香 港 特 別 行 政 區 政 府

創 新 及 科 技 局

香港添馬添美道二號
政府總部西翼二十樓

**INNOVATION AND
TECHNOLOGY BUREAU**

**THE GOVERNMENT OF THE HONG KONG
SPECIAL ADMINISTRATIVE REGION**

20/F, West Wing, Central Government Offices,
2 Tim Mei Avenue, Tamar, Hong Kong

By email

27 April 2018

Mr Desmond LAM
Clerk to Panel on Commerce and Industry
Legislative Council Complex
1 Legislative Council Road
Central, Hong Kong

Dear Mr LAM,

Panel on Commerce and Industry

**Report on the duty visit to Israel to study
the country's experience in promoting
the development of innovation and technology
industry and re-industrialisation**

Thank you for your letter dated 23 January 2018. Having consulted the Education Bureau, we enclose our response to the suggestions in paragraph 4.2 (except paragraph 4.2.1(j) and (k)) of the captioned report for reference.

Yours sincerely,

(Ricky CHONG)
for Secretary for Innovation and Technology

c.c. Secretary for Education   (Attn.: Ms Sharon Ko)
    Commissioner for Innovation and Technology   (Attn.: Ms Zorina Wan)
    Government Chief Information Officer   (Attn.: Ms Fiona Li)

**Report on the duty visit to Israel to study
the country's experience in promoting
the development of innovation and technology
industry and re-industrialisation ("the Report")**

As regards the suggestions of the Report in the following five aspects, the Administration's response is as follows:

I.   **In respect of the HKSAR Government's research and development ("R&D") funding programmes**
     (Paragraphs 4.2.1(a) and (b) of the Report)

     The vetting and approving mechanism of the research and development ("R&D") funding schemes under the Innovation and Technology Fund is largely similar to that of the Israel Innovation Authority.   The Innovation and Technology Commission ("ITC") has a team of around 30 full-time in-house technology professionals to carry out preliminary processing and assessment of the project proposals, which would then be submitted to expert panels in various technology areas for consideration. Altogether there are some 190 expert panelists from the technology sector, academia, business sector, professional services sector, etc.

     To facilitate the submission of applications, ITC has been offering support to applicants through the provision of application guidelines and enquiry hotlines.   The professional staff of ITC have also been arranging meetings with enterprises on a need basis to facilitate project assessment. Unsuccessful applicants will be briefed on the reason(s) for rejection and other pertinent comments from the assessment panel to facilitate re-submission of applications.

     ITC has been reviewing the actual experience and feedback from stakeholders of the funding schemes (including the vetting and approving mechanism), and have implemented improvement measures from time to time, such as constant enhancement of online application system.

II. **In respect of the Hong Kong-Israel Research and Development Cooperation Programme**
     (Paragraphs 4.2.1(c) and (d) of the Report)

     ITC and the Israel Innovation Authority jointly launched "The Hong Kong – Israel R&D Cooperation Programme" ("the Programme") in December 2015 under the Memorandum of Understanding on bilateral cooperation in industrial R&D between the Government of the Hong

Kong Special Administrative Region and the Government of the State of Israel. The Programme, which is open for applications all year round, aims to promote industrial R&D collaboration projects between the two places. Hong Kong companies collaborating with one or more Israeli companies on R&D may apply for funding under the Innovation and Technology Fund ("ITF").

To foster collaboration between enterprises in Hong Kong and Israel, ITC and the Hong Kong Science and Technology Parks Corporation ("HKSTPC") have organised "Israeli Business Matching" sessions annually since 2015. So far, three sessions have been held. These sessions brought together 32 companies from Israel and 115 local companies. These events have laid a foundation for the technology business communities in Hong Kong and Israel to understand more of each other, paving a way for future collaboration. We consider that, if similar sessions could be held by the Israeli side, it would facilitate the success of the Programme and further collaboration between the two places.

As entrepreneurs themselves are best positioned to identify suitable business partner and reach specific collaboration project in their mutual benefits, ITC will continue to focus on working with various stakeholders with a view to further promoting the Programme and creating a facilitative environment for collaboration between enterprises from the two places. ITC will be pleased to provide assistance as appropriate to Hong Kong enterprises wishing to apply for funding under the Programme.

III. In respect of the support to research and development teams of local universities in establishing technology start-ups (Paragraphs 4.2.1(e) to (g) of the Report)

According to the information provided by Education Bureau, a "Task Force on Review of Research Policy and Funding" ("Task Force") was set up on the invitation of the Chief Executive in October 2017 under the University Grants Committee to review the existing research support strategy and the level and allocation mechanism of research funding for the higher education sector in Hong Kong with a view to ensuring quality of research, and that such research can at the same time meet the needs of and the research outcomes can be translated into competitive advantages for Hong Kong which are beneficial to its social and economic development. The Task Force will review the current research

landscapes in Hong Kong and the existing level and allocation mechanism of research funding, including ways to allocate research funding in a more streamlined and transparent manner, and encourage the higher education sector to engage and collaborate with industry and engage in research result commercialisation and knowledge transfer. It is expected that the findings and recommendations of the review can build a stronger foundation for the research work of the higher education sector, enhancing Hong Kong's competitiveness in the long run.

The Task Force plans to submit its report to the Government by end 2018. The Government has set aside no less than $10 billion as additional funding for university research. Subject to the review findings and recommendations of the Task Force, the Education Bureau will consider how best the earmarked funding can be utilised to further support research development in the higher education sector.

Besides, ITC supports the local university teams in starting technology businesses and commercialising their R&D results at their earliest stage of business ventures through the "Technology Start-up Support Scheme for Universities" ("TSSSU") under ITF. By providing initial capital support, TSSSU has created a better ecological environment where academics, entrepreneurs and young talent can collaborate, thus promoting the development of university start-ups in Hong Kong.

Under TSSSU, a selection panel set up by each of the six participating local universities assesses the applications of start-ups formed by their students and professors. Applications assessed and recommended by the selection panel of each university will be forwarded to ITC for endorsement. From 2014-15 to 2017-18, TSSSU provided about $90 million funding to 155 start-ups.

To facilitate TSSSU-funded start-ups in stepping up their applied R&D efforts to translate R&D outputs into marketable products or services, they may apply for further R&D funding under Enterprise Support Scheme or other ITF schemes, subject to their meeting the relevant eligibility requirements.

TSSSU is only the first step supporting universities start-ups. They may apply to join the incubation programmes of HKSTPC or Cyberport when they grow their business further.

IV. **In respect of investment of multinational corporations in the I&T industry**
(Paragraphs 4.2.1(h) and (i) of the Report)

The Government, along with other public bodies (such as HKSTPC and Cyberport) have been devoting substantial resources towards encouraging the long term development of venture capital and incubator industries in Hong Kong. Relevant major measures are as follows:

Innovation and Technology Venture Fund

The Government has set up a HK$2 billion "Innovation and Technology Venture Fund" to attract more private funds to invest in local I&T start-ups, creating a more vibrant start-up ecosystem in Hong Kong. Adopting a role of passive investor, the Government will co-invest with selected venture capital funds at an overall investment ratio of about 1:2.

Corporate Venture Fund of HKSTPC

HKSTPC operates its own venture fund, "Corporate Venture Fund" ("CVF"), to assist I&T start-ups in their early stage of business development. CVF co-invests with angel investors or venture capital funds on a matching basis in start-ups which are current HKSTPC tenants or current/graduated incubatees.

HKSTPC's work in supporting start-ups

HKSTPC runs three incubation programmes for new technology start-ups, biotechnology start-ups, and start-ups focused on web and smartphone-based apps. There are currently 238 incubatees, benefitting from a wide range of assistance such as subsidised office space, financial aid package, technical and development support, business matching, etc. Since its implementation, there are over 520 graduated incubatees.

Apart from the incubation programmes, HKSTPC has set up "Lion Rock 72" programme at its InnoCentre in October 2016, to accommodate the needs of the start-ups and stimulate exchange of ideas. There are now 25 incubatees under the programme.

HKSTPC also launched the Leading Enterprises Acceleration Programme ("LEAP") in 2014 to nurture high potential incubatees and incubation graduates into regional or global companies. LEAP provides specific assistance in strategy consultation, business and corporate development,

and fundraising support etc. Currently 17 companies are enrolled in LEAP and nine have graduated.

Apart from being an in-house incubator, HKSTPC also partners with private incubators to strengthen its support to grooming technology start-ups. Together with Groupe SOS, a leading social-tech incubator in France, and the Hong Kong Children and Youth Services, HKSTPC organised a co-incubation programme sponsored by the Hong Kong Jockey Club, namely the "Social Technology and Youth Social Entrepreneurship Programme". The programme provides local youth with training, guidance and network that allow them to develop a career in the I&T industry and explore opportunities for business expansion.

Besides, in collaboration with leading private enterprises, HKSTPC launched the "Global Acceleration Academy" ("GAA") in April 2017 to facilitate start-ups in commercialising their R&D discoveries. Under the 3-month programme, HKSTPC and the industry leaders will hold intensive workshops and provide advice to participating start-ups, assist them to develop products under specific themes that serve the needs of the industry as well as to showcase to potential business partners and investors their end-products. Since its inception, GAA has hosted 8 cohorts on various themes (including Internet of things, robotics, PropTech, Digital Health, etc.) for 54 start-ups.

Cyberport Macro Fund ("CMF")

Cyberport established the $200 million CMF in August 2016 to provide Cyberport start-ups with seed to Series A stage funding. Hitherto, there are four approved applications, with a total of $30 million investment funding granted.

Cyberport Incubation Programme

The Cyberport Incubation Programme provides comprehensive financial, technical and business advisory support etc. to technology start-ups to help them turn their creative ideas into business undertakings or commercial products. Since its inception, the programme has nurtured 529 technology start-ups.

Promoting R&D Investment

To encourage enterprises to conduct more research activities in Hong Kong, the Government will introduce enhanced tax deduction for local

R&D expenditure incurred. The first $2 million of qualifying R&D expenditure will be eligible for a 300% tax deduction, and a 200% tax deduction will be provided for the remaining balance. There is no cap on the amount of relevant tax deduction.

Besides, enterprises conducting applied R&D projects with the support of ITF or in partnership with designated local public research institutions can enjoy a 40% cash rebate on their investments under the "R&D Cash Rebate Scheme". The approved rebate amounted to $72.4 million in 2016-17.

The Government will continue to introduce measures, which include setting up collaborative technology platforms to attract top-notch overseas and Mainland R&D institutions and technology enterprises to Hong Kong, fostering their collaboration with the local research community, thereby enhancing Hong Kong's capability in developing into an innovation-driven economy.

Nurturing R&D Talent

The Internship Programme benefits organisations undertaking ITF-funded R&D projects, and incubatees and all I&T tenants of the HKSTPC and Cyberport (including multinational corporations). Each eligible applicant company can recruit up to two interns and the maximum internship period is 24 months.

The Government will launch a $500 million "Technology Talent Scheme" in the third quarter of 2018 to nurture and bring together more technology talent. It includes a "Postdoctoral Hub" programme to provide organisations undertaking ITF projects, as well as incubatees and I&T tenants of HKSTPC and Cyberport with funding to recruit postdoctoral talent for carrying out R&D work. Multinational corporations in HKSTPC and Cyberport can also benefit under the "Postdoctoral Hub" programme for the purpose of training R&D talent.

V. In respect of Hong Kong's smart city development (Paragraphs 4.2.1(l) to (n) of the Report)

The Government released the Smart City Blueprint for Hong Kong ("the Blueprint") in December 2017. The Blueprint outlines our vision and mission to build Hong Kong into a world-class smart city and maps out smart city development plans in the next five years covering six areas,

namely "Smart Mobility", "Smart Living", "Smart Environment", "Smart People", "Smart Government" and "Smart Economy".   There are a number of measures in the Blueprint relating to big data analysis and open data, such as: encouraging public transport operators to open their data; setting up a Big Data Analytics Platform by the Hospital Authority; opening up more public and private sector data in digital forms to facilitate research and innovation via the government one-stop Public Sector Information Portal (data.gov.hk), and promoting the use of open data and building a new big data analytics platform etc.

Big data is a major pillar in smart city development.   The Office of the Government Chief Information Officer ("OGCIO") will continue to raise the awareness of bureaux and departments ("B/Ds") on big data and strengthen their capabilities in developing big data applications through appropriate promotion and training activities, in order to improve their operational efficiencies and enhance public services.   To further drive the adoption of big data in the Government, OGCIO plans to launch a big data analytics platform adopting artificial intelligence in 2020.   The platform will expedite the development of big data systems by B/Ds and reduce their development and operating costs through economy of scale and resources sharing.

OGCIO will continue to undertake the coordination role to promote and support B/Ds, with due consideration to the protection of personal data privacy, to open up more datasets in various categories such as health, transport, education, finance, economy, environment, recreation and culture, housing, development, etc. OGCIO will continue to assist B/Ds in analysing and identifying data which are beneficial and useful to the community as raw materials for the industry to facilitate the application of big data analytics.

To commercial organisations, data is their asset.   Whether to open up the data with commercial value should be considered by organisations concerned.   OGCIO will continue to encourage commercial organisations to open up their data and let them understand the value added to their organisations and businesses through open data.

Innovation and Technology Bureau
Education Bureau
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