Legislative Council meeting of 20 November 2024
Motion on "Formulating an AI Plus strategy"

Progress Report

Purpose

At the Legislative Council meeting on 20 November 2024, the motion on "Formulating an AI Plus strategy" moved by Prof Hon William WONG and amended by Dr Hon CHOW Man-kong, Hon Carmen KAN, Hon YUNG Hoi-yan, Hon TANG Fei, Dr Hon TAN Yueheng and Dr Hon SO Cheung-wing was passed. The full text of the passed motion is at **Annex**. This paper reports the progress of the Government's work in relation to the relevant matters raised in the motion.

Progress

2. Artificial Intelligence (AI) is an important driving force of the new round of technological revolution and industrial transformation, and a powerful engine for developing new quality productive forces and achieving high quality development. The Central People's Government proposed in the Report on the Work of the Government in March 2024 to launch an AI Plus initiative to deepen the research and development (R&D) and applications of big data and AI, with a view to building a digital industry cluster with international competitiveness.

3. As far as Hong Kong is concerned, the "Hong Kong Innovation and Technology Development Blueprint" (the Blueprint) published by the Innovation, Technology and Industry Bureau (ITIB) at the end of 2022 proposes to focus on the development of AI and data science industries, which not only lays the foundation for the Government to promote the application of AI by various bureaux/ departments (B/Ds) and enhance public services, but also provides a clear direction for Hong Kong to build an AI ecosystem and enhance the industry ecosystem chain.

4. The Government is now following the development strategies of the Blueprint to build up the AI ecosystem in Hong Kong on all fronts through various dimensions, such as infrastructure and computing power supply, R&D of innovation and technology (I&T), governance and regulation, exploring application scenarios, nurturing and attracting talents, and deepening co-operation with the Mainland, so as to promote

the governance and application of AI.

(1) Infrastructure and Computing Power Supply

5. Data, computing power and algorithms are the three pillars of AI development. The Government has been promoting and accelerating the development of new digital infrastructures on various fronts to enhance data and computing power facilities in Hong Kong.

Data Centres

6. The Digital Policy Office (DPO) has been implementing various facilitation measures to promote the development of data centres in Hong Kong, including the provision of land, facilitating conversion of industrial buildings and utilisation of industrial land, and providing one-stop support services. The supply of data centre floor space in Hong Kong is expected to increase to about 1.5 million square metres by the end of 2026, providing a large amount of data storage space for training AI models and boosting the development of AI in Hong Kong. Furthermore, we have commenced the relevant procedures in end-2024 to rezone a 10-hectare site for data centres and related purposes last year.

Supercomputing Centre

7. The first-phase of the Cyberport's AI Supercomputing Centre (AISC) was launched in December 2024 to provide computing power of around 1 300 petaFLOPS, and will gradually ramp up to reach 3 000 petaFLOPS, providing high-performance computing power to local universities, R&D institutes and the industry. Meanwhile, the Government has also launched a three-year AI Subsidy Scheme of $3 billion in October last year to subsidise eligible users to leverage the computing power provided by the AISC.

(2) R&D of I&T

8. R&D of I&T is the key driving force for the advancement and development of AI. Currently, several local institutions rank among the top in global rankings in AI and data science. As I&T flagships in Hong Kong, both the Hong Kong Science and Technology Parks and the Cyberport are also the clusters for more than 800 AI-related enterprises. These institutions and companies are dedicated to developing a variety of

general-purpose large models and industry-specific large models, including open-source generative AI (GenAI) large language models (LLM) designed for the financial sector.

9. In addition, the AIR@InnoHK Research Cluster, which focuses on AI and robotics technologies, has established 16 R&D laboratories, including the Hong Kong Generative AI Research and Development Center (HKGAI) established in 2023. HKGAI is currently developing and testing local databases and large language models.

10. Through different funding schemes[1] under the Innovation and Technology Fund, the Government also subsidises and encourages universities, local public research institutes (such as R&D centres) and private enterprises to conduct R&D in different technology areas, including projects that involve AI.

11. The R&D Centres under the purview of Innovation and Technology Commission conduct applied research in respective key I&T areas, and at the same time act as focal points for technology collaboration among the Government, industry, academia and research sectors, with the involvement of R&D projects on AI. For example, Hong Kong Applied Science and Technology Research Institute Company Limited (ASTRI), in collaboration with banks and institutions, developed a solution utilising federated learning technology to provide credit assessment on micro, small and medium-sized enterprises while protecting their privacy. Besides, ASTRI collaborated with the Insurance Authority to develop a federated learning platform to provide additional insights for the insurance industry to create new products.

12. Separately, to encourage more enterprises to conduct R&D in Hong Kong, the Government also offers tax concessions to enterprises engaging in R&D activities in Hong Kong. The qualifying R&D expenditures of such enterprises enjoy an enhanced tax deduction.

13. At the same time, the Government strives to promote the Open Data Policy, and encourages B/Ds and public and private organisations to open up more data. The Open Data Portal currently encompasses datasets covering 19 categories (including transportation, climate and weather, housing data, etc.) from over 110 organisations (including B/Ds, public and

[1] Including: "Innovation and Technology Support Programme", "Mainland-Hong Kong Joint Funding Scheme", "Guangdong-Hong Kong Technology Cooperation Funding Scheme", "Partnership Research Programme", "Enterprise Support Scheme" and "Research and Development Cash Rebate Scheme".

private organisations), opening up more than 5 500 datasets, including about 1 000 spatial datasets from more than 60 B/Ds and organisations hosted on the Common Spatial Data Infrastructure Portal. These datasets together serve as raw materials for AI R&D.

(3) Governance and Regulation

14. Regarding AI governance, the DPO formulated the "Ethical AI Framework" in 2021 to provide guidance for B/Ds when implementing projects that involve the use of AI technologies, and to identify and manage potential risks of relevant projects and other issues (such as privacy, data security and management). In early August 2023, the DPO updated the "Ethical AI Framework" to supplement it with the challenges and suggested practices regarding GenAI, so as to assist B/Ds in planning, designing and implementing IT projects or services with AI.

15. Additionally, the Government has commissioned HKGAI under the InnoHK cluster to study and suggest appropriate rules and guidelines, through practice and application of GenAI technology, on areas relating to the accuracy, responsibility and information security of the technology.

Data Governance

16. Data is an essential element of AI. The ITIB published the "Policy Statement on Facilitating Data Flow and Safeguarding Data Security in Hong Kong" in December 2023 to set out the Government's management principles and key strategies on data flow and data security, and to put forward 18 specific action items. Subsequently, the DPO launched a thematic web page on data governance in December 2024 covering the "Principles of Data Governance" and the relevant strategy, guidelines, and technical standards, etc. concerning data governance to introduce the Government's data governance policies in a one-stop manner.

Governance and Regulation of Different Sectors

17. The application and impact of AI technologies vary across different industries. Therefore, we should adopt a flexible and adaptable mindset to formulate "usable, practical and effective" AI application frameworks tailored to the specific circumstances of different industries.

18. On the financial sector, the Government issued a policy statement in October 2024 to promote responsible application of AI in the financial market. At present, the potential risks posed by AI have been suitably reflected in the relevant regulations and/or guidelines issued by financial regulators. To keep pace with the latest developments of AI and international practice, such as the emergence of explainable AI, financial regulators will continuously review and update the existing regulations and/or guidelines as appropriate.

19. The ever-evolving technological development around the world has given rise to new copyright issues from time to time. To enhance the protection provided by the Copyright Ordinance for AI technology development, the Government conducted a public consultation on "Copyright and AI" in the third quarter of last year. The Commerce and Economic Development Bureau and the Intellectual Property Department are carefully considering the views and supporting evidence collected, while taking into account current market practices and overall circumstances. The goal is to gather views from all parties and conduct a comprehensive and thorough review, with the aim of formulating the way forward in 2025.

Protection of Personal Data

20. The protection of personal data privacy is an important component of AI governance. The Office of the Privacy Commissioner for Personal Data (PCPD) published the "Guidance on Ethical Development and Use of AI" and the "AI: Model Personal Data Protection Framework" in 2021 and 2024 respectively. Based on internationally-recognised principles and best practices, the two sets of guidance provide recommendations regarding the governance of AI and the protection of personal data privacy, with a view to assisting public and private organisations in complying with the relevant requirements under the Personal Data (Privacy) Ordinacne (Cap. 486) when they develop, procure, implement and use AI systems, including GenAI. Furthermore, in September 2023, the PCPD issued "10 Tips for Users of AI Chatbots", which helps users better protect their personal data privacy in the use of AI chatbots, thereby enhancing the safe use of AI chatbots.

(4) Exploring Application Scenarios

21. The Government has been endeavouring to take the lead within the Government and in different sectors to promote the exploration of application scenarios and deepen the application of AI in various industries.

Digital Government

22. In applying AI to enhance digital government services, the DPO has fully expanded the 1823 AI chatbot to answer frequently asked questions under its scope of service, and adopted AI speech recognition technology to identify callers' enquiry subjects for the provision of relevant information through voice messages or short message service (SMS).

23. The Government will launch over a hundred of digital government and smart city initiatives from 2024 to 2025. Nearly half of these initiatives involve the application of big data analytics and AI technology, including the use of AI for handling public enquires and a pilot project to streamline application procedures of International Driving Permit by adoption of Optical Character Recognition (OCR) and AI technologies.

24. Regarding the locally-developed GenAI document processing copilot application being piloted within the Government, HKGAI is intensively training its LLM and optimising the application, with a view to assist government personnel on their daily word processing tasks such as document drafting, summarisation and translation. As at mid-January 2025, under the co-ordination of the DPO, government officers of different grades from about 60 B/Ds are participating in the pilot use programme.

Health

25. The Hospital Authority (HA), as a major public healthcare service provider, has successfully implemented AI applications in various service areas to enhance clinical quality and benefit patients. For example, the HA has applied AI in Accident & Emergency Departments (A&E), Specialist Out-patient Clinics and General Out-patient Clinics to assist doctors in identifying abnormal chest X-rays so as to expedite the handling of high-risk cases. AI has also been introduced in A&E to help doctors analyse brain computed tomography scans, detecting urgent conditions such as brain injuries and intracranial haemorrhages. In a bid to address the rising incidence of falls and hip fractures with the aging population, the HA has also employed AI to aid doctors in identifying cases of hip fractures

in order to provide early treatment for patients. The HA has developed an AI system to automatically label cases of Hepatitis B virus positivity to enhance medication safety. In addition, the Hospital Command Centre makes use of AI for predicting the demand for resources so as to facilitate the allocation of beds and hospital support services, etc. Patients can also use AI technology integrated in the HA mobile application "HA Go" where measurements of blood pressure and pulse could be automatically captured and recorded, thereby enhancing patients' experience.

Education

26. In the 2024/25 school year, the Education Bureau (EDB) launched the "AI for Science Education" Funding Programme on a pilot basis, supported by the Quality Education Fund. This programme aims to promote AI-assisted teaching and pedagogical innovations in junior secondary Science, thereby enhancing the effectiveness of learning and teaching. Publicly funded secondary schools are eligible to apply for a one-off funding of $100,000, which can be utilised to enable science teachers to enrol in training courses offered by tertiary institutions or related professional bodies. Additionally, the funding can be used to arrange on-site support services, enhancing teachers' professional capacity for the effective use of AI and other information technology tools, with a view to enriching students' learning experiences in scientific inquiry and innovation.

Social Welfare

27. The Government has been actively encouraging the social welfare sector to make better use of gerontechnology in order to improve quality of life of elderly persons and persons with disabilities and relieve the burden of their carers. The Government allocated $1 billion in 2018 to set up the Innovation and Technology Fund for Application in Elderly and Rehabilitation Care (I&T Fund), which subsidises eligible elderly and rehabilitation service units to procure, rent or trial technology products, including monitoring systems equipped with AI to detect bed-leaving motion, intelligent anti-wandering systems with facial recognition technology, assistive devices with AI technology for persons with visual impairment, etc. By the end of 2024, the I&T Fund had approved grants totalling about $750 million, subsidising about 2 000 service units to procure or rent over 21 000 technology products. The Government injected additional $1 billion into the I&T Fund in 2024-25 and will expand its scope to cover gerontechnology products suitable for household use. The Social Welfare Department is formulating relevant implementation

details, which are planned to be launched in the first quarter of this year.

Financial Services

28. In Hong Kong, the financial services industry is very receptive to deploying AI in their business. According to a survey in 2023, the adoption of GenAI in Hong Kong financial institutions was the highest (38%) among all markets and well above the global average (26%). The Government will closely monitor market developments and draw on international experience in promoting the responsible use of AI in the financial services sector for accelerating the development of new quality productive forces.

Transport and Logistics

29. The "Smart Mobility Roadmap" and the "Smart City Blueprint 2.0" have proposed a number of smart mobility initiatives. For example, to support the development of autonomous vehicles (AVs) technology and the industry, the Government has been promoting the trial and use of AVs in Hong Kong through policy support, regulatory backing and financial support. Several new AV projects are currently underway, employing big data and AI technologies.

30. Moreover, the Transport Department (TD) is actively promoting the use of AI to enhance traffic management efficiency. The TD, together with the DPO, has leveraged on big data analytics and AI to develop a "Traffic Data Analytics System" that helps the TD more comprehensively grasp, consolidate and analyze traffic data. Using the big data analytics platform launched by the Government, the system analyzes past and real-time traffic, transport and weather data as well as weather forecast data from the Hong Kong Observatory to provide real time and estimated travel time in the next 15 to 90 minutes. Since end of April 2022, the traffic forecast has been released to the public through "HKeMobility" and "Data.gov.hk".

31. Meanwhile, the TD is implementing the "Real-time Adaptive Traffic Signal System" at suitable junctions. The computing programme installed in the system will analyze the real-time traffic and pedestrian images and data collected by the sensors with AI, then calculate appropriate signal timing to instruct the traffic light controller, so as to issue commands for controlling traffic signals. For example, the tuned and learned system is able to differentiate between pedestrians waiting to cross the road and pedestrians passing through the waiting area without crossing the road, and

issue appropriate commands to the traffic light controller.

Construction

32. The application of AI in the construction industry is becoming increasingly widespread. The Development Bureau (DEVB) applied AI to enhance the existing Project Surveillance System, predicting the cost and progress of public works projects based on project data to reduce the risk of project delays.

33. In engineering design, some consulting firms have started using AI to support the design of construction projects, providing various design options to optimize the design and enhance its cost-effectiveness. For construction site applications, project teams are installing AI surveillance cameras at construction sites to monitor restricted and dangerous areas through the "Smart Site Safety System", ensuring that workers work in a safe environment to improve site safety. Drones equipped with AI sensors have also been used to automatically identify defects in building facades and tunnel interiors, enhancing the efficiency and performance of site inspections.

(5) Nurturing and Attracting Talents

Talent Training

34. Talent is the key to unleash the potentials of AI. The Government has been striving to encourge the public to learn and apply AI during primary, secondary and higher education stages, working stage as well as silver stage, so as to equip themselves to face future challenges.

35. For primary and secondary education, the EDB launched the "Enriched Module on Coding Education for Upper Primary Level" and "Module on AI for Junior Secondary Level", for schools to implement enriched coding education at the upper primary level and incorporate AI elements at the junior secondary level with a view to further developing students' computational thinking and strengthening I&T learning. The "Enriched Module on Coding Education for Upper Primary Level" covers basic computational thinking concepts and the "Module on AI for Junior Secondary Level" covers topics on AI basics, AI ethics, societal impact and future of work, etc.

36. The EDB is also committed to supporting schools in promoting values education (including media and information literacy education) and has recommended a set of priority values and attitudes for enabling students to use information effectively and ethically. The EDB has added a new literacy area to the "Information Literacy for Hong Kong Students" Learning Framework launched in 2024. This new area, titled "Recognise the ethical issues arising from the application of emerging and advanced information technologies", encompasses issues related to laws and regulations, academic integrity, excessive dependence, etc. arising from the use of innovative technologies such as AI. The aim is to equip students to tackle the challenges posed by new technologies.

37. For higher education, the Government has all along encouraged the University Grants Committee (UGC)-funded universities to offer programmes which cater for Hong Kong's development needs, expand the talent pool of important areas such as I&T, and strengthen Hong Kong's competitiveness. In the 2022 Policy Address, we announced our target that by the 2026/27 academic year, there will be 35% of students of the UGC-funded universities in STEAM subjects and 60% in subjects relevant to Hong Kong's development into the eight centres in the 14th Five-Year Plan. The Government and UGC will join hands with the universities in pursuit of the aforesaid targets through the triennial Planning Exercise, thereby nurturing more talents that match the manpower needs for Hong Kong's strategic development.

38. Looking ahead, the "Steering Committee on Strategic Development of Digital Education" formed by the EDB will tender advice and suggestions on promoting digital education in Hong Kong, including the application of AI in education.

39. On training of the local workforce, the Employees Retraining Board (ERB) provides employment training programmes covering various areas including I&T, which assist the local workforce in responding to the demand for digital transformation in industries. In this regard, ERB implemented the "Love IT • Upgrading Scheme" from April to December 2024, offering over 50 I&T-related training courses including application of GenAI with a view to encouraging continuous learning and acquisition of new digital skills among the workforce from different academic qualifications or sectors. With ERB lifting the restriction on educational attainment of trainees since early this year and enhancing its role and positioning to providing "skills-based" training programmes and strategies for the entire workforce, ERB will strengthen collaboration with parties such as tertiary institutions and leading enterprises to diversity the

direction for course development including I&T skills training, in response to the increasingly wide application of technologies across industries and the changes in manpower demand.

40. The DPO promotes various digital inclusion measures under the "Smart Silver" programme to elderlies to assist them to understand and use digital technology products and services. These measures include outreach programme, mobile outreach service stations, provision of training and technical support on digital technologies at regular and fixed-points, enriched ICT training and a web based learning portal, enabling them to use digital technologies effectively and safely, thereby fully integrate into the digital society. Among them, the enriched ICT training programme offers free advanced digital training courses for elderlies with basic knowledge of digital technology. The curriculum includes a theme onAI, allowing elderlies to understand the definition, historical development, and everyday applications of AI, such as chatbots.

Attracting Talents

41. The Government has been proactively attracting AI talent from the Mainland and overseas, with a view to enlarging the local talent pool for AI through several initiatives. For instance, the Government has included in the Talent List a number of professions with local manpower shortage in the I&T segment, including Experienced AI Specialists, etc., so as to facilitate the industry in the admission of technology talents through relevant talent admission schemes. According to the information provided by the Immigration Department, a total of 28 applications meeting the qualification requirements of Experienced AI Specialists on the Talent List were approved last year under the Quality Migrant Admission Scheme, the General Employment Policy and the Admission Scheme for Mainland Talents and Professionals. Meanwhile, as at 31 December 2024, 138 non-local persons approved for admission under the Technology Talent Admission Scheme (TechTAS) were related to AI.

(6) Deepening co-operation with the Mainland

42. Under "One Country, Two Systems", Hong Kong is endowed with the distinctive advantages of converging both Mainland and international data, creating a favourable environment for strengthening our AI-related collaboration with the Mainland (particularly the Guangdong-Hong Kong-Macao Greater Bay Area (GBA)). Specifically, the ITIB signed the "Co-operation Agreement on Technology and Innovation Exchange between

Guangdong and Hong Kong" with the Department of Science and Technology of the Guangdong Province in March 2023 to further deepen technology and innovation exchanges as well as bolster collaborative innovation of industries, academia and research between the two places. The Guangdong-Hong Kong Technology Cooperation Funding Scheme jointly implemented by the Guangdong and Hong Kong governments has also been encouraging co-operation between universities, research institutions and technology enterprises from both places in various technology areas (including AI), and promoting work on high technology and the transformation of scientific and technological achievements, with a view to enhancing the productivity and competitiveness of enterprises in both places.

43. The Hetao Shenzhen-Hong Kong Science and Technology Innovation Co operation Zone (Co operation Zone) is one of the four major co operation platforms in the GBA under the 14th Five Year Plan. The Hong Kong Special Administrative Region (HKSAR) Government has all along been working closely with the Shenzhen Municipal Government to promote the synergistic development of Hong Kong Park and Shenzhen Park of the Co operation Zone. The HKSAR Government promulgated the Development Outline for the Hong Kong Park of the Hetao Shenzhen Hong Kong Science and Technology Innovation Co operation Zone (the Development Outline) in November 2024, setting out the vision and mission, planning, development directions, strategies and targets of the Hong Kong Park. As set out in the Development Outline, the Hong Kong Park will focus on the development of core frontier technological fields, including AI and data science, etc.; strengthen the supporting infrastructure required for the development of AI technologies; and establish a cross boundary data flow management mechanism, so as to attract Mainland and overseas enterprises engaging in AI to the Co operation Zone to set up and expand their businesses therein. In the future, the two parks of the Co operation Zone will take forward pilot demonstrations of the innovative applications of AI technology, accelerate the development of AI Plus industries and facilitate Hong Kong's co operation with other cities in the GBA, as well as co-operation between the Mainland and the rest of the world.

Conclusion

44. Looking ahead, the Government will build upon the framework and development direction established by the Blueprint to refine the strategy on Hong Kong's AI development and its deployment in a timely manner,

with reference to the actual circumstances of AI development in Hong Kong, to propel Hong Kong into a leading city in research, development and application of AI, enabling Hong Kong to stand firm amidst the wave of AI advancement and to strengthen its role as an international I&T centre.

Innovation, Technology and Industry Bureau
Financial Services and the Treasury Bureau
Commerce and Economic Development Bureau
Transport and Logistics Bureau
Development Bureau
Education Bureau
Labour and Welfare Bureau
Health Bureau
Digital Policy Office
Innovation and Technology Commission

January 2025

Annex

Legislative Council meeting of 20 November 2024

Prof Hon William WONG's motion on "Formulating an AI Plus strategy"

Motion as amended by Dr Hon CHOW Man-kong, Hon Carmen KAN, Hon YUNG Hoi-yan, Hon TANG Fei, Dr Hon TAN Yueheng and Dr Hon SO Cheung-wing

That General Secretary XI Jinping once emphasized that 'it is necessary to uphold unity between fostering development and implementing law-based management, and to vigorously cultivate new application for new technologies such as artificial intelligence, the Internet of Things and next-generation communication networks while also actively adopting the law, regulations and standard norms in guiding the application of new technologies'; as artificial intelligence ('AI') with unstoppable development in recent years will become an important engine driving the development of new quality productive forces, and the Central Government's Report on the Work of the Government announced this year also mentions for the first time the launch of an AI Plus initiative, this Council urges the SAR Government to consider formulating an AI Plus strategy for the strategic planning and development of AI application, so as to lead Hong Kong's development into an advanced city excelling in the research and development ('R&D') as well as the application of AI; to promote Hong Kong's connection and integration with other cities in the Greater Bay Area in the R&D and application of AI; to establish a system for monitoring AI security and develop AI application scenarios in compliance with the law, regulations and moral ethics; to fully utilize AI to enhance the efficiency of the SAR Government and foster AI application in various trades and industries in order to create a favourable ecological environment, bring fresh impetus to the economy and in turn enhance people's quality of life; to study the feasibility of establishing an AI-related legal framework; to motivate individuals and enterprises to keep abreast of technological development, so that they can benefit from AI development rather than being eliminated by the strong tides of AI; and to foster a healthy and sustainable environment to assist various trades and industries in balancing opportunities and risks and adopting AI in a responsible manner; this Council also urges the SAR Government to adopt the following measures:

(1) developing an ecological chain for Hong Kong's AI industry;
(2) enhancing the infrastructure for AI computing power, algorithms, big data, etc.;
(3) developing vertical large models for industries, promoting AI product commercialization, and fostering the integration of such vertical large models with the core business of enterprises, so as to empower industry development;
(4) making good use of government resources in computing power to further promote data sharing; and
(5) motivating a culture of innovation and technology with the Government taking the lead in using new scientific research technologies and products developed locally; and
(6) expeditiously formulating an education strategy on learning AI by all by making reference to the successful experience of neighbouring regions;
(7) promoting wider and deeper AI application in the financial sector; and
(8) providing clear guidelines and standards for issues arising in the course of AI development and application such as data protection, social ethics and accountability, so as to enhance AI security and reliability in its development;

this Council also urges the SAR Government to conduct comprehensive studies on the AI application trend in various trades and industries for the corresponding formulation of measures on local workers' training and policies on labour importation, so as to enhance the labour force structure, enable the integration of AI with the labour force and in turn achieve optimal effectiveness for Hong Kong's productivity.