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Report of the Subcommittee on Matters Relating to the Development of Smart City

Purpose

This paper reports on the deliberations of the Subcommittee on Matters Relating to the Development of Smart City (“the Subcommittee”).

Background

2. The Administration published the first edition of [Smart City Blueprint for Hong Kong](#) (“the Blueprint”) and the updated version, i.e. [Smart City Blueprint for Hong Kong 2.0](#) (“**Blueprint 2.0**”), in 2017 and 2020 respectively. Blueprint 2.0 set out over 130 smart city initiatives. In addition to the **six smart areas** under the Blueprint, namely “Smart Mobility”, “Smart Living”, “Smart Environment”, “Smart People”, “Smart Government” and “Smart Economy”, the initiatives that dealt with the epidemic and the Smart Village Pilots have also been included in a bid to build Hong Kong into a more advanced and livable smart city. The Administration has advised that it will continue to actively implement the various measures set out in Blueprint 2.0 which bring convenience to the public and businesses, with a view to facilitating the public and the business sector to enjoy further convenience and benefits that smart cities as well as innovation and technology (“I&T”) will bring to their daily lives.

3. The Administration promulgated the [Hong Kong Innovation and Technology Development Blueprint](#) (“**I&T Blueprint**”) on 22 December 2022 to establish a clear development path and formulate systematic strategic planning for Hong Kong’s I&T development over the next five to 10 years, charting Hong Kong in moving full steam **towards the vision of an international I&T centre**. I&T Blueprint sets out **four broad development directions**, including “to enhance the I&T ecosystem and

promote ‘new industrialization’ in Hong Kong”, “to enlarge the I&T talent pool to create strong impetus for growth”, **“to promote digital economy development and develop Hong Kong into a smart city”**, and “to proactively integrate into the overall development of the country and consolidate our role as a bridge connecting the Mainland and the world”.

4. The Administration has advised that it will strive to drive and implement digital government initiatives. Apart from launching the Next Generation Government Cloud Infrastructure Services, Big Data Analytics Platform and “iAM Smart” one-stop personalized digital services platform,¹ it set up the Digital Policy Office (“DPO”) in July 2024. This top-level design is expected to accelerate the development of digital government in a systematic manner and facilitate further development of the smart city vision.² The Government will also actively leverage advanced technologies, e.g. big data analytics, artificial intelligence (“AI”), blockchain and geospatial analytics technologies, to implement 100 digital government initiatives before the end of 2025 to provide more convenient services for the general public and the business sector.

The Subcommittee

5. On 8 April 2022, the House Committee appointed the Subcommittee to study matters relating to smart city development. The Subcommittee has completed its initial 12-month period of work in May 2023³ and subsequently reactivated its work on 14 June 2024 to facilitate more in-depth discussion on individual issues relating to smart city.⁴ The terms of reference and membership of the Subcommittee are set out in [Appendices 1](#) and [2](#) respectively.

¹ “iAM Smart” is a mobile application which provides users with more convenient access to the online services of various government departments and participating organizations.

² DPO is responsible for formulating policies and measures relating to digital government, data governance and information technology, overseeing the implementation of digital policies of the Government as a whole, driving innovation and smart applications within the Government and expediting digital transformation of public services.

³ Details of the deliberations of the Subcommittee during its 12-month period of work from May 2022 to May 2023 are available in the report of the Subcommittee submitted to the House Committee on 7 June 2023 ([LC Paper No. CB\(1\)612/2023](#)).

⁴ The proposal of the Subcommittee on extension of period of work was endorsed by the House Committee at its meetings on 31 March 2023.

6. Under the chairmanship and deputy chairmanship of Ms Elizabeth QUAT and Hon Duncan CHIU respectively, **the Subcommittee** has held a total of **nine meetings** since the commencement of its work in June 2024. The Subcommittee also conducted **four site visits** to gain an in-depth understanding of the latest developments in the areas of smart government, smart hospitals, smart mobility, smart environment, etc.

Deliberations of the Subcommittee

Development of smart city digital infrastructure

7. Expressing concern about **whether** the Administration's **digital infrastructure can dovetail with smart city development**, members have raised enquiries and suggestions on individual AI-related facilities and developments. Members have also expressed the view that against the prevailing background of a tight government budget, the Administration should carefully assess the budget allocation for smart city-related projects to ensure that the progress of important projects will not be affected or even cancelled.

Computer system security of critical infrastructures

8. Members note that to enhance the protection of computer system security of critical infrastructures ("CIs"), the Administration has introduced the Protection of Critical Infrastructures (Computer Systems) Bill ("the Bill") into the Legislative Council ("LegCo"),⁵ which seeks to set out the statutory obligations of CI operators ("CIOs") (not intended to include government departments) to take appropriate measures to strengthen the security of their computer systems, thereby enhancing the overall computer system security in Hong Kong. Members have enquired about the measures to **ensure that the network security of government departments using services provided by third parties is properly safeguarded** if government departments are not intended to be included in the Bill.

9. The Administration has advised that for essential services operated by the Government (e.g. water supply, drainage, emergency relief), government departments should adhere to the comprehensive and stringent Government IT Security Policy and Guidelines ("the Policy and Guidelines") with regular review and updating, taking into account the latest international standards and industry best practices, to ensure the security of

⁵ LegCo passed the bill on 19 March 2025.

government information systems. As the level of requirements in the Policy and Guidelines is comparable to the statutory requirements for CIOs under the Bill, the Administration has proposed to continue regulating government departments through the existing administrative approach without netting them into the scope of regulation of the Bill.

10. The Administration has further advised that DPO will enhance the usual security risk assessment and audits for information systems, regular network monitoring, spot checks, compliance audits, staff training of bureaux/departments (“B/Ds”) and B/Ds’ collaboration with the industry, so as to strengthen the abilities to monitor and safeguard government information systems and cyber security. Besides, DPO will take the lead in organizing cyber security attack and defence drills to test and strengthen the information systems security of government departments and public organizations.

Consented Data Exchange Gateway and data sharing

11. Members have enquired about the authorization given by members of the public to government departments to use some of their personal data through the Consented Data Exchange Gateway (“CDEG”) as well as issues relating to the data interchange within the Government. There was a **suggestion** that the Administration should **maximize the flexibility of data sharing among departments and avoid imposing overly stringent restrictions** on the scope of use of personal data when amending the legislation in future.

12. The Administration has explained that CDEG will help reduce the need for members of the public to provide personal data repeatedly and simplify the verification process for departments, with a view to promoting the development of more innovative electronic services by B/Ds that will benefit the public and businesses, and enhancing the operational efficiency of B/Ds.

13. Members have enquired about how banks share the credit records of small and medium enterprises (“SMEs”) among themselves, and how Mainland residents can provide their financial credit records to local banks. The Administration has explained that financial institutions can make use of the “Commercial Data Interchange” (“CDI”) launched by the Hong Kong Monetary Authority to obtain commercial data of SMEs under authorization. In addition, the facilitation measure on the Standard Contract for the Cross-boundary Flow of Personal Information Within the Guangdong-Hong Kong-Macao Greater Bay Area (Mainland, Hong Kong) (“the GBA Standard Contract”) was introduced at the end of 2023 to streamline

the compliance arrangements for the flow of personal information in the Guangdong-Hong Kong-Macao Greater Bay Area (“GBA”). In the first phase, the banking, credit referencing and healthcare sectors with a strong demand for cross-boundary services were invited to participate, and the measure was extended to all sectors in November 2024.

Artificial intelligence Supercomputing Centre

14. Members note that to support the development of the AI ecosystem, the first-phase facility of Cyberport’s AI Supercomputing Centre (“AISC”) commenced operation in December 2024. Members have enquired about the adequacy of AISC to meet the future demand for computing power and the projects planned by the Administration in respect of computing power in Hong Kong. Members have also expressed that reference can be drawn from the Mainland practice of **allowing enterprises to try out supercomputing centres free of charge**, so as to **enhance the utilization rate of AISC**.

15. The Administration has advised that the main purpose of AISC is to support local universities, research and development (“R&D”) institutions, enterprises, etc. to enhance R&D capabilities in different fields and promote industry development. The Administration will increase computing resources in a gradual manner in line with the demand of the industry and ensure effective allocation and utilization of computing resources. The consultant commissioned by the Administration estimated that Hong Kong will need about a computing power of 15 000 PFLOPS in 2030.⁶ The first 5 000 PFLOPS of the computing power facilities (including AISC) will be put into service in the market with funding support from the Administration under various projects, and it is hoped that private sector participation can be introduced in the future to provide the remaining computing power required by the market.

16. Members are concerned about the high power consumption involved in AI development. If the electricity cost is too high, it will discourage enterprises from using the local computing services. The Administration has advised that in the long run, it has to consider measures such as how to lower the operating costs of the local supercomputing centres and enhance collaboration with the computing facilities in the neighbouring regions, so as to further enhance Hong Kong’s computing power.

⁶ Computing power is measured in terms of Peta-floating point operations (i.e. 10^{15}) per second (PFLOPS) (which means one thousand trillion floating-point operations).

Governance and development of artificial intelligence technologies

17. Expressing concern about the progress of the Administration's work on AI governance, members have **suggested that the Administration should formulate a legal framework to regulate AI application to prevent and combat illegal activities.** Members have also considered that publicity on AI development should be stepped up to enhance public awareness of the risks associated with AI.

18. The Administration has pointed out that through the Hong Kong Generative Artificial Intelligence Technical and Application Guideline ("the Guideline") released by DPO in April 2025, it hopes that the Guideline can facilitate the industry and the public in developing and applying generative AI technology in a safe and responsible manner, and mitigate risks while encouraging innovative applications of AI. In addition, DPO and the Office of the Privacy Commissioner for Personal Data have also published the Ethical AI Framework and the Guidance on the Ethical Development and Use of AI respectively to provide guidance to various departments and industries on the development and use of AI technologies.

19. Some members have enquired about the progress of the Administration's implementation of **HKPilot, a generative AI document processing copilot application,** and suggested that the application **should be made available for public use.** The Administration has responded that the training of the large language model has been substantially completed. The Government will pilot the use of the application in different departments and explore the formulation of relevant codes of practice and guidelines on the use of relevant technologies through implementation.

Regional cooperation in smart city development

20. Expressing concern about a number of regional collaboration issues on smart city development, members note that the SAR Government and the Guangdong Provincial Government signed the "Co-operation Agreement between Guangdong and the HKSAR on Co-developing a Smart City Cluster" ("the Agreement") in March 2023 and established the Hong Kong/Guangdong Expert Group on Co-developing a Smart City Cluster ("EGSCC") under the Agreement to work on a series of cooperation projects on co-developing a smart city cluster between Hong Kong and Guangdong.

Planning and collaboration for regional digital infrastructure

21. Members have **urged** the Administration **to collaborate with the Mainland cities in GBA to enhance the planning and construction of digital infrastructure** and optimize the layout, so as to expedite the development of smart cities in GBA and achieve complementarity of advantages. The Administration has advised that it will maintain communication with the relevant authorities in Guangdong Province to explore ways to enhance complementarity in digital infrastructure and capitalize on the characteristics of different institutions, mechanisms and legal systems in GBA to facilitate the development of a smart city cluster and “Digital GBA”.

22. To complement the promotion of smart transport connectivity in GBA, members have suggested that the Administration should **embark on the planning of Hong Kong’s “City Brain”**, including ideas on how to **connect and link with the Mainland**. The Administration has responded that according to the Agreement, the Transport Department (“TD”) and the Mainland transport authorities are actively communicating with each other in areas such as information dissemination and data sharing. As far as Hong Kong’s city management is concerned, its current strategy is to connect the city management data held by different departments, before allowing departments to access the data across systems as needed, with a view to optimizing the city management work in various areas. Members have suggested that the Administration should propose to EGSCC to explore the feasibility of sharing spatial data resources among GBA cities, so as to promote interconnection of relevant data.

Promoting the development of cross-boundary services

23. Members have enquired how the Administration will increase the utilization rate of the **Cross-border Electronic Service Delivery (“CBSD”)** through the “iAM Smart” and suggested that CBSD **should be expanded** to cover more provincial and municipal government services. The Administration has advised that it will continue to deepen the current integration of the “iAM Smart” platform with the Unified Identity Authentication Platform of Guangdong Province, so as to enable “iAM Smart” users to access more government service platforms within the Guangdong Province. In addition, it will continue to optimize “iAM Smart” so that members of the public will be able to use various Guangdong Province’s government services through “iAM Smart” in the future.

24. Members are concerned about the implementation of the facilitation measures on the GBA Standard Contract, including **how the privacy of cross-boundary personal data can be safeguarded**. The Administration has pointed out that as the first phase of the early and pilot implementation of the facilitation measures on the GBA Standard Contract operated smoothly and received positive feedback from the industry, the scope of the facilitation measure has been expanded to all industries in the nine Mainland cities in GBA and Hong Kong in November 2024 so that organizations and individuals may voluntarily adopt the GBA Standard Contract for cross-boundary data flow. It has added that both contracting parties of the GBA Standard Contract must ensure that the cross-boundary data flows conducted are in compliance with the relevant laws and regulations of their respective jurisdictions, and that the enforcement agencies of Hong Kong and Guangdong will conduct spot checks and initiate investigations and enforcement actions against non-compliance.

25. Members have suggested that the Administration should **explore more cross-boundary smart application scenarios**, such as provision of facilitation for Hong Kong people and groups to make cross-boundary bookings for cultural and tourist attractions in the Mainland. The Administration has advised that EGSCC will study the way forward for expanding the smart application scenarios in future, including how to provide better experience for Hong Kong people visiting the Mainland.

26. Members have enquired about the use of eHealth by Hong Kong residents in Mainland hospitals and the progress of the cross-boundary healthcare programme. They have suggested that the Administration should **extend the cross-boundary function of eHealth** to the Residential Care Services Scheme in Guangdong and **discuss with the Health Commission of Guangdong Province on the facilitation of cross-boundary medical services**.

27. The Administration has advised that some of the new functions of the eHealth mobile application (“eHealth App”) could facilitate the storage and cross-boundary use of electronic health records (“eHRs”). It has also advised that it will continue to facilitate the sharing of cross-boundary medical records via the eHealth platform to support various cross-boundary healthcare collaboration programmes. Healthcare institutions in GBA may also consider sharing medical record data through the signing of the GBA Standard Contract. In view of the differences in healthcare laws and regulations, eHR systems, medical data formats and standards between Hong Kong and the Mainland, in-depth discussion with the Mainland

authorities and healthcare organizations on cross-boundary healthcare collaboration arrangements will be required.

Smart health

eHealth+ development

28. Members have suggested that the Administration should **integrate the functions of eHealth and HA Go mobile application** and urged that private healthcare providers (“HCPs”) should be encouraged to upload patients’ eHRs to eHealth. The Administration has advised that it will strengthen the seamless connection of the eHealth App with HA Go, and integrate and rationalize the relevant functions to streamline the management of healthcare processes by members of the public.

29. The Administration has indicated that private HCPs are required to upload certain medical records onto eHealth under the Public-private Partnership Programme. It will gradually expand the requirement to all government-subsidized healthcare programmes. It has also planned to amend the Electronic Health Record Sharing System Ordinance (Cap. 625)⁷ to promote the completeness and portability of personalized eHRs of members of the public. This includes empowering the Secretary for Health to require HCPs to deposit specified important health data into the personalized eHealth accounts of members of the public. Meanwhile, the Administration will endeavour to enhance the technical connectivity between eHealth and the electronic medical record systems in the market, including partnering with Clinical Management System solution vendors and healthcare professional bodies to enhance their systems to facilitate the deposit of health records of members of the public into the eHealth system.

Use and development of artificial intelligence technologies to support healthcare services and hospital operations

30. Members have suggested that the Administration should **expand the application of AI technologies**, including incorporating the large medical AI models developed by local universities into the daily consultation procedures of hospitals, so as to **alleviate the shortage of doctors** and at the same time **enhance the efficiency and quality of medical services**.

⁷ The Electronic Health Record Sharing System (Amendment) Bill 2025 was published in the Gazette on 21 March 2025 and received its First Reading at LegCo meeting of 26 March 2025. The Bills Committee on Electronic Health Record Sharing System (Amendment) Bill 2025 is currently conducting the scrutiny.

The Hospital Authority (“HA”) has advised that it has already applied AI technologies in various professional fields, including the use of AI-assisted clinical diagnosis and Hepatitis B screening system.

Smart mobility

Autonomous vehicles

31. Expressing concern about the progress of autonomous vehicle (“AV”) trials, members have requested the Administration to provide facilitation measures such as sandbox and testing ground to promote smart mobility and the application of new technologies. There is a suggestion for the **provision of AV services in the Lok Ma Chau Loop** (“the Loop”) to **improve the accessibility of the area**.

32. The Administration has advised that the legislative amendments to the Road Traffic (Amendment) (Autonomous Vehicles) Ordinance 2023 and the Road Traffic (Autonomous Vehicles) Regulation (Cap. 374AA) were completed in May 2023 and January 2024 respectively. The new regulatory regime for AVs was implemented in March 2024 to provide flexibility for the industry to test and apply AVs under more complex road conditions. The timing for AV trial and use on public roads in Hong Kong will largely depend on the technical capability of the testing organizations. The Administration has undertaken to convey the views on improving traffic in the Loop to the relevant organizations for consideration.

33. Members have urged the Administration to **formulate a roadmap for taking forward autonomous driving technology** and encourage the industry to invest or participate in the development of the relevant technology. The Administration has advised that the current development of autonomous driving technology in Hong Kong is still at an early stage. It will continue to keep in view the developments in the Mainland and overseas, and encourage the industry to introduce more trials and pilot projects on AVs to map out the way forward for AV development, striving to align Hong Kong’s autonomous driving development with that of other major cities in the Mainland and around the world.

Real-time Adaptive Traffic Signal System

34. Members are concerned about the Administration’s specific policies and targets for **implementing the Real-time Adaptive Traffic Signal System** (“RTATSS”), including **the progress** of the plan for implementing RTATSS in the new development areas (“NDAs”).

Members have also enquired about the number of independent traffic signal junctions in Hong Kong suitable for the implementation of RTATSS.

35. The Administration has advised that TD is arranging pilot installations of RTATSS at interconnected signal-controlled junctions⁸ with higher traffic flow to put related technologies to the test to tie in with the plan of applying RTATSS to some 50 independent signal-controlled intersections across Hong Kong from 2026 onwards. Moreover, when the Government develops NDAs, TD will liaise with the government departments responsible for related infrastructure projects to install RTATSS at suitable signal-controlled intersections concurrently.

Analysis and integration of traffic data

36. Expressing concern about the usage of the traffic data analytics system by the public, members have suggested **optimizing** the functions of “HKeMobility” to provide a more convenient and smoother travel experience to the public. The Administration has advised that the average daily utilization rate of the traffic data analytics system was about 170 000. HKeMobility itself does not have a location-based navigation function but aims to facilitate users in route planning. In the route planning process, HKeMobility will make use of the traffic data from the traffic data analytics system and provide the estimated travel time in real time and in the next 15 to 90 minutes. The Administration will continue to optimize the functions of HKeMobility.

37. Given that different traffic and transport data (including RTATSS, automated parking systems, on-street parking meters, traffic conditions, weather data, traffic enforcement-related information and drone data) are interrelated, some members have suggested that the Administration should **set up a central command centre** to integrate and analyse data from various scenarios to enhance data availability, thereby promoting the development of technologies such as next-generation AI applications. The Administration has taken note of members’ views.

Application of innovative technology in disaster prevention and life-saving

Landslide

38. The Subcommittee has acknowledged the achievements made by the Administration in applying innovative technology in disaster prevention

⁸ Interconnected signal-controlled junctions refer to junctions operating in a co-ordinated fashion with signalized junctions nearby.

and life-saving. Members have suggested that the Administration should **utilize technology and drones in assessing potential landslide risks** and opening up relevant data to the public for reference and taking preventive measures. Relevant data should also be made available to relevant stakeholders to help resolve disputes over the maintenance of private slopes.

39. The Administration has advised that the Civil Engineering and Development Department (“CEDD”) has launched the Digital Aerial Photograph Interpretation System to accurately analyse the data from aerial photographs, with a view to expediting the identification of potentially hazardous natural hillsides. Through the use of drones, CEDD can also grasp the situation of the landslide sites and surrounding environment more efficiently, with a view to assessing post-landslide risks and swiftly formulating the emergency responses and urgent slope repair works. For privately owned slopes, CEDD will require owners to discharge their slope maintenance responsibilities to ensure slope safety.

Encouraging government departments to use technology products

40. Members have suggested that the Innovation, Technology and Industry Bureau should take the initiative to coordinate **the use of diversified technology products** by various departments **in disaster prevention and relief**, such as considering the introduction of mobile command posts, drone technology, etc., so as to enhance search and rescue efficiency. Members have also considered that a platform for city management should be established to facilitate collaboration among departments in technology application.

41. The Administration has advised that the objective of setting up DPO is to drive smart innovation through digital policy and lead B/Ds in accelerating the development of digital government, thereby enhancing efficiency and quality of government services and bringing benefits to the public and businesses. DPO will organize thematic technology forums and exhibitions on a regular basis to introduce AI, disaster emergency response or blockchain technology application solutions to different government departments. In addition, the Government has implemented the TechConnect (block vote) to support technology projects of government departments to enhance operational efficiency and improve public services.

42. Regarding the enhancement of search and rescue efficiency, the Hong Kong Police Force (“HKPF”) has launched the HKSOS Emergency Rescue Mobile Application to assist search and rescue units to

track the location of missing persons as soon as possible when conducting search and rescue operations in the mountains. In addition, HKPF will actively explore the application of various technologies (including mobile command posts and drone technology) to assist and optimize its work. The Fire Services Department (“FSD”) has made use of viewshed analysis technology and AI-assisted Drone Image Analysis Software to estimate and analyse the locations of missing persons in the mountains, so as to enhance the search and rescue capability for hikers.

Smart people

Increasing the supply of talent

43. Members are concerned whether the current **local talent training and talent admission measures** can **adequately meet the development needs of a smart city**, particularly when the I&T industry will face a shortage of talent (especially middle-end talent and low-end talent) in the next five years. Members have urged the Administration to review and strengthen local training measures to effectively meet the challenge of labour shortage in the future.

44. The Administration has advised that it will continue to communicate and collaborate closely with the industries so as to understand the latest situation of Hong Kong’s manpower market and job market. In addition, the Administration endeavours to nurture local young people’s interest in I&T and strengthen the talent base by better integrating education, technology and talent development. It will also work with the Employees Retraining Board (“ERB”) to explore ways to diversify the direction for course development including I&T skills training, in response to the needs of the industries. As regards the admission of talent, the Administration has indicated that the response to the various relevant talent programmes has been favourable.

45. Some members have suggested that the Administration should **provide training on AI for teachers and school management** to enhance their capability in mastering teaching strategies. The Administration has advised that to promote the use of AI-assisted teaching in schools, the Education Bureau launched the “AI for Science Education” Funding Programme at the end of 2024 to promote AI-assisted teaching in junior secondary Science on a pilot basis. Schools will be encouraged to arrange for teachers to participate in professional training and classroom practice so as to enhance students’ learning effectiveness. On the other hand, the Administration will expand exchanges and collaboration with

local, Mainland or international I&T organizations and tertiary institutions to provide professional training for STEAM (Science, Technology, Engineering, Arts and Mathematics) coordinators and teachers.

46. Members have urged the Administration to **formulate a strategy on AI development**, promote the active application of AI by B/Ds and enterprises, and step up efforts in nurturing and attracting talent, so as to further consolidate Hong Kong's competitive edge. The Administration has advised that it has set up the Committee on Education, Technology and Talents by the Chief Secretary for Administration. The Committee will coordinate, among others, the cross-bureaux co-ordination in the work on promoting integrated development of education, technology, and talent, including enhancing various talent schemes and services, and attracting talent in important areas of I&T. Looking ahead, the Hong Kong Park and the Shenzhen Park of the Hetao Co-operation Zone will launch pilot demonstrations of innovative applications in the field of AI technology and accelerate the development of the AI industries, which will be conducive to the training and attraction of IT talent.

Promoting "Smart People" development

47. Members are of the view that apart from enhancing the training of local talent, the Administration should explore **ways to motivate more members of the public to master smart city related applications**. In addition, ERB should provide more programmes to promote continuous learning for all. Members have also suggested that reference should be made to the lifelong learning mode on AI implemented in Singapore to enhance the overall learning effectiveness.

48. The Administration has advised that ERB is undertaking comprehensive reforms to enhance new skills training, including I&T. On the other hand, the Administration expects to promote "Smart People" development through "iAM Smart". As at April 2025, "iAM Smart" has over 3.4 million registered users and connects to more than 1 100 services provided by the Government and public and private organisations, as well as electronic forms from various B/Ds.

49. Some members consider that the Administration should **enhance various digital inclusion measures and step up publicity and education to help the elders better grasp and apply digital technologies** so as to effectively narrow the digital divide. The Administration has advised that DPO has launched a number of "Smart People" initiatives to support the elderly, including the implementation of the "Smart Silver" Digital Inclusion

Programme for Elders, while also providing funding through the Social Innovation and Entrepreneurship Development Fund to support district services organizations in setting up community-based help desks across the territory to provide regular and fixed-point training on digital technologies and technical support for elders. Some implementing organizations also work closely with District Council members and Care Teams to promote the programme in the community, and provide training and support to help elders master digital technologies and integrate into the digitalized smart city.

Digital Accessibility Campaign

50. Members note that the Administration has launched the Digital Accessibility Campaign to promote the adoption of accessibility design by government departments and public and private organizations on their websites and mobile applications for facilitating persons with disabilities to access online information and use online services. Members have urged that **the digital accessibility campaign should be further promoted by making good use of AI technologies** to bridge the digital divide in various public and private services.

51. The Administration has advised that in order to facilitate the elders to browse web information and use online services, DPO released the Elderly-friendly Website/ Mobile Application Design Guide in 2023 to provide recommendations for government departments and industries to reference and encourage them to adopt these designs, so as to meet the needs of the elderly. Meanwhile, DPO has matched technology solutions for government departments through the Smart Government Innovation Lab (“Smart LAB”) to facilitate public services and enhance operational efficiency.

Smart environment

Making good use of technology to enhance environmental management and nature conservation

52. Members have commented that the Administration should **extend the use of effective technologies to more areas of environmental management**, such as the use of the “AI Environmental Air Nuisance Investigation Robot Dog” for pollution monitoring to monitor hygiene black spots in the urban areas, thereby streamlining the manpower required and enhancing monitoring efficiency. The Administration has advised that the Food and Environmental Hygiene Department has adopted a number of technologies in monitoring environmental hygiene, including the use of

video cameras to facilitate law enforcement and the introduction of mechanized and automated technologies. The Administration will continue to work with different government departments to explore more application scenarios for relevant technologies.

53. Members have suggested that the Administration should **consolidate and make good use of environmental data to enhance nature conservation**, such as setting up a database of black spots of illegal hunting of endangered animals and enhancing the relevant monitoring with the use of technology, as well as introducing an AI model to the Hong Kong Environmental Database to enhance accuracy of prediction. The Administration has advised that the Agriculture, Fisheries and Conservation Department had been making use of technology to assist in habitat conservation work, such as setting up a monitoring system for habitat protection and using sensors and cameras to monitor illegal felling of incense trees. The Administration will continue to explore suitable technologies to enhance assistance in environmental protection work in the future.

Enhancing education on waste recovery

54. Members note that the Administration has encouraged more public participation in resource separation and recycling through the provision of various smart recycling facilities and the implementation of the GREEN\$ Electronic Participation Incentive Scheme. Members have suggested that **publicity and education on waste recovery should be stepped up**, and consideration should be given to introducing penalties for improper use of smart recycling facilities. The Administration has advised that members of the public are generally self-disciplined in using the smart recycling facilities, and it will continue to educate the public on waste separation and clean recycling through various activities.

Further development of smart city

Smart City Blueprint for Hong Kong 3.0

55. Members are of the view that the Government should strengthen the overall development planning and top-level design for a smart city, formulate short, medium and long term objectives, improve the relevant legal framework and set up a high-level interdepartmental coordination group to ensure effective implementation of various policies. Pointing out that it has been almost five years since the release of Blueprint 2.0 in 2020, some other members have urged the Administration to **formulate the Smart**

City Blueprint for Hong Kong 3.0 to demonstrate the new directions and initiatives for Hong Kong's future smart city development.

56. The Administration has explained that at present, the Government will prioritize the implementation of the various plans and initiatives under I&T Blueprint and Blueprint 2.0, including the full implementation of the electronic submission of government forms and applications within 2024, the realization of “single portal for online government services” in 2025, the speeding up of the development of digital infrastructure such as AISC, and the building of a more secure cyber environment. In addition, I&T Blueprint sets out a clear development direction and key strategies for Hong Kong's I&T development through top-level design. Among them, “to promote digital economy development and develop Hong Kong into a smart city” is one of the four major development directions proposed in I&T Blueprint, and six specific recommendations have been put forth under this direction. To promote the development of smart city and digital economy, apart from setting up DPO, the Government has been progressively launching 100 digital government and smart city initiatives in 2024 and 2025. It will continue to review and assess the public demand for e-Government services and suitably plan for the future development directions and initiatives.

Promoting the development of low-altitude economy

57. Members have urged the Administration to **expeditiously kickstart local pilot projects on low-altitude economy** (“LAE”) and adopt the latest technology, such as drones, to assist in city management. The Administration has advised that the Working Group on Developing LAE chaired by the Deputy Financial Secretary will formulate development strategies and action plans to promote the development of LAE. The Regulatory Sandbox pilot projects will also be taken forward progressively to foster innovation and facilitate the testing of potential application scenarios for low-altitude flying activities.

Smart City Index

58. A number of members have expressed concern about Hong Kong's ranking in the Smart City Index survey 2024 and urged the Administration to **focus on pursuing improvements in individual fields**, such as facilitating spatial data applications, in taking forward smart city initiatives in the future so as to **enhance the effectiveness of the overall smart city development**. Members have also expressed that publicity and promotion of smart city related services and initiatives, such as

“iAM Smart”, should be stepped up to enhance public awareness and participation.

59. The Administration has advised that in the Smart City Index survey 2024, Hong Kong ranked the 20th out of the 142 cities globally, and 6th among the Asian cities. Overall speaking, Hong Kong received an “A” rating in the “Smart City Rating”, with “AAA” and “BBB” ratings in the “Technologies” and “Structures” pillars respectively. Local residents who participated in the Smart City Index 2024 survey generally considered that Hong Kong performed excellently in the “Technologies” aspects, but they were more concerned about issues such as Hong Kong’s development of green spaces, expansion of cultural activities, provision of affordable housing and the tackling of air pollution. The Government will continue to join hands with relevant B/Ds to further make good use of I&T to improve various aspects of lives, such that our residents can better perceive the benefits brought about by I&T and smart city in their daily lives.

Smart solutions developed by start-ups

60. Members have reflected that many government departments, when trying out technology products, tend to try out products developed with the participation of local quasi-government organizations (e.g. research institutes and universities), while adopting a more conservative attitude towards local I&T companies. Members have suggested that the Administration should proactively **adopt smart solutions and products developed by start-ups**, so as to assist government departments in applying I&T to improve city management, and at the same time help start-ups to develop overseas markets.

61. The Administration has advised that individual government departments have proactively approached local start-ups to explore the adoption of technology for different scenarios and will upload the scenarios onto relevant online platforms (e.g. the Smart LAB website, the E&M InnoPortal) to invite start-ups to provide solutions. Meanwhile, a number of government departments (e.g. FSD and HKPF) have been collaborating with start-ups to apply technology solutions to enhance their operational efficiency, particularly in emergency response and disaster relief. It has also been working with organizations such as the Hong Kong Science and Technology Parks Corporation and the Cyberport to proactively encourage and support the development of start-ups and technology enterprises, and to help them tap into overseas markets.

Coordinating the adoption of technology across government departments

62. Members have pointed out that as technologies and facilities such as drones and Multi-Functional Smart Lampposts will be used by different government departments, the Administration should step up **coordination and planning for cross-departmental technology adoption**, such as the construction of common drone take-off and landing points and the development of a big data sharing platform and AI models, so as to expedite the promotion of technology adoption and avoid duplicated construction. The Administration has responded that it will promote technology adoption through cooperation among different government departments and explore more application scenarios in different policy areas, such as applying “Ground Penetrating Radar” which detects seepage/leakage from underground sewage facilities, to investigate seepage scenarios in buildings.

63. Members have enquired about measures to **facilitate sharing and exchange of data among departments** and suggested optimizing the relevant data sharing platform, such as upgrading the “Common Operational Picture”⁹ to a government-wide cross-bureaux and cross-departmental emergency response system and **interfacing with Guangdong Province’s joint emergency response mechanism to enhance joint prevention and control capabilities**.

64. The Administration has advised that the SAR Government has all along endeavoured to promote the collection and interflow of data among government departments and different sectors and continuously enhanced the government’s central data platforms and services (including Government Cloud Infrastructure Services, Big Data Analytics Platform, Shared Blockchain Platform, “iAM Smart”, CDEG) to support various B/Ds in developing and implementing more data-driven, people-centric, outcome-based and efficient e-government services that bring convenience and benefit to the public and businesses. The Administration has also undertaken to reflect members’ views on the “Common Operational Picture” to the relevant bureaux.

65. Members have suggested that the Administration should **optimize and consolidate the mobile applications of various departments**, in

⁹ The “Common Operational Picture” developed by CEDD is a map-based cloud joint operations platform that can be used by various departments to share emergency information related to natural disasters in real time under severe weather conditions, so as to monitor the city’s situation and assist in assessing the situation and formulating response plans and measures.

particular the “iAM Smart” for accessing different government services. There is also a view that the promotion of “iAM Smart” should be stepped up and concessionary measures should be provided to enhance public utilization rate. The Administration has advised that more new features of “iAM Smart”, including the “Mini-program Platform”, will be rolled out progressively within 2025 to enable the public to access online services of various government departments directly with the mini-programs in “iAM Smart”, without the need to download the mobile applications provided by the departments concerned. In addition, its target is to drive the full adoption of “iAM Smart” by all e-Government services within 2025 to realize “single portal for online government services”.

Visits conducted by the Subcommittee

66. Furthermore, the Subcommittee has conducted four visits regarding the abovementioned policy issues, including:

- (a) visiting the Electrical and Mechanical Services Department on 8 October 2024 to learn about its I&T initiatives to help government departments and public organizations improve their services, as well as the latest progress in promoting smart government;
- (b) visiting Tseung Kwan O Hospital on 25 November 2024 to learn about the latest situation of HA in promoting the development of “Smart Hospital”;
- (c) visiting Fairview Park for autonomous shuttle light buses on 20 January 2025 to learn about the development of “Smart Mobility”; and
- (d) observing a demonstration of “Smart Environment” on 27 May 2025 to learn about the latest technologies adopted by the Administration to monitor environmental pollution.

Recommendations

67. The Subcommittee has recommended the Administration to:

Development of smart city digital infrastructure

- (1) endeavor to enhance the flexibility of data sharing among departments and avoid imposing too many restrictions on the scope of use of personal data when amending the relevant legislation in future (see paragraph 11 above);
- (2) formulate a legal framework to regulate the use of AI technologies to prevent and deter related unlawful acts (see paragraph 17 above);
- (3) made available the generative AI document processing copilot application “HKPilot” for public use (see paragraph 19 above);

Regional cooperation in smart city development

- (4) work in close collaboration with the Mainland cities in GBA to deepen the planning and construction of digital infrastructure to promote the development of a smart city cluster in GBA (see paragraph 21 above);
- (5) embark on the planning of Hong Kong’s “City Brain”, including exploring how to connect and link with the Mainland, and assess the feasibility of sharing spatial data resources among GBA cities to promote interconnection of data (see paragraph 22 above);
- (6) expand the scope of application of CBSD to cover more provincial and municipal government services (see paragraph 23 above);
- (7) explore more cross-boundary smart application scenarios, e.g. providing more convenient services in areas such as tourism (see paragraph 25 above);
- (8) extend the cross-boundary function of eHealth to the Residential Care Services Scheme in Guangdong and discuss with the Health Commission of Guangdong Province on enhancing cooperation in cross-boundary medical services (see paragraph 26 above);

Smart health

- (9) integrate the functions of eHealth and HA Go mobile application and encourage private HCPs to upload patients' eHRs to eHealth (see paragraph 28 above);
- (10) expand the application of AI technologies in healthcare and hospital services to alleviate the shortage of doctors, and enhance the efficiency and quality of medical services (see paragraph 30 above);

Smart mobility

- (11) introduce AV services in the Loop to enhance the accessibility of the area (see paragraph 31 above);
- (12) formulate a roadmap for the development of autonomous driving technology and encourage the industry to invest or participate in the R&D of the relevant technology (see paragraph 33 above);
- (13) continue to optimize the functions of “HKeMobility” to provide a more convenient and smoother travel experience to the public (see paragraph 36 above);
- (14) set up a central command centre to integrate and analyse various types of traffic and transport data to promote the innovative development of the next-generation AI and related technologies (see paragraph 37 above);

Application of innovative technology in disaster prevention and life-saving

- (15) make effective use of technology and drones in assessing potential landslide risks and open up relevant information to facilitate the public to understand the situation and take appropriate preventive measures (see paragraph 38 above);
- (16) actively coordinate the use of diversified technology products by relevant departments in disaster prevention and relief to enhance search and rescue efficiency (see paragraph 40 above);

Smart people

- (17) review and optimize the mechanism for training local I&T talent to meet the manpower needs for smart city development (see paragraph 43 above);
- (18) launch AI training for teachers and school management to enhance their professional competency in the design and application of teaching strategies (see paragraph 45 above);
- (19) formulate a comprehensive AI development strategy, facilitate active adoption of AI technologies by B/Ds and enterprises, and deepen the mechanism for nurturing and attracting talent to strengthen Hong Kong's competitive edge (see paragraph 46 above);
- (20) draw on the lifelong learning mode on AI implemented in Singapore to enhance the overall learning effectiveness, as well as enhance various digital inclusion measures and step up publicity and education to help the elders better master and apply digital technologies (see paragraphs 47 and 49 above);
- (21) deepen the Digital Accessibility Campaign by proactively applying AI technology to bridge the digital divide in different public and private services (see paragraph 50 above);

Smart environment

- (22) consolidate and make good use of environmental data, including the introduction of an AI model to the Hong Kong Environmental Database to enhance accuracy and application value of prediction (see paragraph 53 above);
- (23) step up publicity and education on waste recovery and assess the feasibility of introducing penalties for improper use of smart recycling facilities (see paragraph 54 above);

Further development of smart city

- (24) formulate the Smart City Blueprint for Hong Kong 3.0 to promote the implementation of new directions and innovative

initiatives for developing smart city in Hong Kong (see paragraph 55 above);

- (25) expedite the implementation of local pilot projects on LAE and enhance the efficiency of city management through the adoption of the latest technology, such as drones (see paragraph 57 above);
- (26) focus on and improve individual smart city fields such as spatial data applications to enhance the effectiveness of the overall smart city development (see paragraph 58 above);
- (27) actively introduce smart solutions and products developed by local start-ups, and promote the use of I&T in government departments to enhance city management (see paragraph 60 above);
- (28) optimize the data sharing platform and interface with the Mainland's emergency response mechanism to enhance regional emergency response and collaboration capabilities (see paragraph 63 above); and
- (29) step up coordination and planning of cross-departmental technology adoption, such as optimizing "iAM Smart" to integrate the mobile applications of different government departments so as to enable the public to access the online services of government departments through "iAM Smart" (see paragraphs 62 and 65 above).

Advice Sought

68. The Subcommittee has concluded its work. The House Committee is invited to note the Subcommittee's deliberations and recommendations.

Council Business Divisions
Legislative Council Secretariat
25 June 2025

**Subcommittee on Matters Relating to the Development of
Smart City**

Terms of reference

To review the implementation of the Smart City Blueprint for Hong Kong and Smart City Blueprint for Hong Kong 2.0, and make recommendations on issues relating to the promotion of Hong Kong's development into a smart city.

**Subcommittee on Matters Relating to the Development of
Smart City**

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