[LCQ16: Promoting products and technologies of local scientific researches](#)

Following is a question by Dr the Hon Lo Wai-kwok and a written reply by the Secretary for Innovation and Technology, Mr Alfred Sit, in the Legislative Council today (June 16):

Question:

As a number of major convention and exhibition events in Hong Kong were either postponed or cancelled last year under the impact of the coronavirus disease 2019 epidemic, and coupled with the fact that cross-boundary travels of people have been hindered by quarantine measures, it has been difficult for enterprises to contact potential overseas clients and promote their products to those clients. Members of the industrial and commercial sectors generally consider that the Government should more pro-actively promote the products and technologies of local scientific researches and assist the sectors in using information technology to enhance operation efficiency and promote their products to overseas clients, thereby opening up new opportunities. In this connection, will the Government inform this Council:

(1) given that the Hong Kong Trade Development Council (HKTDC) currently conducts, through an online platform, overseas promotion of local anti-epidemic medical products and technologies, and has stepped up efforts in matching local enterprises with overseas clients, whether it knows the number of enterprises to whom assistance has been rendered through that platform since January 2020, together with a breakdown by number of staff of such enterprises (i.e. (i) less than 50 persons and (ii) 50 persons or more), as well as the major type of products and technologies involved;

(2) whether the Government and the HKTDC have, since January 2020, assisted local enterprises in promoting, apart from anti-epidemic medical products and technologies, other types of products and technologies of local scientific researches to overseas markets; if so, of the details; if not, the reasons for that; whether the Government has made more use of such products and technologies so as to take the lead in using them and elevate the standard of services of various government departments; if so, of the details; if not, the reasons for that;

(3) given that the Government introduced, one after another in 2020 under the Anti-epidemic Fund, (a) the Subsidy Scheme for Encouraging Early Deployment of 5G and (b) the Distance Business Programme to facilitate the use of information technology by public and private institutions, of the following statistics on the two schemes: (i) the number of applications received, (ii) the number of applications approved, and (iii) the average amount of subsidies granted to each institution whose application had been approved,

together with a breakdown by the industry to which the applicant institution belonged; whether the Government will accept afresh applications submitted under such schemes, or introduce new schemes of a similar nature, with a view to enhancing the competitiveness of local enterprises; if so, of the details; if not, the reasons for that; and

(4) whether it will formulate objective key performance indicators for assessing the extent of commercialisation of the results of local research and development; if so, of the details; if not, the reasons for that?

Reply:

President,

The coronavirus disease 2019 (COVID-19) epidemic which has swept across the globe in the past year or so has brought about unprecedented challenges to the business environment and enterprises in Hong Kong. In spite of the difficulties under the new normal, the Government and the Hong Kong Trade Development Council (HKTDC) have been striving to assist the industry in promoting the products and technologies of homegrown scientific research in the city and to overseas, as well as using information technology (IT) to enhance operational efficiency for opening up new opportunities.

In consultation with the Commerce and Economic Development Bureau, I provide the following reply to the various parts of the question:

(1) The HKTDC launched a "Hong Kong: Technology in Action" website in 2020 to promote homegrown tech products and innovative solutions from around 180 companies ranging from start-ups to small and medium-sized enterprises and sizable enterprises. It covers healthtech, medtech, e-learning, e-business and smart city. In addition, the HKTDC revamped its "hktdc.com Sourcing" platform, which uses artificial intelligence (AI) and machine learning technologies to enhance its business matching effectiveness, provide better personalised smart sourcing experiences for its over 130 000 suppliers and over two million buyers around the world, and enable suppliers and global buyers to stay connected during the epidemic. The year-on-year growth of viewership and business enquiries through the platform have increased considerably by 15 per cent and 26 per cent respectively. Many Hong Kong companies, especially those trading anti-epidemic medical or healthcare products, have received new big orders via the platform.

(2) Besides the Innovation and Technology (I&T) Experience Sharing and Business Promotion Platform launched by the Government and the HKTDC in June 2020, which assists enterprises in connecting with overseas governments and stakeholders, the HKTDC has been promoting a range of innovative technologies, including AI, robotics, big data, fintech, green tech, healthtech, retail tech, smart city tech, etc., through its conventions and exhibitions. For example, the HKTDC organises the Business of IP Asia Forum every year to promote the city's innovative technologies and professional services that can foster the commercialisation of tech products. It also sets up Hong Kong Pavilions in major tech fairs in the Mainland and overseas to

promote the city's technology products. In addition, the HKTDC has been organising the Start-up Express incubation programme since 2018 to help start-ups get funds, build connections and expand markets. It also published the Start-up Express Digital Book to promote the city's tech products and success stories to overseas enterprises. Moreover, the Hong Kong Productivity Council, the Hong Kong Science and Technology Parks Corporation and the Cyberport have been committed to assisting local enterprises in promoting the products and technologies of their scientific research to overseas. For example, the Overseas/Mainland Market Development Support Scheme under the Cyberport provides subsidies for its incubation graduates to develop Mainland and overseas markets.

The Government has been taking the lead in technology adoption and enhancing service level. The major initiatives in this regard in recent years are as follows:

(i) Policy bureaux and departments (B/Ds), by making use of the block allocation under the Capital Works Reserve Fund Head 710 Computerisation, have been implementing various IT projects to improve services and operational efficiency and enhance system security. For example, the Government leverages robotics technologies to provide better service experience for the public, and enhances the functionality and efficiency of information systems through cloud computing. In 2020-21, the provision for block allocation under Head 710 is about $1.28 billion;

(ii) The TechConnect (block vote) set up in 2017 supports government departments in implementing technology projects so as to enhance operational efficiency and improve public services. To date, the scheme has supported a total of 99 technology projects proposed by 31 departments. The technologies adopted include Internet of Things (IoT), big data, AI, etc., and the scheme involves total funding of around $500 million;

(iii) The Public Sector Trial Scheme (PSTS) under the Innovation and Technology Fund (ITF) provides funding support for eligible local companies/organisations to conduct trials of their research and development (R&D) outcomes in public sector organisations (including Government departments) and facilitate commercialisation of R&D outcomes. In the past four years, PSTS funded 205 projects with total funding amount of about $424 million, benefiting over 130 different organisations to conduct over 280 trials. In response to the COVIDâ€'19 epidemic, the Innovation and Technology Commission (ITC) launched a special call for projects under PSTS in March 2020 to support product development and application of technologies for the prevention and control of the epidemic. The special call received 332 applications, 63 of which were approved with total funding amount exceeding $102 million. As at end May 2021, the trials of 22 projects have been completed, involving different technologies for epidemic prevention and control, such as COVID-19 virus diagnosis or detection methods, masks and other protective equipment, equipment for air purification and disinfection, etc. Organisations and companies with projects approved are proactively realising and commercialising the relevant R&D outcomes;

(iv) In addition to providing financial support, the Electrical and Mechanical Services Department launched the E&M InnoPortal in mid-2018, which lists the technological development needs of government departments, public bodies and the Electrical and Mechanical (E&M) trade. Organisations such as start-ups and academic institutions can match the needs by proposing E&M-related I&T solutions via the portal. From 2020 to the end of May 2021, the portal collected around 140 I&T wishes and around 550 I&T solutions, and trials of around 80 I&T projects were launched. The Office of the Government Chief Information Officer also established the Smart Government Innovation Lab (Smart LAB) in April 2019, which encourages and invites industry players to assist government departments in introducing IT solutions. From January 2020 to May 2021, the Smart LAB matched 19 business needs nominated by departments with solutions and arranged 30 thematic workshops for these departments during the process, which involve areas such as IoT, blockchain, AI and robotics technologies, etc.; and

(v) Through the Be the Smart Regulator and the Streamlining of Government Services programmes, the Efficiency Office (EffO) has been driving B/Ds to provide more electronic services. The target of the Government is that by mid-2022 or before, all applications for licences and services can be submitted electronically unless there are legal or operational constraints. Besides, e-payment options will be available for making relevant payments in respect of most licences and services starting from mid-2022. To expedite the implementation of electronic services, the EffO will provide advice and support to departments, and organise solution days and I&T trade shows. The EffO will also source relevant technical solutions through the Hong Kong Science Park, the Cyberport and other platforms.

(3) The Government earmarked $55 million under the Anti-epidemic Fund (AEF) for launching the Subsidy Scheme for Encouraging Early Deployment of 5G, which subsidises 50 per cent of the costs of eligible projects (subject to a cap of $500,000). The application period just ended on May 31, 2021. A total of 415 applications were received, and the 95 projects approved so far cover innovative 5G applications in public and private sectors, such as construction, estate and facility management, transport, medicine and healthcare, environmental protection, etc. The Government will continue to encourage the deployment of 5G technologies by different sectors and promote smart city development in Hong Kong.

In addition, the ITC launched the Distance Business Programme under the AEF, with an aim of supporting enterprises to continue business and provide services during the epidemic through adoption of IT solutions. The programme received a total of 38 572 applications, of which 34 771 were approved. As at June 11, 2021, excluding cases where applicants did not accept the results or provide relevant documents after their applications had been approved, 24 891 applications have signed the funding agreements to implement the projects, involving a total funding of around $1.62 billion, with average approved funding of about $65,000 per application. A breakdown of numbers by applicant enterprises' industry types under the programme is set out in the table below. The programme is a time-limited initiative introduced under the AEF. The ITC does not plan to open the programme for application again. That said,

the Technology Voucher Programme (TVP), a regular programme under the ITF, aims to support enterprises in using technological services and solutions to improve productivity, or upgrade or transform their business processes. Having regard to the operational experience and the industry's views, the ITC introduced a number of enhancements to the TVP in 2020. For example, funding is provided for three-quarters of the project cost of each approved project, which means that the enterprise only has to contribute one quarter of the project cost. The ITC welcomes interested enterprises to submit applications.

Breakdown of numbers by applicant enterprises' industry types under the Distance Business Programme

Industry	No. of applications received	No. of applications approved	Average approved funding amount
Administrative and support services	1 045	961	$56,000
Construction	1 128	1 040	$61,000
Creative industry	767	701	$59,000
Education and training	2 479	2 181	$65,000
Environmental services	151	141	$66,000
Hospitality, food and beverage	2 882	2 641	$75,000
Import and export trade	3 457	3 192	$57,000
Manufacturing	1 035	957	$60,000
Media, printing and publishing	613	549	$60,000
Professional services	2 985	2 672	$56,000
Retail	7 706	6 829	$65,000
Servicing	3 458	3 147	$66,000
Technology development and services	1 502	1 311	$46,000
Transportation and logistics	922	856	$64,000
Others (including participating enterprises which engage in more than one industry)	8 442	7 593	$58,000

(4) Fostering the commercialisation of R&D outcomes is indispensable to building a comprehensive I&T industry chain. Hong Kong is currently home to nine unicorns, with the number of start-ups rising from around 1 070 in 2014 to 3 360 in 2020. The venture capital also increased about seven times from 2014 to around $10 billion in 2019. The Government has been assisting

enterprises in launching the outcomes of their scientific research to the market through different initiatives and investment funding. For example, the Innovation and Technology Venture Fund under the ITF has invested a total of over $100 million in 19 local I&T start-ups and attracted over $600 million private investment. As at 2020â€'21, the Technology Start-up Support Scheme for Universities disbursed around $208.8 million subsidy to 293 start-ups. Over 160 subsidised start-ups have launched over 200 products or services to the market; over 120 have generated revenue from their business. We will continue to review the progress of commercialisation of local R&D outcomes via multi-dimensional indicators.