LCQ13: Development of digital economy

â€‹Following is a question by Dr the Hon Johnny Ng and a written reply by the Secretary for Innovation and Technology, Mr Alfred Sit, in the Legislative Council today (February 23):

Question:

The "Outline of the 14th Five-Year Plan for National Economic and Social Development of the People's Republic of China and the Long-Range Objectives Through the Year 2035" puts forward developing a digital economy, promoting digital industrialisation and industrial digitisation, as well as facilitating an in-depth integration of digital technologies with the real economy, with a view to building a globally competitive digital industrial cluster. There are views that Hong Kong's unique positioning as an international financial centre is conducive to the development of the country's digital economy. In this connection, will the Government inform this Council:

(1) of the policies and initiatives rolled out by the Government in the past three years to foster the development of Hong Kong's digital economy and the core technologies thereof (such as artificial intelligence, blockchain, next-generation Internet), and whether it has evaluated the effectiveness of such efforts; if so, of the details (including the specific data);

(2) of the initiatives and strategies in place to leverage the unique systems and market advantages of the Guangdong-Hong Kong-Macao Greater Bay Area (Greater Bay Area), so as to further develop the digital economy and the core technologies thereof, thereby boosting gross domestic product and enhancing social as well as economic and trade developments; and

(3) given that developing digital economy can create development and employment opportunities for young people in the Greater Bay Area, whether the Government has formulated policies and allocated additional resources to nurture digital technology talents; if so, of the details, and whether it will further enhance the training for talents in this aspect and introduce relevant jobs; if so, of the specific plans?

Reply:

President,

The Central Government attaches great importance and provides staunch support to Hong Kong's innovation and technology (I&T) development. The National 14th Five-Year Plan, for the first time, explicitly indicates clear support for Hong Kong to develop into an international I&T hub, which fully affirms the city's important role in advancing the country's development in science and technology. It also injects strong impetus into Hong Kong's I&T development.

Over the past four years or so, the Government has invested over $130 billion in developing I&T along the eight major areas set forth by the Chief Executive in 2017 which has established a good foundation for Hong Kong's I&T development. The Government has also been actively promoting the development of digital economy. Various initiatives are gradually bearing fruits.

With regard to Dr the Hon Johnny Ng's question, in consultation with the Financial Services and the Treasury Bureau, my reply is as follows:

(1) The effective use of data, various emerging digital technologies such as artificial intelligence (AI), big data, blockchain, cloud computing and cyber security etc., as well as the construction of digital infrastructure facilities are important catalysts and key success factors for forging ahead the development of digital economy. The Hong Kong Special Administrative Region (HKSAR) Government actively promotes the development of smart city and digital economy in Hong Kong through a data-driven strategy.

To this end, following the publishing of the Smart City Blueprint for Hong Kong in 2017, the Government further published the Smart City Blueprint for Hong Kong 2.0 in 2020, setting out over 130 initiatives under six smart areas. Bureaux and departments (B/Ds) have been actively pursuing and implementing the initiatives, and will timely update the development goals in view of the latest advancements in smart city and innovative technologies.

With the Next Generation Government Cloud Platform and Big Data Analytics Platform commenced operation in September 2020, it has effectively facilitated the data interchange among B/Ds and the implementation of more projects adopting AI and big data analytics. So far, it has supported over 340 digital government services and over 15 projects for conducting big data analytics. Launched in December 2020, the one-stop personalised digital services platform "iAM Smart" has recorded more than 1.1 million users so far. Over 190 commonly used online services are accessible through the platform, and are increasing progressively. The Government also completed four pilot projects adopting blockchain in 2020 to explore the applicability and benefits in applying blockchain technology to different digital government services.

To actively promote digital transformation of the Government, B/Ds can make use of the block allocation under the Capital Works Reserve Fund Head 710 Computerisation to implement various information technology (IT) projects to expedite the system development of digital government services so as to improve the operational efficiency of the Government and the quality of public services, and further promote smart city development. The Office of the Government Chief Information Officer (OGCIO) established the Smart Government Innovation Lab (Smart Lab) in April 2019 to encourage and invite industry players to assist government departments in introducing IT solutions with a view to enhancing public services and city management. As of end-January 2022, the Smart Lab matched over 60 business needs from various departments with solutions and arranged over 80 thematic workshops during the process, involving areas such as AI, blockchain, Internet of Things (IoT) and

robotics technologies, etc. The Government departments can also make use of other schemes such as TechConnect (block vote), the Public Sector Trial Scheme under the Innovation and Technology Fund, etc. to foster the official launch and application of the outcomes of relevant pilot projects.

The Government also continuously supports local enterprises in adopting IT services and solutions to enhance their business operations through the Technology Voucher Programme.

On the other hand, following the implementation of the two Fintech infrastructure projects, namely Faster Payment System and eTradeConnect, which have facilitated development of digital economy, the Hong Kong Monetary Authority (HKMA) is developing the Commercial Data Interchange. Through this centralised platform, enterprises can authorise service providers such as payment systems, public bodies or utility companies to furnish the banks with data. The banks can then make a more accurate and objective credit risk assessment, thereby facilitating small and medium-sized enterprises (SMEs) in obtaining trade finance.

(2) To act in concert with the national development strategy to enable Hong Kong to better integrate into the overall development of the country, the HKSAR Government is proactively taking forward a series of I&T infrastructure initiatives. The areas of development of these initiatives align with the emerging industries mentioned in the National 14th Five-Year Plan in the age of digital economy, including AIR@InnoHK in the InnoHK research clusters focusing on the development of AI and robotics technologies; the Hong Kong-Shenzhen I&T Park that will classify big data and AI etc. as the prioritised research and development (R&D) domains; as well as the Phase 2 expansion of the Hong Kong Science Park project which will focus on the needs of research activities for technologies such as AI.

The Innovation and Technology Commission will continue to operate the Guangdong-Hong Kong Technology Cooperation Funding Scheme (TCFS) with relevant Department/Commission of Guangdong and Shenzhen to encourage collaboration among universities and research institutes in Hong Kong and Guangdong/Shenzhen on applied R&D projects under specific themes. In recent years, those themes covered by the TCFS which are related to core technologies of digital economy include new-generation information technology, AI, blockchain and Fintech, IoT, big data and cloud computing, etc. R&D results of those funded projects, if commercialised, could be a driving force of developing digital economy in the Greater Bay Area.

On the other hand, the OGCIO has been organising the "Maker in China" SME Innovation and Entrepreneurship Global Contest – Hong Kong Chapter (Contest) in collaboration with the Ministry of Industry and Information Technology and the Liaison Office of the Central People's Government in the Hong Kong Special Administrative Region in 2019 and 2021 respectively. The Contest serves to facilitate Mainland investors and enterprises to understand the top notch innovative technology products and solutions from Hong Kong. Meanwhile, it allows I&T-related SMEs to explore business opportunities in the Mainland, especially in the Greater Bay Area, so as to drive the

development of digital economy in the Greater Bay Area. The OGCIO will continue to co-organise the Contest in 2022.

Moreover, the People's Bank of China (PBoC) and the HKMA signed a Memorandum of Understanding in October 2021 to provide a connected one-stop platform for financial institutions and technology companies to conduct pilot trials of cross-boundary Fintech initiatives concurrently in Hong Kong and the Mainland, thereby expediting the launch of Fintech products in the Greater Bay Area and lowering development costs. Furthermore, the second phase of proof-of-concept for connecting the eTradeConnect of Hong Kong with the PBoC Trade Finance Blockchain Platform was completed in October 2021, covering more types of trade activities and financing products. The HKMA will continue working closely with the PBoC with a view to providing importers and exporters of both places with more convenient trade finance services.

(3) The Government has been adopting a multi-pronged approach to enlarge the I&T talent pool through attracting, nurturing and retaining talent (including those related to digital technology) with a series of initiatives. With a view to nurturing students' interest in I&T from a young age, the IT Innovation Lab in Secondary Schools and Knowing More About IT Programmes subsidise secondary and primary schools respectively to organise extra-curricular activities related to IT. In addition, the Government, the Hong Kong Science and Technology Parks Corporation and Cyberport also introduce various schemes such as the STEM Internship Scheme, the Innovation and Technology Scholarship and the Research Talent Hub, etc. to attract and support university students to pursue further development in I&T. On the other hand, the Reindustrialisation and Technology Training Programme subsidises local enterprises on a matching basis for their staff to receive training in advanced technologies; relevant technology areas include "Industry 4.0" process training, blockchain, data analytics, cyber security, etc.

In addition, the Government launched the FinTech Anti-epidemic Scheme for Talent Development in 2020 to subsidise local Fintech companies to create nearly 1 000 full-time positions with a view to enriching Hong Kong's Fintech talent pool. We have also provided Fintech training courses for financial practitioners, with over 1 200 financial practitioners benefited so far.

With a view to facilitating talent admission to Hong Kong, the Technology Talent Admission Scheme handles applications that involve the admission of non-local talent to undertake R&D work in Hong Kong expeditiously, covering 13 technology areas such as Fintech, 5G communications, etc. The Global STEM Professorship Scheme supports universities in attracting world-renowned I&T scholars and their teams to undertake teaching and research work in Hong Kong. The Government will also further increase the annual quota of the Quality Migrant Admission Scheme, as well as explore the extension of the Immigration Arrangement for Non-local Graduates to cover graduates of Hong Kong universities' Greater Bay Area campuses.