For Discussion on 12 December 2023

Legislative Council Panel on Information Technology and Broadcasting

Facilitating Data Flow and Safeguarding Data Security

Purpose

This document aims to brief Members on the highlights of the Policy Statement on Facilitating Data Flow and Safeguarding Data Security in Hong Kong ("Policy Statement") (at <u>Annex</u>).

Background

- 2. The Country's 14th Five-Year Plan states clearly its support for Hong Kong's development as an international innovation and technology ("I&T") hub. The Hong Kong Innovation and Technology Development Blueprint ("Blueprint") promulgated by the Innovation, Technology and Industry Bureau ("ITIB") last year has set out four broad directions and eight major strategies for Hong Kong's I&T development. To this end, ITIB adopts a data-driven approach and strives to enhance the digital capability of Hong Kong, thereby promoting the development of I&T, digital economy and smart city.
- 3. To capitalise on the strengths of data, we should work on the core elements of data governance, in particular data flow and data security being the two key components. In order to drive data-based development, the 2023 Policy Address announced that the Government will publish a policy document to facilitate data flow and ensure data security by the end of this year. On 8 December 2023, ITIB and the Office of the Government Chief Information Officer ("OGCIO") jointly published the Policy Statement to set out the Government's management principles and strategies on data flow and data security.

Policy Statement

4. The Policy Statement puts forward 18 specific action items under five broad categories to promote the consolidation, application, opening up

and sharing of data on the one hand, and to enhance safeguards for data security and planning of related infrastructural facilities on the other. The highlights are set out below.

A. Advancing Digital Government and Enhancing Data Governance

5. The Digital Policy Office ("Office") will be set up by merging OGCIO and the Efficiency Office. Led by the Commissioner for Digital Policy, the Office will be responsible for promoting digital government and enhancing data governance of the Government. The Office will formulate policies to promote data sharing between government departments and across sectors and leverage data for advocating innovative public services and rolling out digital government initiatives that bring convenience to the public, facilitate conduct of businesses and enhance city management.

B. Formulating or Updating Policies, Guidelines and Laws

- 6. The Government has formulated rules relating to usage and safety to protect its information technology systems and data security. Keeping abreast of the development and actual needs of society, we will update or formulate relevant policies and guidelines in a timely manner, and publicise related guidelines and encourage the industry to make reference and adopt as appropriate in light of their own circumstances.
- 7. We will review the content in existing laws and guidelines concerning the collection, use, processing, protection and sharing of data and explore feasible measures to tackle pain points in specific areas, thereby breaking data silos and removing barriers to data sharing.
- 8. Moreover, the Constitutional and Mainland Affairs Bureau and the Commerce and Economic Development Bureau will respectively study amendments to the Personal Data (Privacy) Ordinance and explore further enhancement of the Copyright Ordinance, with the objectives of strengthening protection for personal data and artificial intelligence ("AI") technology development, as well as addressing the challenges posed by cyber technologies.

C. Enhancing Cybersecurity Protection

9. The Security Bureau will introduce a legislative bill into the Legislative Council to define clearly, through legislation, the cybersecurity obligations of critical infrastructure operators, thereby enhancing the protection of cybersecurity of critical infrastructure.

10. The Government will step up collaborative efforts with the industry, including organising an array of publicity activities, promoting the sharing of cybersecurity information, offering free website security detection services for small and medium-sized enterprises, setting up staff training platforms and formulating Practice Guides on Data Centre Security in consultation with the industry, thereby enhancing the awareness and capability of the industry and the general public in safeguarding cybersecurity.

D. Bolstering the Digital Infrastructure

- 11. The Government will actively promote the digitalisation of public services to bring convenience to the citizens, including pressing ahead the full digitalisation of government services, providing a single government digital services platform, and expanding electronic payment options to all government services. We will also progressively upgrade the "iAM Smart" platform to enhance users' digital and one-stop experience.
- 12. The Government will continue to foster the development of digital infrastructure, including Cyberport's phased establishment of an AI supercomputing centre, enhancing the coverage and capacity of 5G infrastructure and network, and launching a Consented Data Exchange Gateway to facilitate data interchange within the Government.

E. Promoting Cross-boundary Data Flow

13. The Government will facilitate cross-boundary data flow in the Greater Bay Area ("GBA") in collaboration with the Mainland pursuant to the framework of the "Memorandum of Understanding on Facilitating Cross-boundary Data Flow Within the Guangdong-Hong Kong-Macao Greater Bay Area", and work closely with the Guangdong Province in striving for implementation of the early and pilot arrangement in the GBA shortly to streamline the compliance procedures for the flow of personal information from the Mainland to Hong Kong.

Way Forward

14. The Policy Statement puts forward a holistic and detailed action agenda to further facilitate data flow and strengthen data security. We will continue to foster the high-quality development of I&T, digital economy and smart city in an orderly manner and under a data-driven approach, in a bid to achieve the vision of developing Hong Kong into an international I&T hub.

Advice Sought

15. Members are invited to offer views on the paper.

Innovation, Technology and Industry Bureau Office of the Government Chief Information Officer December 2023

Policy Statement on Facilitating Data Flow and Safeguarding Data Security in Hong Kong

I. FOREWORD

This document is published by the Innovation, Technology and Industry Bureau ("ITIB") and the Office of the Government Chief Information Officer to set out the Government's management principles and key strategies on facilitating data flow and safeguarding data security, being two important components of data governance. It puts forward specific action items to further promote the efficient flow of data and to strengthen protection of data security, covering areas such as top-level design, policy formulation, legislation and guidelines, infrastructure support and cross-boundary data flow. This serves to promote development and safety in a more coordinated manner, support the development of innovation and technology ("I&T"), digital economy and smart city, and fuel the advancement of Hong Kong as an international I&T hub.

II. BACKGROUND AND VISION

- 2. 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" [1] ("14th Five-Year Plan") clearly states the country's commitment to developing digital economy, promoting digital industrialisation and industry digitisation, and deepening the integration of digital technologies with the economy, thereby building a globally competitive cluster of digital-based industries. The 14th Five-Year Plan also affirms support for Hong Kong's development as an international I&T hub.
- 3. Data is a key element of new production in the digital era that ushers in innovation and drives high-quality development of the digital economy. A new wave of technological reforms brought by data-driven applications and the rise of big data and artificial intelligence ("AI") is indeed reshaping Hong Kong's technological landscape, industry structure and economic pivot.
- 4. Hong Kong is the country's international financial, trade, maritime and telecommunications centre. We are known for our world-class, versatile and efficient professional services, international business environment, well-established common law system and independent judiciary, sound protection for intellectual property, as well as simple and transparent taxation. Adopting a data-driven approach, Hong Kong can capitalise on the advantages of "One

Country, Two Systems" as a special region across the boundary, enhance its digital capability and promote the development of I&T, digital economy and smart city, in a bid to make Hong Kong a more liveable, competitive and sustainable city. This will also help build Hong Kong into a global data hub that consolidates data from different places to spur the development of related industries.

III. OBJECTIVES

- 5. Data applications create impetus to scientific researches, innovation and digital economy development. At the same time, data applications bring concerns about data security, application risks, cybersecurity, privacy and ethics. In the new age of digital economy, every sector, be it finance, trade, logistics or retail, rely on digital innovation and data applications to enhance operational efficiency, improve competitiveness and achieve uplift in quality. A prerequisite of catalysing the development of I&T and digital economy of Hong Kong is to strike a balance between the opening up, usage and protection of data and to provide for proper data management.
- 6. We strive to leverage and strengthen the strategic role played by data in driving transformation and high-quality economic development. The philosophy and strategy underpinning data governance must be holistic to maximise the benefits and mitigate the risks of data flow, by promoting consolidation, application, opening up and sharing of data on the one hand, and enhancing safeguards for data security and planning of related infrastructural facilities on the other. To protect the security of data flow while optimising the strengths of data resources, our strategy should also tackle the interface with different data governance standards and regulatory frameworks. These will help innovate the digital government and economy in Hong Kong.

IV. CURRENT LANDSCAPE

7. Free flow of information is the underlying condition to make the good use of shareable data, whilst data security facilitates the integration and application of data. Currently, the Government adopts a multi-pronged approach to promote the opening up and interchange of data and to ensure data security, encompassing policies, laws, guidelines and infrastructure support, etc.

A. Policy

- 8. Under the Open Data Policy^[2] announced in 2018, government bureaux and departments ("B/Ds") are required to make their best endeavours in opening up their data to the public for free use. Currently, more than 5 200 datasets have been released on the DATA.GOV.HK portal for public free access, covering data in various sectors and industries. Members of the public can also search, view and download over 700 types of spatial data from more than 50 B/Ds on the Common Spatial Data Infrastructure rolled out by the Government in 2022.
- 9. The Hong Kong I&T Development Blueprint^[3] promulgated by the Government in December 2022 has highlighted "to promote digital economy development and develop Hong Kong into a smart city" and "to accelerate the development of digital economy and smart city to enhance citizens' quality of life" respectively as part of our four development directions and eight major strategies. These underscore our data-driven development approach to seize opportunities brought about by digital economy and to integrate into the overall national development.
- 10. In June 2023, ITIB and the Cyberspace Administration of China signed the "Memorandum of Understanding on Facilitating Cross-boundary Data Flow Within the Guangdong-Hong Kong-Macao Greater Bay Area" to jointly promote cross-boundary data flow in the Guangdong-Hong Kong-Macao Greater Bay Area ("GBA"), with the objective of promoting safe and orderly data flow from the Mainland to Hong Kong, thereby facilitating integration of Hong Kong into the "Digital Bay Area" in the longer run and promoting collaborative development between Hong Kong and the Mainland.

B. Law and regulation

- In respect of data governance, the Government sets basic standards and rules on data usage and data security while promoting the opening up and application of data. To ensure security of the government information systems and data on all fronts, the Government has formulated the Security Regulations, the Government IT Security Policy and Guidelines^[4] and the Ethical Artificial Intelligence Framework^[5] respectively, and devised multi-pronged security measures and implementation mechanism, covering government data protection, audit and risk assessment, incident handling and response, education and training, etc.
- 12. In view of the latest development of generative AI, the Government has updated the Ethical Artificial Intelligence Framework in August 2023 to

provide clearer guidance to B/Ds on developing applications with AI-related technologies.

- 13. The Government IT Security Policy and Guidelines and the Ethical Artificial Intelligence Framework have been uploaded onto related government websites for reference by public and private organisations. Having regard to their own circumstances, individual organisations can adopt suitable principles and measures on information security risk management as recommended in the relevant policy and guidelines, so as to raise their awareness and capability of data protection.
- 14. The need for protecting data including personal data grows with the advancement of the digital economy. We pay heed to the Personal Data (Privacy) Ordinance ("PDPO"), the Guidance on the Ethical Development and Use of Artificial Intelligence issued by the Office of the Privacy Commissioner for Personal Data^[6], as well as other relevant laws, administrative measures and industry guidelines, in the collection, holding, processing, use, control and protection of data including personal data and those derived from different business processes.
- 15. To enhance the overall awareness of information and data security in the community including public and private organisations, schools and the general public, and in a bid to fortify the overall data security framework, the Government has been working closely with stakeholders and relevant organisations, including Hong Kong Computer Emergency Response Team Coordination Centre and Hong Kong Internet Registration Corporation Limited. Efforts include sharing cybersecurity information; organising publicity campaigns and training to the industry and the public to strengthen their cybersecurity measures and protect the information systems and data against cyberattacks; as well as offering support on information security incident responses, issuing security threat alerts and providing protective guidelines and security education.

C. <u>Infrastructural support</u>

- 16. Since 2020, the Government has rolled out a series of digital infrastructure projects including the Next Generation GovCloud, Big Data Analytics Platform and the Shared Blockchain Platform, etc. to support B/Ds' sharing of the collected non-personal data, big data analytics and AI projects, with a view to making available more digital government services.
- 17. The "iAM Smart" platform launched in December 2020 is a key digital infrastructure for developing digital economy and smart city in Hong Kong.

It provides reliable identity verification function for members of the public to log in to their online accounts for using various government and commercial online services, conducting online transactions and performing digital signing with legal backing in a simple and secure manner. The new application interface of "iAM Smart" was introduced in October 2023 to allow people who are yet registered for "iAM Smart" to gain access to day-to-day information.

18. The Government is developing a Consented Data Exchange Gateway ("CDEG") at full speed, enabling citizens to authorise government departments to use their personal information stored in other departments and obviating the need of repetitive submission of same information. By end-2023, CDEG will first launch a new function to link with the Commercial Data Interchange of the Hong Kong Monetary Authority to facilitate data transfer from government departments to financial institutions upon the authorisation of the latter's enterprise clients.

V. ACTION ITEMS

19. To further promote the flow and security of data and to ensure optimal data management, the Government will take actions in respect of 18 items listed below under five broad categories.

A. Advancing Digital Government and Enhancing Data Governance

- 1) The Digital Policy Office to be led by the Commissioner for Digital Policy will be responsible for formulating policies on digital government, data governance and information technology to steer the setting up of digital government and enhancement of data governance.
- 2) Data governance policies will be drawn up to foster the opening up, sharing, development and application of data between government departments and across sectors, to break data silos and to remove barriers to data sharing. We will also advocate, coordinate and promote data-driven innovation of public services and develop more digital government initiatives that bring convenience to the public, facilitate conduct of businesses and enhance city management.

B. Formulating or Updating Policies, Guidelines and Laws

3) Keeping abreast of the development and actual needs of society, we will update or formulate relevant policies and guidelines in a timely manner.

Government guidelines will also be publicised to the industry for reference and adoption as appropriate.

- 4) To promote the development and application of generative AI in Hong Kong, the InnoHK research centre specialised in generative AI has been commissioned to study and suggest rules and guidelines on the accuracy, responsibility and information security in the use and application of generative AI technologies.
- 5) We will review the existing arrangements on the collection, use, processing, protection and sharing of data, and follow up on feasible measures to tackle pain points in specific areas.
- 6) The Constitutional and Mainland Affairs Bureau will study possible amendments to the PDPO to align with the latest international developments in privacy protection, strengthen personal data protection, and address the challenges posed by cyber technologies.
- 7) The Commerce and Economic Development Bureau ("CEDB") will conduct consultation within 2024 to explore further enhancement of the Copyright Ordinance regarding protection for AI technology development.

C. Enhancing Cybersecurity Protection

- 8) The Security Bureau will enhance the protection of cybersecurity of critical infrastructure and introduce a legislative bill into the Legislative Council within 2024 to define clearly, through legislation, the cybersecurity obligations of critical infrastructure operators including the establishment of good preventive management system to ensure the secure operation of their information systems and networks.
- 9) To enhance the industry and the public's awareness and preparedness of cybersecurity, and in support of the China Cybersecurity Week held annually in September, we will organise an array of activities promoting cybersecurity in Hong Kong, including community roadshows, school talks, technical seminars, as well as exchanges and cyberattack & defence training with the industry in the Mainland. We will also invite more Mainland cybersecurity companies to set up businesses in Hong Kong.

- 10) We will step up support for the Partnership Programme for Cyber Security Information Sharing to encourage the sharing of cybersecurity information and experience of incident responses in different sectors. We will also promote industry collaboration on providing free website security detection services for small and medium-sized enterprises and a training platform for network security staff. We will also support the provision of more cybersecurity training courses by tertiary education institutions.
- 11) We will formulate Practice Guides on Data Centre Security in consultation with the industry to strengthen the security of data centre infrastructure.

D. Bolstering the Digital Infrastructure

- 12) By mid-2024, we will digitalise all government licences, services and forms involving application and approval. By end-2025, we will achieve the goal of providing a single government digital services platform through full adoption of "iAM Smart" by all departments to facilitate citizens' use of one-stop electronic government services.
- 13) We will progressively upgrade the "iAM Smart" platform and introduce a simplified registration procedure to enhance user experience by mid-2024.
- 14) We will launch CDEG by end-2024 to facilitate data interchange within the Government.
- 15) We will bring forward the initiative of providing electronic payment options for all government services in 2024 and explore measures to facilitate the wider adoption of electronic payment options by businesses to support digital economy development.
- 16) We will foster the development of major digital infrastructure, including the establishment an AI supercomputing centre by Cyberport in phases from 2024, with a view to supporting the huge demand for computing power and data analytics from relevant sectors and promoting industry development.
- 17) CEDB will continue to enhance the coverage and capacity of 5G network, including expediting the expansion of mobile network infrastructure in rural and remote areas through subsidies and supplying

more spectrum to mobile network operators by auctions, to enhance the transmission speed of 5G networks. Moreover, the Government will continue to implement various measures to promote the development of 5G infrastructure, including amending the Telecommunications Ordinance and revising the relevant guidelines to ensure that appropriate space will be made available in new buildings for the installation of telecommunications facilities by mobile network operators, as well as amending the Inland Revenue Ordinance to provide tax incentives to operators in respect of spectrum utilization fees to promote development of 5G infrastructure.

E. Promoting Cross-boundary Data Flow

18) We will implement in an orderly manner measures to facilitate cross-boundary data flow in the GBA, including the early and pilot implementation of the arrangement to streamline and facilitate the compliance procedures for the flow of personal information relating to banking, credit checking and healthcare from GBA to Hong Kong. We will consider extending the facilitation measure to other sectors gradually having regard to the implementation progress.

VI. CONCLUSION AND WAY FORWARD

- 20. Under "One Country, Two Systems", Hong Kong is endowed with the distinctive advantages of enjoying strong support of our country and being closely connected to the world. As we press ahead the development into an international I&T hub to dovetail with the national development strategies, it is key to enhance data governance and promote the free flow of data and its safe application to achieve high-quality economic development.
- 21. This document represents the Government's management principles and core strategies on facilitating data flow and safeguarding data security. It organises the various policies and measures currently in place and puts forward 18 concrete action items in five areas for the furtherance of data flow and security, thereby supporting the development of I&T, digital economy and smart city in Hong Kong. We look forward to continuous dialogue with different sectors of society, and will keep an open mind and adopt a pragmatic approach to collaborative efforts for driving the high-quality development of Hong Kong's digital economy.

Innovation, Technology and Industry Bureau Office of the Government Chief Information Officer December 2023

Appendix

- 1. The 14th Five-Year Plan for Economic and Social Development and Longrange Objectives Through the Year 2035 of the People's Republic of China http://www.gov.cn/xinwen/2021-03/13/content_5592681.htm
- 2. The Open Data Policy the Public Sector Information Portal https://data.gov.hk/en/
- 3. The Hong Kong I&T Development Blueprint https://www.itib.gov.hk/en/publications/I&T%20Blueprint%20Book_EN_single_Digital.pdf
- 4. The Government IT Security Policy and Guidelines https://www.infosec.gov.hk/en/useful-resources/it-security-standards-and-best-practices
- 5. The Ethical Artificial Intelligence Framework

 https://www.ogcio.gov.hk/en/our_work/infrastructure/methodology/ethical_a

 i framework/
- 6. The Guidance on the Ethical Development and Use of Artificial Intelligence https://www.pcpd.org.hk/english/resources_centre/publications/files/guidancee_ehtical_e.pdf