical consultancies for the design and setting up of the production line concerned, including the fees for testing and

staff training. As we expect that the scale of the production facilities to be established under the NIAS will be substantial, the NIAS will also provide funding for specialised facilities and associated auxiliary equipment that are necessary for the operation of the production facilities, for example, the costs of procurement, installation and commissioning of clean rooms, anti-seismic structure for microelectronics factory, specified storage facilities, etc., including but not limited to the related fitting-out costs. Expenditure items of approved projects under the NIAS shall not receive funding from any other funding schemes of the Government or those administered by public bodies. General business operating expenses of the applicant enterprise will also not be funded.

Project Vetting and Implementation

9. The ITC will first conduct a preliminary assessment of the application received, including checking the basic eligibility and conducting initial assessment of the financial capability of the applicant enterprise. After the initial assessment by the ITC, the New Industrialisation Development Office under the Innovation, Technology and Industry Bureau will confirm whether the proposed new smart production facilities are from industries of strategic importance and whether they contain the high-end advanced manufacturing element. After going through the relevant procedures, the application will be submitted to the Vetting Committee of the NIAS.

Assessment Criteria

- 10. To ensure the proper use of public funds, all applications will be vetted individually in accordance to the paragraph above and based on the following principles
 - (a) Economic benefits;
 - (b) Financial considerations;
 - (c) Implementation viability;
 - (d) Technical, financial and management capabilities; and
 - (e) Industry advancement/high-end element of the new smart production facilities.

Control and Review Mechanism

- 11. We will put in place the following control and review mechanisms under the NIAS -
 - A successful applicant company will be required to enter into a funding (a) agreement with the Government and carry out the approved project in accordance with the agreement;
 - (b) Grant will be disbursed on a reimbursement basis after completion of the project and the Government's approval of the final project report and final audited accounts submitted by the enterprises. reimbursement arrangement will be made available in accordance with the duration of the project¹;
 - Upon project completion and before disbursement of the final instalment, the enterprises concerned would be required to provide information to the Government on the benefits of the relevant production line; and
 - To ensure the funded projects can bring substantive economic benefits to Hong Kong for a reasonable period, unless with prior written approval from the Government, the production facilities funded cannot be transferred to other parties or to any place outside Hong Kong within a specified period of, say, five years after project completion.

Expected Benefits

12. The setting up of the NIAS will encourage more enterprises from industries of strategic importance to establish new smart production facilities in Hong Kong and promote the development of downstream industries in Hong Kong. At the same time, we can attract these enterprises to set up large-scale R&D centres in Hong Kong through the RTH-NIAS, so as to further promote multi-pronged collaboration among the industry, academic and research sectors, and to enhance and elevate the I&T ecosystem of Hong Kong, thereby creating more opportunities for research talents. We aim to attract 50 to 100 enterprises to set up new production facilities in Hong Kong with a corresponding direct

If the project duration is over 12 months but not more than 24 months, the Government will disburse interim

funding of not more than 50% of the approved funding amount upon the Government's acceptance of the progress report(s) and audited account(s) submitted by the enterprises which certify that certain project milestones have been achieved. If the project duration is over 24 months, the Government will disburse interim funding of not more than 60% of the approved funding amount by two batches upon acceptance of the progress reports and audited accounts submitted by the enterprises.

investment of no less than \$20 billion from these enterprises under the NIAS starting from 2024-25 over a period of five to eight years.

Other Funding Schemes under the ITF

Supporting R&D

- 13. There are currently six funding schemes that support R&D with the aim of supporting applied R&D projects undertaken by R&D centres, universities, other designated public research institutes and private enterprises. These schemes also encourage private enterprises to collaborate with research institutes like universities and R&D centres with a view to transferring the R&D results to local industries. The Enterprise Support Scheme (ESS) and the R&D Cash Rebate Scheme (CRS) are both enterprises-oriented funding schemes:
 - (a) The <u>ESS</u> was launched in 2015 to provide dollar-for-dollar matching funding for private companies to carry out in-house R&D projects. The maximum funding amount for each approved project is \$10 million. As at the end of March 2024, the ESS Assessment Panel has assessed 762 applications², of which 330 have received support. Private companies have contributed about \$712 million while the ITF about \$651 million.
 - (b) The <u>CRS</u> was introduced in 2010 to provide cash rebate of private companies' eligible expenditure in R&D projects funded by the ITF, and those funded entirely by themselves conducted in partnership with local universities and designated local public research institutes³. The level of cash rebate was 10% in 2010 and progressively increased to 40%. As at the end of March 2024, a total of over 1 900 companies were benefitted with cash rebates involving a total rebate of over \$1,164 million. We estimated that the private sector invested more than \$2.9 billion in R&D projects during the same period.

Facilitating Technology Adoption

14. On facilitating technology adoption, there are four schemes under the ITF to assists enterprises, institutes and the society to upgrade and transform through adoption of applied technology. Among which, the Public Sector Trial

The funding amount approved and number of approved projects under the ESS in 2022-23 increased by two times compared to those of 2015-16.

Including R&D Centres established by the Government, the Hong Kong Productivity Council, the Vocational Training Council and the Hong Kong Institute of Biotechnology.

Scheme (PSTS), the Technology Voucher Programme (TVP) and the New Industrialisation Funding Scheme (NIFS) are enterprise-oriented schemes:

- (a) The <u>PSTS</u> was introduced in 2011 to support public sector organisations to try out new technologies or products developed from ITF-funded R&D projects and all technology companies conducting R&D activities in Hong Kong, and support the production of prototypes or samples of their R&D outcomes with a view to helping relevant enterprises/organisations apply local R&D outcomes for local use for enhancing the prospects of realisation and commercialisation. As at the end of March 2024, the PSTS has funded 473 projects⁴ involving a total funding amount of about \$990 million, benefiting over 210 different organisations to conduct over 640 trials.
- (b) The <u>TVP</u> was launched in 2016 as a pilot scheme with an aim of subsidising eligible local enterprises and organisations in using technological services and solutions to improve productivity, or upgrade or transform their business processes. Subsequently, the TVP has been incorporated into the ITF as a regular funding scheme, and a number of enhancements have been introduced, including the raising of the Government funding ratio from two-thirds to three-quarters in April 2020. The cumulative funding ceiling and the maximum number of projects funded were also increased from \$400,000 and four projects to \$600,000 and six projects respectively.

As at the end of March 2024, a total of 36 985 applications have been received under the TVP (excluding applications which were subsequently withdrawn or unable to be processed due to ineligibility or missing supporting documents). Of the 33 940 applications assessed, 33 513 were approved⁵ involving a total funding amount of about \$5,936 million, representing a success rate of about 99%. We estimated that the private sector entities and organisations contributed \$3,808 million during the same period, which indicates their efforts in digital transformation and upgrading and transforming their business processes.

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The funding amount and number of approved applications for 2020-21 include those under the special call for projects for the prevention and control of Novel Coronavirus Disease 2019 (COVID-19).

There were also 63 applications supported by the Committee but had been withdrawn by the applicants before funding approval was granted, and another 29 applications supported by the Committee which were awaiting submission to the Commissioner for Innovation and Technology for approval.

(c) The NIFS was launched in 2020 to subsidise manufacturers, on a 1 (Government): 2 (company) matching basis, to set up new smart production lines in Hong Kong. The funding ceiling is one-third of the total project cost or \$15 million, whichever is lower. As at the end of March 2024, the Secretariat has received 66 applications. The NIFS Vetting Committee has vetted 64 applications, and agreed in principle to support 38 of them, which involve industries such as food manufacturing and processing (including health food), textiles and clothing, construction materials, medical device, nanofiber materials, pharmaceutical production (including Chinese medicine), electronics, printing, and equipment and parts, covering 62 smart production lines. It is estimated that private companies will contribute about \$696 million and the ITF around \$271 million.

In the 2023 Policy Address, the Chief Executive announced that the Re-industrialisation Funding Scheme would be renamed as the NIFS. In addition, enterprises will be allowed to apply for the NIFS to carry out up to three projects concurrently with a total maximum funding of \$45 million. The arrangement has been implemented since January 2024. We expect to subsidise the setting up of more smart production lines in Hong Kong under the NIFS.

Nurturing I&T Talents

- 15. To promote the development of I&T and "new industrialisation", an adequate supply of quality technology talents is crucial. The Government has been making use of various means to expand the local I&T talent pool through a multi-pronged approach. There are three funding schemes under the ITF that support the nurturing of I&T talents, of which the RTH and the New Industrialisation and Technology Training Programme (NITTP) are most directly related to enterprises.
 - (a) The <u>RTH</u> was introduced in 2020 (merging the Researcher Programme (RP) launched in 2004 and Postdoctoral Hub (PH) launched in 2018). It provides funding support for eligible companies or organisations⁶ to engage up to four graduates in Science, Technology, Engineering and Mathematics (STEM)-related disciplines from a local university or a

⁶ All technology companies conducting R&D activities in Hong Kong, incubatees and I&T tenants of the Hong Kong Science and Technology Parks Corporation and the Hong Kong Cyberport Management Company Limited, as well as organisations and companies undertaking R&D projects funded by the ITF are eligible to apply.

well-recognised non-local institution⁷ to conduct R&D work. The Chief Executive announced in the 2022 Policy Address that the Government would increase the subsidies provided for research institutions and I&T enterprises for employing research talents under the RTH by about 10%. Research talents with a doctoral degree would be further provided with a living allowance under the RTH. From April 2023, ITC has increased the maximum monthly allowance for research talents with a bachelor's, master's and doctoral degree to \$20,000, \$23,000 and \$35,000 respectively; and provides research talents who are doctoral degree holders with an additional monthly living allowance of \$10,000. The maximum engagement period for each research talent is generally 36 months.

As at the end of March 2024, the RTH (including RP and PH) has approved about 12 800 applications for research talent⁸ involving a total funding amount of about \$6.1 billion. Among these applications, there were over 4 300 applications for postdoctoral research talent, involving a funding amount of about \$3.2 billion.

(b) The NITTP was introduced in 2018 to fund local enterprises on a 2 (Government):1 (enterprise) matching basis for their staff to receive training in advanced technologies, especially those related to "new industrialisation". The NITTP is administered by the Vocational Training Council (VTC) and overseen by VTC's Innovation and Technology Training Board, which determines the types of technology training that can be funded. As at the end of March 2024, the NITTP has approved 5 140 applications for registering public courses and funding of more than \$620 million for over 26 200 trainees to receive about 46 400 trainings in advanced technologies.

Supporting Technology Start-ups

16. In order to encourage academic teams to set up technology start-ups in Hong Kong and support their development, there are three funding schemes under the ITF to underpin the support of technology start-ups:

"Well-recognised non-local institution" refers to one of the top 100 institutions for STEM-related subjects in the latest Quacquarelli Symonds World University Rankings, the Academic Ranking of World Universities or the Times Higher Education World University Rankings.

The amount of approved funding and number of approved projects under the RTH in 2023-24 have increased by about 7 times and about 2.6 times respectively when comparing to those in 2017-18.

- Technology Start-up Support Scheme for Universities (TSSSU) was (a) launched in 2014 to support professors and students of six universities (i.e. City University of Hong Kong, Hong Kong Baptist University, The Chinese University of Hong Kong, The Hong Kong Polytechnic University, The Hong Kong University of Science and Technology, and The University of Hong Kong) to start technology businesses and commercialise their R&D results. Starting from the 2023-24 financial year, ITC has implemented an enhancement measure ("TSSSU+") in addition to the original component of TSSSU ("TSSSU-O") to provide dollar-to-dollar matching funds to those university start-ups which have demonstrated good growth potential through securing investment from private sector. The maximum annual funding for each of the six universities is \$16 million (i.e. \$8 million each for TSSSU-O and TSSSU+). Each funded technology start-up may receive up to \$1.5 million each year for no more than three years under TSSSU-O and TSSSU+ respectively. As at 2024-25, more than 70 start-ups from the six participating universities have received over \$90 million of funding under TSSSU+. As at early May 2024, TSSSU has provided a total of about \$494 million to about 550 start-ups.
- (b) <u>Innovation and Technology Venture Fund (ITVF)</u> was launched in 2017. It aims to encourage venture capital investment in local I&T start-ups so as to create a more vibrant I&T ecosystem in Hong Kong. Co-investment partners (CPs) are responsible for recommending suitable investee companies to ITC, and the latter will co-invest with the CPs in eligible local I&T start-ups at a matching investment ratio of approximately 1 (Government):2 (CPs). As at the end of April 2024, the ITVF had a total of 20 CPs.

As at the end of April 2024, the Government has invested about \$230 million through the ITVF in 31 local I&T start-ups with businesses covering supply chain management, e-commerce, financial technology, biotechnology and AI, etc., attracting private investment of about \$2.4 billion.

(c) Research, Academic and Industry Sectors One-plus Scheme (RAISe+Scheme) was launched in October 2023, aiming to provide funding support for university research teams to transform their R&D results into products or services for commercialisation as well as encourage the industrial and commercial sectors to invest in R&D projects and share their business experience, so as to achieve efficient collaboration among the Government, industry, academia and research sectors. ITC will fund, on a matching basis, at least 100 research teams from

universities which have good potential to become successful start-ups to complete their projects in two stages within around five years. A total of 94 applications were received from various universities under the RAISe+ Scheme in the first application solicitation period, and inprinciple support has been given to more than 20 applications. ITC has informed the universities of the application results in end-March 2024 and is currently following up with the university teams to finalise the project details.

Promoting I&T Culture

17. There are also funding schemes under the ITF which support the promotion and nurturing of an I&T culture in the community. The Patent Application Grant was launched in 1998 to provide funding support for first-time patent applicants. As at the end of April 2024, a total of 2 784 applications were approved with a total funding amount of about \$560 million. During the same period, 1 293 applicants have been granted patents.

Way Forward

- 18. Since the introduction of the ITF over two decades ago, it has made significant contributions to the local I&T development by nurturing numerous R&D talents and start-ups as well as delivering commercialised R&D results. These are elements essential in a vibrant I&T ecosystem, laying a solid foundation for Hong Kong's development into an international I&T hub as supported under the National 14th Five-Year Plan. Meanwhile, the ITF has also brought about benefits to the daily life of the general public as well as the industrial and commercial sectors. To match the pace of social and economic developments, we will continue to make the best use of the ITF to provide support in different areas in order to inject impetus into the development of the local I&T ecosystem.
- 19. Members are invited to note the content of the paper.

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