For discussion
on 19 November 2024

Legislative Council
Panel on Commerce, Industry, Innovation and Technology

Latest Progress of the Innovation and Technology Fund and Funding Injection Proposal

PURPOSE

This paper briefs Members on the latest progress and enhancement measures of various funding schemes under the Innovation and Technology Fund ("ITF") and seeks Members' support for the injection of $7.5 billion into ITF to continue its operation.

BACKGROUND

2. The ITF was established by a Resolution passed by the Legislative Council ("LegCo") on 30 June 1999 as a statutory fund under section 29 of the Public Finance Ordinance (Cap. 2) and is administered by the Innovation and Technology Commission ("ITC"). The ITF has all along financed projects that contribute to innovation and technology ("I&T") upgrading in our manufacturing and service industries, in order to facilitate the long-term development of Hong Kong.

3. Since the introduction of the ITF over two decades ago, it has made significant contributions to the local I&T development by nurturing numerous research and development ("R&D") talents and start-ups, delivering commercialised R&D results, as well as attracting many private investments. These are elements integral to a vibrant I&T ecosystem, laying a sound foundation for Hong Kong's development into an international I&T centre as supported under the National 14th Five-Year Plan. Meanwhile, the ITF brings about benefits to the daily life of the general public as well as the commercial and industrial sectors.

4. The annual expenditure of the ITF increased by about five times from over $1.2 billion in 2016-17 to over $5.9 billion in 2023-24. In the past three financial years, the various enterprise-oriented funding schemes under the ITF,

including the Technology Voucher Programme ("TVP") and New Industrialisation and Technology Training Programme ("NITTP"), have provided funding support to over 30 000 small and medium-sized enterprises. At the same time, the various funding schemes supporting the nurture of technology talents, including the Research Talent Hub ("RTH") and STEM Internship Scheme, have supported a cumulative total of over 15 000 talents in the past three financial years. The ITF has been continuously nurturing a favourable I&T atmosphere in Hong Kong to support the development of the local I&T industry, upgrading and transformation of the local industry, and providing young people with quality employment and entrepreneurial opportunities.

5. In the 2023 World Digital Competitiveness Ranking published by the International Institute for Management Development, Hong Kong ranked in the tenth place globally, and came in second worldwide in terms of "technology". Besides, in the Global Startup Ecosystem Report 2023 published by Startup Genome, a US research institute, Hong Kong ranked second in the world and first in Asia in the emerging startup ecosystems, demonstrating that Hong Kong has been striving ahead in the overall I&T development. Detailed figures and indicators in recent years reflect that the various initiatives taken by the Government in taking forward the development of upstream, midstream and downstream sectors are gradually bearing fruit. Hong Kong's gross expenditure on R&D ("GERD") increased from $21.3 billion in 2017 to $30.1 billion in 2022, as a ratio to the Gross Domestic Product increased from 0.8% to 1.1%. The number of R&D personnel in Hong Kong also increased from around 30 000 in 2017 to around 40 000 in 2022, the number of local start-ups increased from about 3 200 in 2019 to about 4 300 in 2023 and the number of employees also rose from around 12 500 to around 16 500 during the same period.

The Innovation and Technology Fund

Various Funding Schemes under the ITF

6. The ITF has gradually expanded and was consolidated into 19 funding schemes at present in response to the changes in Hong Kong's I&T ecology as well as other developments (such as the deepening of the I&T cooperation between Hong Kong and the Mainland). Each of the funding schemes has its own objective, scope, and modus operandi, supporting six I&T areas, namely supporting R&D, facilitating technology adoption, nurturing I&T talent, supporting technology start-ups, promoting new industrialisation and developing new quality productive forces and fostering an I&T culture. Information on the number of applications, the amount of approved funding and the effectiveness of various funding schemes, etc., is set out below -

Supporting R&D

(a) Innovation and Technology Support Programme ("ITSP") was introduced in 1999 to fund applied R&D projects undertaken by local R&D Centres[1], local universities as well as other designated public research institutes[2]. As at end-September 2024, a total of 3 390 projects were funded, with a total funding amount of over $12.6 billion. The funded projects involve different technology areas, including biotechnology, Chinese medicine, electrical and electronics, environmental technology, information technology, manufacturing technology, materials science and nanotechnology, etc. From 2017 till now, the funded projects have generated over 2 170 intellectual property[3] ("IP") rights. In addition, to support participation in the national space programme by Hong Kong's research teams, ITC launched the ITSP Special Call (Aerospace Technology) in July 2024 to provide dedicated funding support to local universities in taking forward aerospace technology-related R&D projects[4]. It is initially estimated that six applications will be supported, involving a total funding amount of over $100 million. R&D project results may have the opportunities to be applied in the Chang'E-7 mission, Tiangong Space Station and future manned lunar exploration mission.

(b) Mainland-Hong Kong Joint Funding Scheme ("MHKJFS") was introduced in 2019 to support and encourage universities and research institutes in Hong Kong and the Mainland to conduct collaborative R&D projects, with a view to enhancing R&D collaboration between the two places[5]. In 2024, the MHKJFS invited proposals under the

---

[1] Namely the Automotive Platforms and Application Systems R&D Centre ("APAS"), Hong Kong Applied Science and Technology Research Institute ("ASTRI"), Hong Kong Research Institute of Textiles and Apparel ("HKRITA"), Logistics and Supply Chain Multitech R&D Centre ("LSCM") and Nano and Advanced Materials Institute ("NAMI") and Hong Kong Microelectronics Research and Development Institute ("MRDI").

[2] Including all self-financing degree-awarding institutions registered under the Post-Secondary Colleges Ordinance (Cap. 320), the Hong Kong Productivity Council ("HKPC"), the Vocational Training Council ("VTC"), the Clothing Industry Training Authority and the Hong Kong Institute of Biotechnology ("HKIB").

[3] Since 2017, funded organisations have been invited to provide relevant information on IP rights in the post-project evaluation forms submitted after completion of the projects. As some of the organisations have not yet submitted their reports, the relevant information has not fully reflected the number of IP rights generated by all the funded projects.

[4] Considering that aperiodic special call on projects could provide more flexibility and targeted support to R&D of specific theme, ITC will replace ITSP (Mid-stream, theme-based) with one-off special calls.

[5] Applications received under MHKJFS will be first assessed by the Ministry of Science and Technology ("MOST") and ITC separately. Only those supported by both sides will be processed. After both sides agreed on the list of supported applications, ITC would then request the applicants concerned to revise their project proposals with reference to the assessment comments, so as to facilitate the formal approval procedures.

themes of "Biotechnology", "Artificial Intelligence" ("AI") and "Sustainability engineering and technology" with a total of 380 applications received. From the launch of programme to end-September 2024, a total of 110 projects were funded, with a total funding amount of over $210 million.

(c) Guangdong-Hong Kong Technology Cooperation Funding Scheme ("TCFS") was introduced in 2004 to fund applied R&D projects that include elements of cooperation between Guangdong and Hong Kong (i.e. projects involving collaboration between research institutes and/or enterprises in Guangdong/Shenzhen and Hong Kong) to enhance R&D collaboration between Hong Kong and Guangdong Province. As at end-September 2024, a total of 408 projects were funded, with a total funding amount of over $1.08 billion.

(d) Partnership Research Programme ("PRP") was launched in 2019 to fund collaborative R&D projects conducted by the five R&D Centres, local universities and other designated local public research institutes in collaboration with companies incorporated in Hong Kong. The funded enterprise can own the IP rights of the project and commercialise the R&D outcomes if it sponsors 50% or more of the project cost. As at end-September 2024, a total of 315 projects were funded with a total funding amount of about $580 million. The PRP has attracted more than $580 million in sponsorship from the private market so far, illustrating the growing active participation of the industries in collaborative R&D projects.

(e) Enterprise Support Scheme ("ESS") was launched in 2015 to provide dollar-for-dollar matching funding for private companies to carry out in-house R&D projects. The funding ceiling for each approved project is $10 million. As at end-September 2024, the ESS Assessment Panel has assessed 792 applications, of which 224 have received support. Private companies have contributed about $724 million while the ITF has contributed about $662 million.

Since the inception of the ESS up to end-September 2024, the R&D work of 164 funded projects have been completed. We have conducted a survey with companies of 129 projects that have been completed for over 24 months about the progress of commercialising the project deliverables. 66 companies (responsible for 77 projects involved) responded and 58 of them (69 projects involved) indicated that they had created at least 304 jobs and already commercialised the project deliverables with income generated (26 companies revealed

that the project deliverables they commercialised have generated at least $67 million income). The projects also created a total of 353 patent applications being filed or granted. In addition, among the 69 projects, 18 received new fund injection with the total amount exceeding $801 million.

(f) R&D Cash Rebate Scheme ("CRS") 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 designated local public research institutes[6]. The level of cash rebate was 10% in 2010 and was gradually increased to 40%. As at end-September 2024, a total of over 2 000 companies have been approved with cash rebate, involving a total rebate of about $1.25 billion. We estimated that the private sector invested around $3.1 billion in R&D projects during the same period.

Facilitating Technology Adoption

(g) Public Sector Trial Scheme ("PSTS") was introduced in 2011 to support R&D projects under the ITF as well as start-ups and technology companies conducting R&D activities in Hong Kong for the production of prototypes/samples of their R&D outcomes for use in the public sector (including Government departments), with a view to facilitating the realisation and commercialisation of R&D outcomes.

As at end-September 2024, the PSTS funded 485 projects, involving a total funding amount of about $101 million, benefitting over 210 different organisations to conduct over 650 trials.

(h) TVP was launched in 2016 as a pilot scheme to subsidise, on a matching basis, eligible local enterprises and organisations in using technological services and solutions to improve productivity, or upgrade or transform their business processes. Subsequently, the TVP became a regular funding scheme under the ITF and multiple enhancement measures were introduced.

TVP is widely welcomed by the industry. As at end-September 2024, a total of 40 172 applications were received under the TVP (excluding applications which were subsequently withdrawn or unable to be processed due to ineligibility or missing supporting documents). Of the 38 036 applications assessed,

[6] Including R&D Centres established by the Government, HKPC, VTC and HKIB.

37 059 were approved involving a total funding amount of about $6.598 billion, representing a success rate of about 99%. Around 97% of the benefited applicants are small-to-medium enterprises. We estimate that private sector entities and organisations contributed $4.196 billion during the same period, signifying their efforts in digital transformation and upgrading and transforming their business processes.

According to evaluation reports submitted by nearly 7 500 beneficiary enterprises/organisations that had already completed their projects, 99% of them were of the view that the projects were conducive to enhancing their competitiveness. Almost all of them indicated that ITC should continue to implement TVP.

We are reviewing the operation of TVP and will announce the review result at an appropriate juncture.

(i) Innovation and Technology Fund for Better Living ("FBL") was launched by the Innovation and Technology Bureau in 2017 and transferred to the ITF in 2021. It aims to fund I&T projects which will make people's daily living more convenient, comfortable and safer, or address the needs of specific community groups. As at end-September 2024, the FBL funded 52 projects with a total funding amount of about $170 million, covering various aspects including daily living, health, education and safety, etc. For example, the FBL funded a non-profit organisation to develop an online map platform and provide an open data API to share wheelchair accessibility data across Hong Kong, enabling wheelchair users to navigate the city with confidence and promoting wheelchair accessibility throughout Hong Kong.

Nurturing I&T Talents

(j) RTH 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 organisations[7] to generally engage up to four graduates in Science, Technology, Engineering and Mathematics ("STEM")-related

[7] 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, organisations and companies undertaking R&D projects funded by the ITF as well as companies subsidised under the NIAS.

disciplines from a local university or a well-recognised non-local institution[8] to conduct R&D work (companies subsidised under the New Industrialisation Acceleration Scheme ("NIAS") could engage an additional 36 research talents on a 1 (Government): 1 (company) matching basis). It provides maximum monthly allowances of $20,000, $23,000 or $35,000 for each research talent with a bachelor's, master's or doctoral degree respectively. Research talent with a doctoral degree will be provided with an additional living allowance of $10,000 per month under the RTH. The maximum engagement period for each research talent is generally 36 months.

As at end-September 2024, RTH (including RP and PH) approved about 13 800 applications for research talent, involving a total funding amount of about $6.9 billion. Among these applications, there are about 5 000 applications for postdoctoral research talent, involving a funding amount of about $3.7 billion.

ITC has been inviting funded research talents to submit evaluation questionnaires after the end of their engagement periods. According to the 497 questionnaires collected in 2023, more than 96% of the research talents expressed interest in pursuing a career in scientific research in the future; about 66% indicated that they had secured a job in R&D-related areas; while 27% expressed that they were still searching for jobs or had decided to further their studies.

(k) 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". NITTP is administered by the VTC and overseen by VTC's Innovation and Technology Training Board, which determines the types of technology training that can be funded. As at end-September 2024, the NITTP approved over 5 180 applications for registering public courses and funding of about $667 million for about 26 790 staff of local enterprises to receive about 49 240 trainings in advanced technologies.

[8] "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, the Times Higher Education World University Rankings, or the U.S. News & World Report Best Global Universities Rankings.

(l) STEM Internship Scheme was launched in 2020 to subsidise undergraduates and post-graduates taking STEM-related programmes in local universities[9] to enrol in short-term internships during their studies to gain I&T-related work experience, with a view to fostering their interest early in pursuing a career in I&T after graduation.

In order to further enlarge the local I&T talent pool, ITC expanded the Internship Scheme in 2023-24 to cover more universities students. For details, please see paragraph 19 below.

As at end-September 2024, a cumulative total of about 15 500 internship placements have been funded by the Scheme, involving an average of 1 500 companies and organisations each year. About 3 400 internship opportunities were provided in the first six months of 2024-25 (i.e. from April to September 2024), representing an increase of 100% comparing to the total number of internships in 2020-21. According to the surveys conducted by participating universities, upon completion of their internship, most students (over 95%) have indicated that they would consider pursuing their careers in I&T in the future; and almost all participating employers considered that the job performance of their interns had met their expectations and planned to join the Scheme again.

Supporting Technology Start-ups

(m) Technology Start-up Support Scheme for Universities ("TSSSU") was launched in 2014 to support the teams from 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 outcomes.

An enhancement measure (TSSSU+) has been implemented in 2023-24 to provide matching funds to those university start-ups which have secured investment from the private sector (please see paragraph 20 below for details). As at end-September 2024, TSSSU

[9] The nine universities currently participating in the Scheme are: City University of Hong Kong, Hong Kong Baptist University, The Chinese University of Hong Kong, The Education University of Hong Kong, The Hong Kong Polytechnic University, The Hong Kong University of Science and Technology and The University of Hong Kong that have participated since 2020-21, and Lingnan University and the Hong Kong Metropolitan University that have joined the Scheme in 2023-24 and 2024-25 respectively.

provided a total funding of about $471 million to 539 start-ups, of which 71 received nearly $90 million of funding under TSSSU+.

Funded start-ups have to submit an annual report on the development of their businesses to ITC via their associated universities. According to the reports submitted by the universities for 2014-15 to 2022-23[10], out of the 382 start-ups funded during that period, 84 won international awards, 234 generated a total of nearly 1 900 IP rights from their R&D outcomes, 248 rolled out a total of about 480 products or services in the market, and 195 generated business revenue. In addition, 289 start-ups have successfully received capital injections. The total investment was approaching $2.19 billion, of which over $1.81 billion (around 82%) was private investment.

(n) Innovation and Technology Venture Fund ("ITVF") 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 ITC would co-invest with CPs in eligible local I&T start-ups at a matching ratio of approximately 1 (Government):2 (CP).

As at end-October 2024, the Government, through the ITVF, invested about $305 million in 38 local I&T start-ups with businesses covering supply chain management, e-commerce, financial technology, biotechnology and AI, etc., attracting over $2.7 billion of private investment.

The Government will optimise the ITVF by redeploying $1.5 billion to set up funds jointly with the market, on a matching basis, to invest in start-ups of strategic industries, with a view to enhancing Hong Kong's start-up ecosystem. The recommended optmisation of the ITVF has taken into accounts the market views and has been reported at the panel at the panel meeting on 28 October 2024. ITC is preparing the relevant works on inviting professional fund managers through open selection.

[10] Information on the commercialistion of R&D outcomes by the funded start-ups in 2023-24 has to be collected and verified by the universities before submission to ITC by end August 2024. However, due to incompleteness of the information submitted by individual universities, the figures as at 2023-24 are not available at the moment.

(o) Research, Academic and Industry Sectors One-plus Scheme ("RAISe+ Scheme") was launched in October 2023. It aims to encourage universities to transform excellent original breakthrough R&D outcomes which have reached a certain level of technology readiness to products or services for the initiation of the commercialisation stage, so as to facilitate the commercialisation of R&D outcomes. A total of 24 projects in the first batch have confirmed their participation in the Scheme, and a Memorandum of Understanding was signed by CIT with the relevant university representatives in May 2024. The total funding for the first batch of projects amounted to over $1 billion. The second application solicitation exercise from September to October 2024 received 108 applications, and vetting of the relevant applications is underway.

Promoting New Industrialisation and Developing New Quality Productive Force

(p) New Industrialisation Funding Scheme ("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 end-September 2024, the NIFS Vetting Committee supported 49 applications, involving 79 production lines. Among them, 35 projects have entered into funding agreements, involving 56 production lines, over 310 skilled job opportunities and contributions from applicants of about $650 million, and covering sectors such as food manufacturing and processing (including health food), textiles and clothing, construction materials, medical devices, nanofiber materials, pharmaceutical (including Chinese medicine), electronics, printing and product accessories, etc.

(q) NIAS was launched in September 2024 to provide funding support on a 1 (Government) : 2 (enterprise) matching basis for enterprises engaging in life and health technology, AI and data science, and advanced manufacturing and new energy technologies, subject to a funding ceiling of $200 million per enterprise.

Promoting I&T Culture

(r) General Support Programme ("GSP") was introduced in 1999 to support non-R&D projects that help upgrade local industries, and promote I&T culture as well as popular science in Hong Kong. As at end-September 2024, the GSP funded 456 projects with a total funding amount of about $870 million. Examples of funded events held in

recent years include "The Future Science Prize Week 2023" (with over 1 400 participants), the "Gerontech and Innovation Expo cum Summit 2023" (with attendance of over 37 000), the "Hong Kong Student Science Project Competition 2023" (with about 900 secondary school students participated) and the "Innovation and Technology Scholarship" (with awards given to 25 university students). These activities help foster understanding and interest in I&T amongst the general public, especially youngsters, and promote popular science from different facets.

(s) Patent Application Grant ("PAG") was launched in 1998 to provide funding support for first-time patent applicants. As at end-September 2024, a total of 2 823 applications were approved with a total funding amount of about $570 million. 1 320 applicants have been granted patents during the same period.

Examples of signature projects and main activities under various funding schemes of ITF in recent years are set out at **Annex 1**.

Technology Transfer Offices of Universities ("TTOs"), Laboratories and R&D Centres

7. In addition to establishing various funding schemes, the ITF also underpins in a multi-faceted manner our I&T strength by funding, in full or in part, the operating expenditure of over 60 TTOs, laboratories and R&D Centres to enable them to carry out more R&D work and technology transfer, or commercialise their R&D outcomes. The entities supported include -

(a) the 16 State Key Laboratories ("SKLs") in Hong Kong;

(b) the six Hong Kong Branches of the Chinese National Engineering Research Centres ("CNERCs");

(c) the 30 R&D centres set up under the *InnoHK* Research Clusters;

(d) six R&D Centres (i.e. ASTRI[11], NAMI, LSCM, HKRITA, APAS[12] and MRDI; and

[11] The operational expenditure of ASTRI has all along been met separately by the Government's annual recurrent subvention. To rationalise the financial arrangement, the LegCo Finance Committee approved on 19 July 2024 for ITF to fund ASTRI's operational expenditure from 1 April 2025 to 31 March 2028.

[12] APAS will be merged into HKPC from April 2025 onwards. We have briefed LegCo Finance Committee of the plan on 19 July 2024.

(e) the TTOs of the eight University Grants Committee ("UGC")-funded universities.

The latest progress of the operations of the relevant institutions are outlined in paragraphs 8 to 12 below.

SKLs and Hong Kong Branches of CNERCs

8. The SKL Scheme is one of the major national science and technology development schemes managed by MOST. High-quality research teams and good research equipment are prerequisites for becoming SKLs. Meanwhile, research institutions approved as CNERCs serve as major impetus in providing engineering research and consultancy support to the industries. They need to possess strong R&D capabilities and enjoy leading positions in their areas of expertise both in the Mainland and internationally. Currently, there are a total of 16 SKLs and six Hong Kong Branches of CNERCs in Hong Kong (see **Annex 2**).

9. Since 2011-12, ITC has been providing annual funding to SKLs in Hong Kong and the Hong Kong Branches of CNERCs as a source of funding in addition to funding approved by the UGC as well as various local and Mainland institutions, to enable them to strengthen their research capability, build up the necessary infrastructural support and map out a longer term development plan.

"InnoHK" Research Clusters

10. The two research clusters focusing on healthcare technologies as well as AI and robotics have established a total of 30 R&D centres, involving more than 30 world-renowned universities and research institutes to promote global research collaboration, pooling together about 2 500 researchers locally and from all over the world.

R&D Centres

11. The Government has set up six R&D Centres to drive and coordinate applied R&D in relevant areas. The R&D Centres work closely with the industries to encourage local private enterprises to invest in R&D so as to facilitate the commercialisation of R&D results and technology transfer. The R&D Centres also actively promote the use of local technology products and services by public sector organisations. Over the years, the R&D Centres have nurtured a group of scientific research talents, and their innovative inventions have also won international awards. We briefed the Panel on the progress reports of the R&D Centres on 18 June 2024. We have continuously reviewed

the positioning and focus areas of our R&D Centres, with a view to acting in concert with Hong Kong's future I&T development and to accelerating the development of new quality productive forces, we will merge ASTRI and NAMI and are commissioning an independent consultant to make recommendations on the transitional arrangements and implementation plan of the merger.

TTOs

12. Since 2013-14, ITC has been providing extra funding through the ITF to TTOs of designated universities, with a view to enhancing their technology transfer capabilities, and supporting the development of innovative ideas and R&D outcomes of universities' scientific research talent into new products or services. The funding support has facilitated the patent and licensing activities in TTOs. It has also enabled TTOs to organise various activities for promoting entrepreneurship and proactively connect with industry players, investors, public and private incubators/accelerators, as well as the local, Mainland and overseas R&D communities. All these efforts have provided pertinent assistance to technology start-ups incubated by the universities. The universities have procured more professional services and engaged more professionals of related areas to assist in optimising the application and management of patents, expanding their networks in the industry, and implementing business plans, etc.

Enhancement Measures implemented since our last report to the LegCo

13. 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 in the future. Since the inauguration of the current-term Government, ITC has implemented the new initiatives and enhancement measures as set out in paragraphs 14 to 23 below.

Setting up of the RAISe+ Scheme

14. It has been announced in the 2022 Policy Address that the Government will launch a $10 billion RAISe+ Scheme with a view to accelerating the "from 1 to N" transformation of R&D outcomes. The Scheme was launched in October 2023 to fund, on a matching basis, at least 100 research teams from universities with good potential to become successful start-ups to complete their projects in two stages within around five years. While the first stage concerns the transformation and realisation of R&D outcomes within around three years, the second stage concerns the initiation of the commercialisation of R&D outcomes within the remaining time frame of the project.

15. As the time required for the transformation of R&D outcomes into products or services for different technology areas may vary, or some projects may have a higher level of technology readiness, a university team may join the Scheme starting from either the first or the second stage depending on the maturity of the transformation of its R&D outcomes. The funding amount for each approved project ranges from $10 million to $100 million.

Launch of the NIAS

16. The Chief Executive announced in the 2023 Policy Address the setting up of the $10 billion NIAS. The Scheme was launched in September 2024 to provide funding support on a 1 (Government) : 2 (Company) matching basis for enterprises engaging in life and health technology, AI and data science, and advanced manufacturing and new energy technologies, subject to a funding ceiling of $200 million per enterprise. Enterprises with projects approved under the NIAS are allowed to engage an additional 36 research talents for a total engagement period of three years on a 1 (Government): 1 (enterprise) matching basis through the "RTH-NIAS". Meanwhile, the enterprises concerned can also employ non-local technical personnel who possess the required skills/know-how and relevant experience in setting up and operating new production facilities to work in Hong Kong through the "TechTAS-NIAS".

The MRDI

17. ITC has created a new subhead "Hong Kong Microelectronics Research and Development Institute" and the MRDI was established in September 2024. The MRDI is wholly-owned by the Government, with an aim to spearhead and facilitate R&D on third-generation semiconductors among universities, R&D centres and the industry, promote microelectronics development in Hong Kong, and develop it as one of the leading institutions for supporting microelectronics development in the Asia-Pacific region. Two pilot lines of the MRDI will be set up at the Microelectronics Centre in the Yuen Long InnoPark, serving as a bridge between innovative research and mass production.

Strengthening the Financial Support for the RTH

18. It is announced in the Chief Executive's 2022 Policy Address that the allowances provided for research institutions and I&T enterprises for employing research talents under the RTH Scheme would be increased by about 10%. Research talents with a doctoral degree will be further provided with a living allowance. Starting from April 2023, ITC has raised the monthly allowance for each research talent with a bachelor's, master's or doctoral degree to $20,000,

$23,000 and $35,000 respectively, and research talent with a doctoral degree is being provided with an additional living allowance of $10,000 per month.

Expanding the STEM Internship Scheme

19. ITC expanded the STEM Internship Scheme in 2023-24. According to The Chief Executive's 2022 Policy Address, eligibility for the Scheme has been expanded to cover internship opportunities offered by the five government-funded R&D Centres and HKPC to undergraduates and postgraduates studying STEM programmes in local and non-local universities (including the GBA campuses established by designated local universities). It also covers self-financing STEM-related programmes offered by designated local universities so that more students can participate in the Scheme. The participating designated local universities have increased from seven to nine, with the inclusion of the Lingnan University and the Hong Kong Metropolitan University in 2023-24 and 2024-25 respectively. The allowance for each student intern under the Scheme has been increased to $11,190 per month with effect from 1 April 2023. In addition, to tie in with the adjustment of the admission quota of non-local students studying in funded universities, the ratio of non-local student of designated local universities participating in the Scheme has also been increased from not exceeding 30% of the total number of participating students from local campus of the university concerned in 2023-24 to 40% in 2024-25.

Expanding TSSSU

20. In 2023-24, in addition to the original component of TSSSU (TSSSU-O), an enhancement measure (TSSSU+) has been implemented by the Government to provide dollar-to-dollar matching funds to university start-ups which have demonstrated good growth potential through securing investment from the private sector. An annual funding of up to $16 million (i.e. $8 million each for TSSSU-O and TSSSU+) is provided to each of the six universities. Each funded start-up may receive up to $1.5 million each year for no more than three years under TSSSU-O or TSSSU+ respectively.

Increasing the Maximum Funding provided for the TTO of Each Designated University

21. In 2024-25, we have doubled the annual maximum funding provided for the TTO of each designated university from $8 million to $16 million and included Lingnan University in the funding scope, with a view to enabling the eight UGC-funded universities to strengthen their capabilities in arranging support services and conducting marketing activities, as well as enhance their flexibility in collaborating with research teams.

Increasing the Funding to SKLs and Hong Kong Branches of CNERCs

22. Since the 2022-23 financial year, ITC has increased the annual funding ceiling for each of the SKLs in Hong Kong and Hong Kong Branches of CNERCs from $10 million to $20 million, so that they can have more resources to conduct R&D activities. The funding scope covers manpower, equipment, consumables and services incurred for the purpose of conducting R&D work.

Enhancing the NIFS

23. It is announced in The Chief Executive's 2023 Policy Address that the Re-industrialisation Funding Scheme would be renamed the New Industrialisation Funding Scheme, allowing an applicant enterprise to carry out up to three projects concurrently with a total maximum funding of $45 million. The enhancement measure has been implemented since January 2024. We hope to continue subsidising the setting up of more smart production lines in Hong Kong under the NIFS.

NEW MEASURES TO BE LAUNCHED

24. We will continue to press ahead with the I&T development in the upstream, midstream and downstream sectors in Hong Kong through the ITF. We will also continue to review the operation of the ITF from time to time and consolidate the existing schemes under the ITF to improve its efficiency and flexibility. In the coming year, we plan to implement the enhancement measures and new initiatives as set out in paragraphs 25 to 31 below.

<u>New Measures</u>

Supporting the Continuous Development of the InnoHK research clusters

25. To expand world-class research collaboration and strengthen research development in Hong Kong, we have commenced preparatory work to establish the third *InnoHK* research cluster, which will focus on advanced manufacturing, materials, energy and sustainable development. We plan to invite institutions to submit proposals in early 2025 to attract world-class research teams to cooperate with local institutions in promoting industry development. In addition, we will allocate $2 billion to support the *InnoHK* research clusters to establish presence in the Loop. This will facilitate the set-up of the InnoLife Healthtech Hub in the HSITP to attract top-notch research teams, talents and institutions from around the world, with a focus on life and health disciplines, to conduct research.

26. We have also set up a new research centre under one of the *InnoHK* research clusters to support the Chang'E-8 mission to be carried out by the China National Space Administration in 2028, with a view to supporting collaboration in deep space exploration between research teams of local universities and organisations from the Mainland and overseas.

Streamlining the Funding Schemes under the ITF

27. In processing the applications for various funding schemes under the ITF, we have all along been committed to striking a balance between ensuring the proper use of public money and reducing the documents required and administrative procedures for processing them. After reviewing the policy objective and funding recipient of the various funding schemes under the ITF, we will streamline these funding schemes from the current 19 to 14, with details as follows -

Consolidating the ITSP and the PRP

28. The Government has spared no effort in creating a vibrant I&T ecosystem and encouraging R&D collaboration among the Government, industry, academic and research sectors. Both the ITSP and the PRP under the ITF aim to fund applied R&D projects conducted by local R&D Centres, universities and other designated public research institutes in collaboration with companies for transferring R&D outcomes to the local industry, so as to assist the upgrading and transformation of the industry and enhance its competitiveness. In view of the similarities in objectives and target beneficiaries, ITC will subsume the PRP under the ITSP with the application parameters remain unchanged in order to facilitate the submission of funding applications by research institutes and participating companies.

Redefining the nature of the STEM Internship Scheme and TSSSU

29. At present, the STEM Internship Scheme and TSSSU differ in nature from other funding schemes under the ITF. Both schemes are directly administered by the participating universities/institutions and only accept applications from designated stakeholders (e.g. the STEM Internship Scheme is administered by designated local universities, government-funded R&D centres and HKPC; TSSSU is only opened to technology start-ups established by teams related to the participating universities). After considering the relevant arrangements of the two schemes concerned, we are of the view that their nature is similar to that of the funding for TTOs. In order to have a clearer positioning of the two schemes and avoid confusing applicants, we will define the STEM Internship Scheme and TSSSU as I&T support measures for tertiary institutions

instead of funding schemes under the ITF. The ITF will, same as before, continue to provide financial and administrative support for the two schemes.

Amalgamation of the FBL with Existing Funding Programmes

30. FBL aims to fund I&T projects which will make people's daily living more convenient, comfortable and safer, or address the needs of specific community groups. Having considered that the Government has already put in place different funding programmes to take care of the needs of different community groups, such as the Social Innovation and Entrepreneurship Development Fund and the Digital Outreach Programme, and that R&D outcomes of projects funded by other ITF schemes could also be adopted to improve livelihood and address social issues, thereby achieving the objectives of FBL. In order to make more effective use of the ITF in supporting Hong Kong's I&T development, we will cease receiving FBL applications from 1 January 2025 onwards. The FBL Secretariat will continue to monitor the progress of funded FBL projects to ensure proper use of public money.

Merging of the MHKJFS and the TCFS

31. In the view that the MHKJFS and the TCFS both share the objectives of supporting and encouraging R&D collaboration among universities, research institutes and technology enterprises in Hong Kong and the Mainland and in order to facilitate research institutes and participating companies in submitting funding application, ITC will merge the two schemes as the Mainland-Hong Kong Technology Cooperation Funding Scheme. The application parameters would remain unchanged.

FINANCIAL ARRANGEMENTS OF THE ITF

32. Since its establishment in 1999, the expenditure of the ITF has increased substantially with the launch of various new funding schemes and enhancement measures as well as its growing popularity. As at end-September 2024, more than 76 100 projects have been funded by the ITF, involving a total commitment of around $46 billion.

33. In view of the cash balance and the cashflow requirements for various funding schemes under ITF, we need an injection of $7.5 billion into ITF in 2025-26 to support its work in the said financial year, including the continued operation of existing funding schemes and the launch of new measures. We will include sufficient provision in the draft Estimate of the relevant financial year to meet the expenditure of the proposals above. The Government will closely

monitor the financial position of ITF, including the cash balance and the cashflow requirements for various funding schemes under ITF and seek funding injection to ITF as needed.

EXPECTED BENEFITS

34. The proposals to inject $7.5 billion into ITF will further enhance Hong Kong's I&T ecology and help build Hong Kong into an international I&T centre -

(a) continue to provide comprehensive support for applied R&D activities in Hong Kong;

(b) continue to raise the level of GERD;

(c) encourage R&D collaboration and exchanges between universities/public research institutes and private companies, and amongst the local, overseas and Mainland research communities;

(d) support the upgrading and development of various industries in Hong Kong through I&T activities so as to meet the changing international, Mainland and domestic business environment;

(e) encourage more private companies to participate in ITF-funded projects or invest in R&D projects, non-R&D projects and technology start-up activities;

(f) create more I&T jobs and internship opportunities to nurture and attract more I&T talents;

(g) organise I&T activities for all to foster a vibrant I&T culture; and

(h) encourage and attract more internationally renowned universities and R&D institutions to collaborate with local scientific research institutes.

MONITORING AND REVIEW

35. ITC has already put in place a robust control mechanism, and regularly review the operation of the various funding schemes to ensure that funding is properly disbursed and used. We will also introduce enhancement measures in a timely manner to meet the development and needs of the society. ITC has also

set fair and reasonable assessment criteria for the funding schemes and followed such criteria during assessment. In brief, all applications are vetted by professional panels (which generally include the industries and independent members) according to the assessment framework of the relevant funding scheme. Each scheme has its own guidelines on the setting of requirements, for instance, on the usage of ITF funding, procurement arrangements, reporting and auditing, disbursement of grants and return of residual funds, etc. All such requirements, alongside key information of approved projects, are available on the ITF's website[13] for public reference.

36. ITC conducts progress meetings/site visits with the project teams for some funding schemes to verify the project progress and usage of funds as set out in the project reports. Funds will be disbursed only if the project is able to meet pre-set milestones. In case of non-compliance with the funding guidelines or where project progress is unsatisfactory, ITC may withhold the disbursement of funds. ITC will continue to enforce the control mechanism, review and make necessary enhancements as appropriate.

ADVICE SOUGHT

37. Members are requested to support the Government in injecting $7.5 billion to the ITF in 2025-26 through the Appropriation Bill to support the work of the ITF in that financial year.

Innovation Technology and Industry Bureau
Innovation and Technology Commission
November 2024

[13] https://www.itf.gov.hk/tc/project-search/index.html

Annex 1

Selected highlight projects under the Innovation and Technology Fund

Promoting Life and Health Technology

(a) The R&D results of the research centres established under the "*InnoHK* Clusters" have brought significant benefits to society. The following are four success stories -

- Hong Kong Center for Neurodegenerative Diseases (Professor Nancy IP of the Hong Kong University of Science and Technology ("HKUST")): The center's research team has successfully developed a simple, non-invasive and accurate blood test for Alzheimer's disease applicable to early case detection and case monitoring. The test can screen out patients with over 96% accuracy five to ten years before clinical symptoms of Alzheimer's disease develops. It can also be applied to the monitoring of the progression of the disease. This world-leading patented technology has been licensed to spin-off companies of the center and HKUST for further development and commercialisation. The company has launched blood testing services for public use at designated medical centers in Hong Kong.

- Centre for Novostics (Professor Dennis LO of the Chinese University of Hong Kong ("CUHK")): The multi-cancer early detection technology developed by the centre represents a significant step forward in the development of the field of cancer detection. Equipped with the technology developed by the centre, the centre's spin-off company and another local technology start-up company received US$100 million (approximately HK$780 million) of capital support from a Hong Kong company listed on NASDAQ to take forward the clinical testing and commercialisation of the technology. The company plans to launch tests for lung and liver cancer in 2025, and to launch tests covering more than 10 types of cancer in 2027.

- Microbiota I-Center (Professor Siew NG and Professor Francis CHAN of the CUHK): The center is the first to identify unique intestinal microbiome characteristics related to novel coronavirus post-infection syndrome (long-COVID). It also developed the world's first non-invasive stool test that predicts long-COVID symptoms. The test has a sensitivity of 95% and a specificity of 92%.

– Centre for Virology, Vaccinology and Therapeutics (Professor YUEN Kwok Yung of the University of Hong Kong): The center developed the world's first nasal spray COVID-19 vaccine, which has been approved for emergency use by six cities in China, including Beijing, Xiamen, Yancheng, Quanzhou, Fuzhou and Suzhou. So far, more than one million doses of the vaccine have been administered.

(b) Mainland-Hong Kong Joint Funding Scheme ("MHKJFS") provides funding to support CUHK to develop a new multi-modal and multi-parameter intelligent auxiliary chemotherapy system for breast tumors. By optimising the algorithm models to enhance the accuracy, efficiency of the Artificial Intelligence ("AI") model as well as interpretability of the breast tumor prediction are enhanced, thus help improving the cure rate of breast tumor.

(c) Funded by the MHKJFS, HKUST utilises the photosensitizers with aggregation-induced emission ("AIE") and the technology of cell membrane-coated nanoparticles to develop biomimetic cell membrane-encapsulated AIE theranostic nanoparticles with high tumor specificity, long circulation time, low immune response, and high biocompatibility for safe and efficient tumor diagnosis and therapy. The biomimetic nanoparticles developed in the project has high stability and biocompatibility with low risk in toxicological studies.

(d) Guangdong-Hong Kong Technology Cooperation Funding Scheme ("TCFS") provides funding to City University of Hong Kong ("CityU") to develop the key technology for new artificial acetabulum that better match the mechanical properties of the human skeleton and effectively avoid the stress shielding effect of traditional metal implant products. The new artificial acetabulum also has excellent wear assistance, with surface that has multiple biomedical functions such as osteogenic and antibacterial properties which reduce the risk of postoperative infection and enhance bone fusion.

Promoting Artificial Intelligence and Microelectronics Technologies

(e) Innovation and Technology Support Programme ("ITSP") provides funding to support the Hong Kong Applied Science and Technology Research Institute (ASTRI) to develop a sensor signal processing system on chip ("SoC") platform embedded with Narrowband Internet of Things ("NB-IoT") connectivity. Key technologies involved in the project include reconfigurable sensor interface, low power analog to digital converter ("ADC") with scalable resolution, power management unit ("PMU"), sensor driver and light-emitting diode ("LED") driver, embedded digital signal processing ("DSP") algorithm for data processing, NB-IoT connectivity and

etc. The project provides a low-cost and small-volume solutions with a chip that can be used in smart meter reading, smart lamp posts, smart trash cans, smart homes, and remote temperature, humidity, and gas monitoring, which may support the huge demand for sensing applications in smart cities.

(f) Partnership Research Programme ("PRP") provides funding to support CityU to develop a real time optimisation framework for minimising the energy consumption of train services. Taking into considerations of service capacity and regularity, the project develops and applies advanced artificial intelligence and deep reinforcement learning technique through service scheduling and train speed control to minimise the energy consumption of train services. The framework developed facilitates the train system operator to deliver effective and eco-efficient urban train services with advanced information and optimisation technology.

(g) ITSP provides funding to support ASTRI to develop a high-end Power Management Integrated Circuit ("PMIC") that significantly improves the output current capabilities and efficiency in high frequency operations, such that it is optimised for the application of third generation power semiconductors. The multi-phase PMIC developed in this project can be widely applied in scenarios that require distributed or ultra-high current output in high-density smart city applications, such as AI computing, data centers, 5G base stations, etc. The industry co-applicant of this project are designing load point power modules based on the PMICs developed in the project, and plan to be used in smart city scenarios such as motherboards for 5G communication base stations, replacing imported modules and providing high-quality power supplies for domestically produced high-current loads

Promoting New Industrialisation and Developing New Quality Productive Force

(h) New Industrialisation Funding Scheme ("NIFS") provides funding to support a local smartphone case company to establish smart production lines of phone cases printing in Hong Kong. By using smart manufacturing technologies such as picking robots and robotic arms that expands the production center in Hong Kong, the company's production efficiency is enhanced and production wastes are reduced, supporting its local and global business growth.

(i) NIFS provides funding to support a semiconductor company to establish a smart production line in Hong Kong by using the key technologies of Industry 4.0 (viz. sensors, human-machine interfaces, Internet of Things and data analysis, etc.) for wafer-and-die performance testing, sorting, packaging and shipping.

(j) Funded by ITSP, the Logistics and Supply Chain MultiTech R&D Centre conducts a project on e-SmartPort Platform. By setting up two key parts (namely the port community system and the cross-border system), the project increases the visibility of international trade logistics through adopting digital technology that shares the logistics information originally owned separately by independent operators such as sellers, transport agents, and warehouses through system, thereby improving the efficiency of logistics operations, reducing overall logistics costs. The project facilitates trade between Hong Kong and the global market, enhances the market competitiveness of enterprises, and brings more innovation and development to the port logistics industry.

(k) ITSP provides funding to Nano and Advanced Materials Institute ("NAMI") to develop thin and soft smart protective materials that has high protective property. NAMI cooperates extensively with local industries to develop a series of high-performance protective products (such as gloves, floor mats and anti-collision bollards) which have been successfully commercialised.

Utilisng Innovation and Technology for Better Living

(l) The Hong Kong Research Institute of Textiles and Apparel ("HKRITA") is funded by the "Public Sector Trial Scheme" to work on a trial project with Po Lam Jockey Club Housing for the Elderly of Helping Hand. The elderly in the trial organisation participated in the try-outs of bedding products (including mattresses, mattress covers, duvet, duvet covers, pillow, pillow covers, and bedsheets) with enhanced thermal, touch, and biomechanical comfort. Their feedbacks on sleeping comfort upon trials in actual household environment were studied so as to further refine the product design.

(m) Funded by the ITSP, HKUST develops and produces a unique platform integrating a wind tunnel test rig, computational fluid dynamics models, and optimisation procedures, which records aerodynamic resistance, physical power output, physiological conditions, and body posture of athletes in real time. The platform developed in the project provides a research and testing platform for enhancing the performance of cyclists at Olympics Games and World Championship events.

(n) CityU is funded by the PRP to collaborate with a local eco-friendly materials company in the development of a new environmental friendly, sustainable and cost-effective multi-functional paper-based materials for food packaging. The project deliverables have been adopted by the industry co-applicant company in producing the food containers and coffee capsules.

(o) The ITSP provides funding to support the CUHK to develop bilingual Cantonese and English speech recognition system that accurately recognise continuous speech inputs from adult patients with speech disorders caused by cerebral palsy and functional impairment e.g. Parkinson's disease. The system assists the elderly and disabled people with speech impairment to communicate independently with society, improving their quality of life and the quality and efficiency of the medical care they require.

(p) The ITSP subsidises CUHK to develop a 3D-printed soft robotic arm. Compared to metal robot system, the robotic arm is less restrictive and could provide more degree of freedoms in terms of upper limb function tasks training for stroke survivors and elderly, which helps facilitate neuroplasticity in the brain and enhance rehabilitation progress.

(q) The ITSP supports APAS in developing a fast power pantograph charger for electric vehicle that includes pantograph high power charger ("HPC") plus modular HPC vehicle kit, with the R&D result applied as Hong Kong's first HPC charger, which was completed and commenced operation in 2023 at the Yue Man Square Public Transport Interchange in Kwun Tong in support of fast charging for electric minibuses. The 300 kilowatts pantograph HPC station supports international combined charging system OppCharge standard, thereby fulfilling the busy turnaround cycles required by the commercial fleet operators. It only takes eight minutes to charge a pure electric minibus up to 80% battery level at the pantograph HPC station. The battery status of the minibus can be ascertained in advance through wireless network so as to provide a suitable charging current.

(r) The ITSP funded ASTRI in developing an accelerator for smart automatic ground vehicle perception. With obstacle detection, avoidance and indoor navigation inside offices or hospitals in mind, the project develops a low-cost dedicated perception accelerator platform that optimizes the perception algorithms of multiple sensors including LIDAR and camera, and then propose a dedicated perception accelerator platform to handle the computations efficiently. This project provides a practical solution for smart automatic ground vehicles integrated circuit and perception module manufacturers worldwide.

Popularise I&T culture

(s) The Hong Kong Academy of Sciences applied for funding support from the "General Support Scheme"("GSP") in 2023 and 2024 respectively to organise the yearly "Future Science Prize Week". The event aims to pay tribute to scientists with outstanding contributions in the Greater China and to host a series of seminars and youth-facing exchange sessions. The

events are beneficial to promoting I&T culture as well as increasing the sense of belonging to the nation. The "2023 Future Science Prize Week" held during 14 to 17 October 2023 was staged at the Hong Kong Science and Technology Park, the University of Hong Kong, and the Hong Kong Palace Museum, attracting over 1 400 participants. This year's "Future Science Prize Week" was held from 30 October to 3 November 2024 at various locations, including the Hong Kong Science Museum, the Hong Kong Convention and Exhibition Centre and etc. The one-month "2024 Future Science Award Exhibition" was also organised from 4 October to 4 November this year to enhance the general public's understanding of the scientific research achievements by award-winning scholars.

(t) Since 2018, the Hong Kong Council of Social Service organises the "Gerontech and Innovation Expo cum Summit" ("GIES") annually with the financial support from the GSP. The event aims to provide an opportunity for the general public to explore and learn about gerontechnology as well as promote the application of relevant technology in the elderly care and rehabilitation service sector. The 2023 GIES was held at the Hong Kong Convention and Exhibition Centre from 23 to 26 November 2023 and attracted over 37 000 participants. The 2024 GIES will be held from 21 to 24 November 2024.

****

Annex 2

State Key Laboratories ("SKLs") in Hong Kong and Hong Kong Branches of Chinese National Engineering Research Centers ("CNERCs")

(1) SKLs in Hong Kong

	Hosting Organisation	Name of SKL	Head	Year of Approval
1.	The University of Hong Kong	SKL of Emerging Infectious Diseases	Prof GUAN Yi Prof YUEN Kwok-yung	2005
2.	The University of Hong Kong	SKL of Brain and Cognitive Sciences	Prof Tatia LEE Mei-chun	2005
3.	The Chinese University of Hong Kong	SKL of Translational Oncology	Prof Dennis LO	2006
4.	City University of Hong Kong	SKL of Terahertz and Millimeter Waves	Prof CHAN Chi-hou	2008
5.	The Chinese University of Hong Kong	SKL of Agrobiotechnology	Prof Hon-Ming LAM	2008
6.	The Hong Kong Polytechnic University	SKL of Ultra-precision Machining Technology	Prof Benny CHEUNG	2009
7.	The Hong Kong University of Science and Technology	SKL of Molecular Neuroscience	Prof Nancy IP Yuk-yu	2009
8.	City University of Hong Kong	SKL of Marine Pollution	Prof Kenneth Mei Yee LEUNG	2009
9.	The Chinese University of Hong Kong	SKL of Research on Bioactivities and Clinical Applications of Medicinal Plants	Prof LEUNG Ping-chung	2009
10.	The University of Hong Kong	SKL of Liver Research	Prof Irene O.L. NG	2010
11.	The University of Hong Kong	SKL of Synthetic Chemistry	Prof CHE Chi-ming	2010
12.	The Hong Kong Polytechnic University	SKL of Chemical Biology and Drug Discovery	Prof WONG Kwok-yin	2010
13.	Hong Kong Baptist University	SKL of Environmental and Biological Analysis	Prof CAI Zongwei	2013
14.	The University of Hong Kong	SKL of Pharmaceutical Biotechnology	Prof XU Aimin	2013

	Hosting Organisation	Name of SKL	Head	Year of Approval
15.	The Chinese University of Hong Kong	SKL of Digestive Disease	Prof YU Jun	2013
16.	The Hong Kong University of Science and Technology	SKL of Advanced Displays and Optoelectronics Technologies	Prof Kristiaan NEYTS Prof FAN Zhiyong	2013

(2) Hong Kong Branches of CNERCs

	Hosting Organisation	Name of Hong Kong Branch of CNERC	Head	Year of Approval
1.	Hong Kong Applied Science and Technology Research Institute	Hong Kong Branch of the National ASIC System Engineering Research Center	Ir CHONG Chris	2012
2.	The Hong Kong Polytechnic University	Hong Kong Branch of National Engineering Research Center for Steel Construction	Prof K F CHUNG	2015
3.	The Hong Kong Polytechnic University	Hong Kong Branch of National Rail Transit Electrification and Automation Engineering Technology Research Center	Prof Yi Qing NI	2015
4.	City University of Hong Kong	Hong Kong Branch of National Precious Metals Material Engineering Research Center	Prof LU Jian	2015
5.	The Hong Kong University of Science and Technology	Hong Kong Branch of National Engineering Research Center for Tissue Restoration & Reconstruction	Prof SUN Jianwei	2015
6.	The Hong Kong University of Science and Technology	Hong Kong Branch of Chinese National Engineering Research Center for Control & Treatment of Heavy Metal Pollution	Prof CHEN Guang Hao	2015

****