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Replies to supplementary questions raised by Legislative Council Members in examining the Estimates of Expenditure 2022-23

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Reply Serial No.

CONTROLLING OFFICER'S REPLY

S-ITB001

(Question Serial No. S045)

Head:	(135) Government Secretariat: Innovation and Technology Bureau
Subhead (No. & title):	Not specified
Programme:	Not specified
Controlling Officer:	Permanent Secretary for Innovation and Technology (Ms Annie CHOI)
Director of Bureau:	Secretary for Innovation and Technology

Question:

- (1) While the Bureau has published two smart city blueprints, Shenzhen has issued various innovation and technology blueprints and formulated clear objectives, including the proposal to reach a production value of over RMB 200 billion in 2025 for biomedicine. Will the Government, after taking serious consideration of expert scientific views, publish a development blueprint for industries of life and health technology and put forward clear objectives for these industries?
- (2) The Bureau has responded that the InnoLife Healthtech Hub will operate on the basis of the laboratories in the "InnoHK Research Clusters" and State Key Laboratories, which are all managed by universities. Will the Bureau ensure that the InnoLife Healthtech Hub is independent from the operation of universities to avoid interference from the administrative and financial procedures of the latter? Will reference be made to the practices of national departments which encourage universities to allow scientific researchers to acquire intellectual property rights of their research results so as to promote the realisation of such results? Will it allow the Hub to accept scientific researchers (including those from enterprises) who are not working in the above laboratories to participate in joint research projects?

<u>Asked by</u>: Hon WONG Yuen-shan <u>Reply</u>:

Hong Kong has a solid foundation in research of life and health disciplines, and a good number of world-renowned experts. To develop Hong Kong into a major research and development (R&D) hub in life and health disciplines, the Government announced in the 2021 Policy Address a number of initiatives including providing land and infrastructure, further promoting R&D, enlarging the talent pool, etc. One of which is the setting up of the

InnoLife Healthtech Hub with 16 R&D laboratories related to life and health sciences and 8 relevant State Key Laboratories as basis, so as to promote multi-faceted collaboration in scientific research and industry development. These laboratories all possess high-level scientific research teams and equipment, and many of them enjoy global leading positions in their areas of expertise. This will pool together top-notch scientific research scholars from all over the world and help develop Hong Kong into an international innovation and technology hub, which will in turn attract more non-laboratory based researchers and industry representatives to come to Hong Kong and participate in research collaboration.

The Government also announced in the 2022-23 Budget that \$10 billion has been earmarked to provide more comprehensive support, including hardware, talent, clinical trials and data application, for the long-term development of life and health science research in Hong Kong so as to enhance our research capacity and capability in this area, among others, the setting up of the InnoLife Healthtech Hub in the Hong Kong-Shenzhen Innovation and Technology Park. Furthermore, the Government is studying the planning and operation details of the InnoLife Healthtech Hub for the time being, and will announce the details in due course.

As regards the arrangement for intellectual property rights and commercialisation of R&D results, each local university has its own policies on intellectual property rights and commercialisation of R&D results for sharing the research projects' benefits with the relevant researchers under the principle of institutional autonomy. In addition, the Government has been encouraging universities and publicly-funded research laboratories to enhance their I&T cooperation with the industry, so as to strengthen the capabilities of research and commercialisation of R&D results.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

S-ITB002

(Question Serial No. S041)

<u>Head</u> :	(155) Government Secretariat: Innovation and Technology Commission
Subhead (No. & title):	Not Specified
Programme:	Not Specified
Controlling Officer:	Commissioner for Innovation and Technology (Ms Rebecca PUN)
Director of Bureau:	Secretary for Innovation and Technology

Question:

- (1) It is stated in the Government's written reply that the operating procedure for the allocation of additional funds under the Technology Start-up Support Scheme for Universities will be similar to the existing one. However, given that the additional funds are matching funds, will the Government draw up guidelines on the assessment and selection work to be conducted by the universities, including but not limited to the composition of the selection panel (the panel) and the assessment criteria to be followed by the panel? Meanwhile, will the Government consider requiring the panel to comprise members from the industries and conduct assessment with reference to the criteria set under the Innovation and Technology Venture Fund in relation to projects and venture capital (VC) funds?
- (2) It is stated in the Government's written reply that it will invite the Hong Kong Science and Technology Parks Corporation and the Cyberport to identify investment opportunities for the Strategic Tech Fund (Tech Fund), and will focus on the investment in "technology enterprises which are of strategic value, considerable scale and have good development potential". Will the Government provide clear definitions of the characteristics of the said enterprises? What are the investment objectives of the Tech Fund? In order to foster deep technology enterprises, will the Government consider investing at an early stage in university projects that have the potential for industrialisation, and invite VC funds to jointly identify investment projects?

Asked by: Hon WONG Yuen-shan

Reply:

(1) The existing guidelines of the Technology Start-up Support Scheme for Universities (TSSSU) have specified the requirements on the establishment of the selection panel (the panel) by participating universities, including that the panel should comprise members with relevant expertise and experience, such as technologists, academics, experts from the industry, professionals in accounting/financial/legal areas, public or private incubators, and venture capitalists, etc. The guidelines have also set out the various factors that the panel should consider before making recommendations to the Innovation and Technology Commission (ITC), including the innovation and technology (I&T) content and commercial viability of the business proposed by the applicant teams, the research and development (R&D) and company management capabilities of the team members, as well as the impact to be brought by the business on the community.

In order to help universities further realise their R&D outcomes, it is announced in this year's Budget that the annual amount of subsidy for each participating university under the TSSSU would be doubled to \$16 million. The additional subsidy will be provided to university start-ups with private investments on a matching basis of one to one. Each start-up can receive an annual subsidy of up to \$1.5 million for an additional maximum period of 3 years, meaning that each start-up may receive subsidies of up to 6 years.

Regarding the implementation of the above new initiative, ITC is of the view that the modus operandi of the existing guidelines (including the assessment and selection procedures and criteria) remains basically applicable, but necessary amendments will also be made to the guidelines concerned, such as relaxing the eligibility to cover technology start-ups that have been incorporated for a relatively long period of time, and delineating the scope of "private investment". In fact, in the course of ITC's consultation with universities, they expressed that flexibility should be allowed in the updated guidelines, and the operating procedure of the new initiative should be similar to the existing one in order to reduce unnecessary administrative processes. ITC will continue to review the eligibility of the start-ups recommended by the universities and the reasonableness of their proposed budget before determining whether funding will be granted.

The mission and modus operandi of the Innovation and Technology Venture Fund (ITVF) are different from those of the TSSSU. Under the ITVF, direct co-investment is made in local I&T start-ups with the co-investment partners upon the invitation of the latter. Therefore, the criteria under the ITVF are not applicable to the TSSSU.

(2) The Strategic Tech Fund focuses on the investment in technology enterprises which are of strategic value, considerable scale and have good development potential, with a view to enriching the I&T ecosystem in Hong Kong. We are open to the technology areas and types of enterprises in which investment will be made, and have already invited the Hong Kong Science and Technology Parks Corporation (HKSTPC) and the Cyberport to identify investment opportunities. The relevant preparatory work is underway.

Regarding the early-stage investment in university start-ups, the Government has invested in start-ups at different development stages through various funds, such as the aforementioned TSSSU, the Corporate Venture Fund under the HKSTPC, the Cyberport Macro Fund under the Cyberport, and the ITVF. Although these funds have their own specific key areas of investment, they are all targeted at early-stage start-ups.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

SV-ITB001

(Question Serial No. SV014)

Head:	(135) Government Secretariat: Innovation and Technology Bureau
Subhead (No. & title):	0
Programme:	Not specified
Controlling Officer:	Permanent Secretary for Innovation and Technology (Ms Annie CHOI)
Director of Bureau:	Secretary for Innovation and Technology

<u>Question</u>:

As the selected scholars and their research teams under the Global STEM Professorship Scheme launched by the Government are gradually arriving Hong Kong to take up their teaching and research positions, would the Government please advise on the respective areas of research of these scholars and their research teams?

<u>Asked by</u>: Hon LAM Chi-yuen, Nelson <u>Reply</u>:

The selected scholars under the Global STEM Professorship Scheme are mainly from the fields of engineering and computer science, medical and life sciences and physical sciences.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

SV-ITB002

(Question Serial No. SV016)

<u>Head</u> :	(155) Government Secretariat: Innovation and Technology Commission
Subhead (No. & title):	0
Programme:	(2) Promotion of Technological Entrepreneurship
Controlling Officer:	Commissioner for Innovation and Technology (Ms Rebecca PUN)
Director of Bureau:	Secretary for Innovation and Technology

Question:

Among the 174 start-ups funded by the Technology Start-up Support Scheme for Universities implemented by the Government, 112 (64%) had commercialised their R&D results. In this connection, will the Government advise on the duration of operation of the start-ups after being funded, including the numbers of these start-ups which are in operation and have ceased operation, as well as their current operation; the reasons for the remaining 36% of the funded start-ups not being able to commercialise their R&D results, including the difficulties and challenges faced by them, as well as how the Government supports these start-ups to tackle the difficulties.

Asked by: Hon CHOW Man-kong

Reply:

According to the information of the Companies Registry, of the 174 start-ups funded under the Technology Start-up Support Scheme for Universities (TSSSU) from the 2018-19 to 2020-21 financial years, 167 (96%) of them are still in operation.

With reference to the information provided by the universities to the Innovation and Technology Commission (ITC), of the 174 funded start-ups under the TSSSU, 112 (64%) had commercialised their R&D results and nearly 200 products or services have already been successfully rolled out in the market; 104 (60%) have generated a total of around 720 intellectual property rights from their R&D results; and 89 (51%) have received an annual income amounting to \$11 million from their business. The result was very encouraging. The remaining 36% of the funded start-ups had not yet commercialised their R&D results during the 1 to 3-year funding period, as the start-ups may need more time to conduct research and development or adjust their products in order to fit market needs or obtain relevant product certification, or have inadequate experience in market promotion or management, or with a lack of precise market positioning and social connections.

Supporting start-ups is an essential element in enhancing the local innovation and technology (I&T) ecosystem. For supporting start-ups of universities, apart from the annual subsidy for each participating university under the TSSSU to be doubled to \$16 million and provided to university start-ups with private investments on a matching basis of one to one as announced in this year's Budget, ITC will continue to support start-ups and nurture I&T talents through the funding schemes under the Innovation and Technology Fund (ITF). For instance, the Research Talent Hub provides funding support for start-ups to engage bachelor degree, master's degree and doctoral degree holders in Science, Technology, Engineering and Mathematics ("STEM") related disciplines from a local university or a well-recognised non-local institution to conduct R&D work for a maximum of 3 years; and the Enterprise Support Scheme provides dollar-for-dollar matching funding of up to \$10 million to carry out R&D projects. It is believed that these funding schemes can assist the R&D work of university start-ups or the commercialisation of their R&D results into new products or services.

In addition, the incubation programmes under the Hong Kong Science and Technology Parks Corporation (HKSTPC) and Cyberport provide financial, technical and business advisory supports to start-ups by helping them to turn their creative ideas into business undertakings or commercial products, formulating marketing plans, and expanding their social network. The Corporate Venture Fund administered by the HKSTPC and the Cyberport Macro Fund administered by the Cyberport co-invest, on a matching basis, with angel investors or venture capital funds, etc., in start-ups in the Science Park and Cyberport. The Innovation and Technology Venture Fund under the ITF co-invests in local I&T start-ups at a matching ratio of approximately 1 (Government):2 (Co-investment partners).

The above initiatives not only provide comprehensive support to relevant enterprises but are also conducive to the creation of a more vibrant I&T ecosystem.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

SV-ITB003

(Question Serial No. SV015)

<u>Head</u> :	(47) Government Secretariat: Office of the Government Chief Information Officer
Subhead (No. & title):	0
Programme:	(3) Information Technology in the Community
Controlling Officer:	Government Chief Information Officer (Victor LAM)
Director of Bureau:	Secretary for Innovation and Technology

Question:

What are the Government's specific policy objectives in promoting the adoption of technology by the elderly? What group(s)/organisation(s) and which government department(s) are currently responsible for the promotion of gerontechnology and implementation of related initiatives, and what kind of resources and support will the Government provide in order to more effectively assist the elderly in their adoption of gerontechnology?

<u>Asked by</u>: Hon TIK Chi-yuen <u>Reply</u>:

Having consulted the Labour and Welfare Bureau, our reply is as follows:

To actively promote Gerontechnology, the Government earmarked \$1 billion for setting up the Innovation and Technology Fund for Application in Elderly and Rehabilitation Care (I&T Fund) in December 2018 to subsidise eligible elderly and rehabilitation service units to procure/rent and try out technology products, with a view to improving the life of service users, and reducing the burden and pressure on care staff and carers. A secretariat under the Social Welfare Department (SWD) is responsible for co-ordinating operation of the I&T Fund and supporting the Assessment Panel. The first five tranches of grants at a total of about \$380 million had been approved for about 1 300 elderly and rehabilitation service units to procure or rent over 9 600 items of technology products. Application for the sixth tranche closed in October 2021. A total of about 1 700 items of technology products from about 500 service units were received. So far, over 880 items of technology products have been approved, involving grants of about \$30 million. The vetting of the remaining items of technology products is underway. Moreover, the seventh tranche of the I&T Fund has been open for applications from 27 January 2022 to 29 April 2022.

While only service units receiving subvention or subsidy from SWD are currently eligible to apply, the Government plans to extend the I&T Fund to cover private residential care homes for the elderly (RCHEs) and residential care homes for persons with disabilities (RCHDs), with a view to allowing them to use technology products to alleviate the burden and stress of their caring staff and the carers, as well as improve the living quality of service users. SWD plans to invite applications from private RCHEs and RCHDs in the second half of this year.

SWD has commissioned the Hong Kong Council of Social Service (HKCSS) to promote the use of technology products among carers and social welfare organisations providing elderly and rehabilitation services. SWD has thus allocated an additional recurrent funding of about \$3.75 million to HKCSS for employing extra staff to promote the use of technology products on long-term care services among social welfare organisations and carers, and to co-ordinate as well as facilitate stakeholders' collaboration. In addition, the Government, HKCSS and the Hong Kong Science and Technology Parks Corporation have been jointly organising an annual Gerontech and Innovation Expo cum Summit (GIES) since 2017 to showcase local and overseas innovative products and ideas, and provide stakeholders with a collaboration platform for gerontechnology development. The fifth GIES was held in November 2021.

Meanwhile, the Social Innovation and Entrepreneurship Development Fund (SIE Fund) appointed an intermediary in January 2021 to design and operate an inclusive one-stop "Gerontechnology Platform". The platform links up different stakeholders on the supply and demand sides and enhances synergy through engagement, cross-sector partnership and collaboration with a view to fostering the development and application of gerontechnology. Moreover, the SIE Fund supported four innovative projects in October 2021 for promoting inter-generational digital inclusion and engaging young people to assist the elderly in learning digital technologies. The projects include launching of digital outreach rehabilitation service, teaching the elderly on the basic operation of tablet or smart phone as well as the operation of mobile apps.

Besides, the Office of the Government Chief Information Officer (OGCIO) has been striving to promote digital inclusion over the years. Through the provision of information and communications technology (ICT) outreach services, the offering of training courses for the elderly, and the launch of a web-based learning portal etc., the elderly are encouraged and facilitated to adopt digital technology in their daily life and integrate themselves into smart living. We expect that the percentage of the elderly aged 65 or above who having used the Internet and electronic services will be raised from 65.9% in 2020 to over 75% by 2023.

OGCIO has implemented the "ICT Outreach Programme" since 2014. Six non-profit-making organisations are engaged to organise visits to the elderly across the territory, including those living in residential care homes, receiving day care and home care services and the hidden elderly etc. by leveraging on their service network. Various activities have been organised for the elderly to experience digital living, thus encouraging them to make greater use of digital technology. Some 18 000 elderly people have benefited from the Programme so far. Starting from end-2021, service organisations under the "ICT Outreach Programme" have set up mobile outreach service stations at various community

locations (such as parks, shopping malls and the neighbourhood of housing estates) on a pilot basis to proactively introduce mobile apps to the elderly and address their enquiries about the use of smart phones, with a view to further promoting digital inclusion. Owing to the COVID-19 pandemic, the mobile outreach service has been suspended since January 2022 while some other activities are being conducted online. Service organisations will gradually resume the relevant outreach activities from May 2022 onwards having regard to the latest epidemic situation.

Moreover, OGCIO has implemented the "Enriched ICT Training Programme for the Elderly" since 2019. Through subsidising 11 Elder Academies, the Programme has organised over 100 free ICT advanced training courses for elderly with basic knowledge of digital technology. Topics covered include e-government services, smart healthcare, online shopping, mobile payment, e-wallet, anti-epidemic applications and cyber security, etc. Upon completion of these training courses, the elderly participants may even serve as teaching assistants to facilitate their peers in understanding and using technology products and services. So far, around 3 300 elderly people have participated in the Programme.

OGCIO also launched the "Elderly IT Learning Portal" (the Portal) in October 2019 to help the elderly acquire digital skills based on their personal interest and needs, so that they can benefit from the digital technology in their daily life. The Portal has so far launched 32 learning modules covering online shopping, "iAM Smart" mobile app, cloud-based tools, electronic payment tools, the use of the "LeaveHomeSafe" mobile app, registration of the "Hong Kong Health Code", etc., and recorded over 7 million accesses.