LCQ8: Development of digital economy

Following is a question by the Hon Yung Hoi-yan and a written reply by the Secretary for Innovation and Technology, Mr Alfred Sit, in the Legislative Council today (May 26):

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" (the 14th Five-Year Plan) puts forward accelerating digitalisation development, including the creation of new advantages of a digital economy. The Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area (Greater Bay Area) also puts forward strengthening cooperation in innovation and technology in the Greater Bay Area, and the authorities of both Hong Kong and the Guangdong Province have planned to jointly strengthen the innovation and development of the digital economy in the Greater Bay Area. In this connection, will the Government inform this Council:

(1) whether it will, by drawing reference from documents such as the Implementation Plan for the Innovation and Development of Digital Economy Industries of the Shenzhen City (2021-2023), expeditiously formulate a blueprint for Hong Kong's development of digital economy with clear targets; if so, of the details and work schedule;

(2) in respect of strengthening the innovation and development of the digital economy in the Greater Bay Area, of the latest progress of the Government's work on facilitating the cross-boundary flow of the scientific research resources of Hong Kong's higher education institutions and scientific research institutes within the Greater Bay Area; whether it has formulated new plans for the coming three years to participate in developing the Greater Bay Area into a global hub for digital economy development; if so, of the details (including the timetable); and

(3) whether, in the coming year, it will formulate corresponding development strategies and plans in respect of the seven digital economy key industries (i.e. cloud computing, big data, Internet of Things, industrial Internet, blockchain, artificial intelligence, as well as virtual reality and augmented reality) as set out in the 14th Five-Year Plan; if so, of the details; if not, the reasons for that?

Reply:

President,

Regarding the various parts of the question, our consolidated reply is as follows:

The Government of the Hong Kong Special Administrative Region (HKSAR) has been actively promoting the development of digital economy. In December 2017, the Government published the Smart City Blueprint for Hong Kong (Blueprint), formulating the blueprint for the development of digital economy in Hong Kong and the building of a world-renowned Smart Hong Kong characterised by a flourishing economy and people's high quality of living. The Blueprint set out 76 initiatives under six smart areas, i.e. "Smart Mobility", "Smart Living", "Smart Environment", "Smart People", "Smart Government" and "Smart Economy", with a view to addressing city management challenges and improving people's livelihood through innovation and technology (I&T), and more than 40 initiatives have been completed.

In December 2020, the Government released the Smart City Blueprint for Hong Kong 2.0 (Blueprint 2.0), setting out over 130 smart city initiatives which continue to enhance and expand existing city management measures and services, hoping that members of the public can better perceive the benefits of smart city and I&T in their daily lives.

Besides, we have implemented as scheduled several digital infrastructure projects in the past three years, including the Next Generation Government Cloud and the Big Data Analytics Platform which commenced operation in September 2020, and the "iAM Smart" one-stop personalised digital services platform which was also launched in December of the same year. We also actively promote the opening up of data by public and private organisations in a bid to foster technological research and innovation, thereby bringing convenience and benefits to members of the public and assisting the industry in expanding business opportunities at the same time. Currently, more than 4 500 datasets are available on the webpage of the Government's Public Sector Information Portal, and over 10 billion downloads were recorded in 2020.

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" (the 14th Five-Year Plan) clearly supports Hong Kong's establishment of an international I&T hub and put forth nurturing and building up of emerging digital industries, including artificial intelligence (AI), big data, blockchain, cloud computing and cyber security etc. in the era of digital economy, thereby enhancing industry level, such as communication equipment, core electronic components and key software etc. Meanwhile, the National 14th Five-Year Plan also proposes high-quality Guangdong-Hong Kong-Macao Greater Bay Area (GBA) development, and supports Hong Kong's integration into national development, leveraging the complementary advantages of the Mainland.

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 taking forward a series of I&T infrastructure initiatives. The areas of development of these initiatives will align with the above emerging industries mentioned in the 14th Five-Year Plan in the age of digital economy, including the Cyberport expansion project that will strengthen its I&T ecosystem and continue to drive the development of cutting-edge technologies such as AI, big data and blockchain etc.; the Hong Kong-Shenzhen I&T Park that will focus on technology domains such as AI and

big data etc.; 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 Blueprint 2.0 initiatives also make use of these digital technologies, including cloud computing, big data analytics, AI, blockchain, Internet of Things (IoT), and 5G etc. to improve public services and stimulate the industry to develop more innovative technological applications.

Hong Kong all along has advantages in scientific research in the above technology areas. According to the university ranking published by Quacquarelli Symonds in 2021, five Hong Kong universities rank among the top one hundred in overall performance and their faculties of engineering and technology, demonstrating Hong Kong's strong capability in basic research. According to the finding as early as in 2018 by Scopus, the world's largest abstract and citation database of peer-reviewed literature, universities in Hong Kong as a whole ranked third globally in terms of producing the most highly cited and impactful research on AI. In addition, the City University of Hong Kong has established the State Key Laboratory of Terahertz and Millimeter Waves approved by the Ministry of Science and Technology. The City University of Hong Kong and the University of Hong Kong have also participated respectively in the establishment of the GBA Joint Laboratory of Big Data Imaging and Communications, as approved to be set up by the Department of Science and Technology of Guangdong Province, led by the Shenzhen Academy of Information and Communications Technology, and the Guangdong-Hong Kong-Macao Joint Laboratory on Smart Cities led by the Shenzhen University.

Apart from the strength in scientific research capability, Hong Kong also has an edge in internationalisation and a robust intellectual property protection regime, while other GBA Mainland cities have capabilities in advanced manufacturing and commercialising research and development results. As a result, for more than 15 years, the HKSAR Government has been collaborating with the Guangdong Provincial and Shenzhen Municipal Governments through the Guangdong-Hong Kong Technology Cooperation Funding Scheme (TCFS) to enhance productivity and competitiveness of enterprises in Guangdong and Hong Kong. The themes of the 2020 TCFS are also in line with the emerging industries in the era of digital economy covered in the National 14th Five-Year Plan, such as new-generation information technology, AI, IoT, big data and cloud computing. The 2020 TCFS received a total of 211 project applications to be jointly funded by Guangdong/Shenzhen and Hong Kong. The Guangdong/Shenzhen authorities and the Innovation and Technology Commission will each conduct independent vetting of the eligible applications received, and compare the results to identify projects to be jointly supported afterwards.

The HKSAR Government will continue to facilitate effective flow of innovative elements, including talent, capital, goods and information etc., thereby promoting collaboration in scientific research and better leveraging the complementary advantages among different cities in the GBA. Government policy bureaux/departments and related organisations will actively collaborate with the relevant Mainland authorities with a view to fostering the development of digital economy and I&T in Hong Kong, and strive to build

Hong Kong into an international I&T hub.