

# Office of the Government Chief Information Officer The Government of the

Hong Kong Special Administrative Region of the People's Republic of China





### Vision

Sustain Hong Kong's position as Asia's leading digital city.

#### Mission

- Deliver efficient, secure and citizen-oriented e-Government Services.
- Nurture and develop Information and Communications Technology (ICT) talents and professionalism in Hong Kong.
- Develop a vibrant ICT industry, promoting high-tier data centres, cloud computing services, big data and cyber security awareness.
- Develop Hong Kong into a world-class smart city.
- Promote a digitally inclusive, knowledge-based society.

## **Organisation Structure**

Headed by the Government Chief Information Officer, the Office of the Government Chief Information Officer (OGCIO) is responsible for formulating information technology (IT) strategies, programmes and measures, in addition to providing IT services and support within the Government.

OGCIO has some 600 civil service staff and is responsible for the career development of around 1,900 government IT professionals working in different government bureaux and departments (including OGCIO).

These government IT professionals are responsible for assuring the quality of government IT activities, particularly in developing and aligning IT strategy with business and policy objectives and in designing and delivering IT-enabled business change projects that enable timely delivery of policy goals. In addition, around 4,400 contract IT staff are engaged to supplement the government IT workforce.

# Functions of OGCIO

### (i) Facilitating a digital economy

We facilitate the development of a digital economy through –

 Legal Framework for the Conduct of Secure Electronic Transactions in Hong Kong – The Electronic Transactions Ordinance (Cap. 553) ("ETO") accords electronic records and electronic signatures the same legal status as that of their paper-based counterparts in the conduct of electronic transactions.



 Internet Domain Name Administration Regime – The Hong Kong Internet Registration Corporation Limited (HKIRC) is a non-profit making company and designated to manage and administer the ".hk" country-code top level domains for Hong Kong.



 Fostering IT Learning Atmosphere among the School Community – OGCIO launched the IT Innovation Lab in Secondary Schools Programme in the 2020/21 school year for three years to provide funding support up to \$1 million to each publicly funded secondary school for organising IT-related extra-curricular activities and procuring necessary IT equipment and related professional services to support the activities, which aims to cultivate young people's interest in IT, enhance their innovative thinking and foster an IT learning atmosphere, thereby promoting local popular science education and expanding the supply of I&T talent to meet the needs of a technology-driven society. From the 2021/22 school year, we extended the programme to primary schools by implementing a three-year "Knowing More About IT" Programme. Subsidy of up to \$400,000 will be provided to each publicly funded primary school for organising extra-curricular activities to enhance primary school students' interests, knowledge in and application of information technology and prepare them for integration into the knowledge-based economy and participation in the development of a digital society in the future. In view of the very positive responses from schools, we have allocated an additional funding of \$300 million to extend the "IT Innovation Lab in Secondary Schools" programme and continue the provision of funding support up to \$1 million to each publicly-funded secondary school for organising IT-related extra-curricular activities for three school years from 2023/24 to 2025/26.

Smart City Development – The Government published the Smart City Blueprint for Hong Kong (the Blueprint) in December 2017, providing a clear and concrete direction for the smart city development in Hong Kong. Subsequently, the Blueprint 2.0 was released in December 2020, putting forth over 130 initiatives which enhance and expand existing city management measures and services. It has also included new chapters on "Use of I&T in Combating COVID-19" and "Smart Village Pilots". The Blueprint 2.0 is available at the dedicated smart city portal (www.smartcity.gov.hk).

"Smart Village Pilots" would explore the use of I&T in addressing the daily life issues faced by residents living in rural and more remote areas. OGCIO has already been providing free Wi-Fi service at over 150 village premises (e.g. village offices) to facilitate the provision of other smart village pilot initiatives.

- Development of digital infrastructure in supporting the Smart City Blueprint, namely "iAM Smart", Pilot Multi-functional Smart Lampposts Scheme and Next Generation Government Cloud Infrastructure Services and Big Data Analytics Platform.
  - "iAM Smart" OGCIO launched the "iAM Smart" Platform in December 2020 for provision of one-stop personalised digital services. As of January 2024, over 2.5 million users have registered for "iAM Smart" and they could access over 300 government, public and private digital services conveniently with a single digital identity. We are now upgrading "iAM Smart" comprehensively in supporting the fully adoption of "iAM Smart" by e-government services to provide one-stop digital services in 2025, so as to realise "single portal for online government services". We will enhance the services of "iAM Smart" to optimise the user experience, to organise, categorise and integrate the existing online services more

systematically, as well as to develop more services that are convenient and beneficial to the public. The wider use of "iAM Smart" will further promote Smart Government and the digital transformation of the whole society.



Multi-functional Smart Lampposts - The smart lampposts with smart devices provide convenient data services and collect various real-time city data, enhance city and traffic complement management, and the infrastructure development for the fifth generation (5G) mobile communications services in Hong Kong. Over 400 smart lampposts have been put into operation in four selected districts in the territory with higher pedestrian flow, including Kwun Tong District, Kowloon City District, Kai Tak Development Area, Sai Kung District, Yau Tsim Mong District, Wan Chai District and Central & Western District. Please visit the smart lampposts thematic website (smartlamppost.ogcio.gov.hk) for details. We will continue to install smart lampposts in all new development areas (including the Northern Metropolis).



 Government Cloud Infrastructure Services and Big Data Analytics Platform – OGCIO has modernised the existing government cloud infrastructures and adopted a new application architecture. Through this new platform, bureaux and departments can expedite the development and delivery of digital government services, including the big data analytics and artificial intelligence (AI) applications. The Government Cloud Infrastructure Services and Big Data Analytics Platform started operating in September 2020. "Smart City" roving exhibition - To enable citizens to experience how various smart city initiatives can bring convenience and benefits to their daily lives through the adoption of technology, "Smart City" roving exhibitions were held quarterly from August 2022 to June 2023 in shopping malls across all 18 districts, with different themes for each quarter and attracted over 78,000 visits.



## (ii) Developing Hong Kong as a hub for innovation and technology

We support ICT start-ups, nurture talents and facilitate ICT industry development through –

 Smart Government Innovation Lab – OGCIO set up a Smart Government Innovation Lab in April 2019 to promote pro-innovation government procurement policy and expedite bureaux and departments' adoption of innovative IT products and solutions, thereby improving public services and creating more business opportunities for local start-ups and SMEs. Please visit the thematic website (www.smartlab.gov.hk) for details.



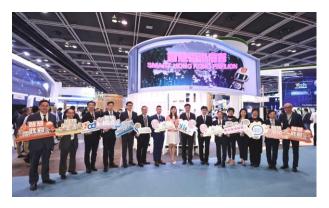
Collaboration with the Mainland - OGCIO takes active facilitate exchange steps to and collaboration between the ICT industries of Hong Kong and the Mainland. We have been leading local ICT delegations to visit the Mainland to explore collaboration and business opportunities, taking advantage of Mainland's implementation of the strategic "Internet+", "Belt and Road" and "Digital Economy" initiatives. We regularly take part in major ICT exhibitions in the Mainland providing opportunities for local ICT companies, especially SMEs, to showcase their innovative products and services and to tap into the Mainland market.

The Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) and the National 14th Five-Year Plan were announced in February 2019 and March 2021 respectively. OGCIO will continue to actively support the national strategies in the high-quality development of GBA, and participate in key innovation and technology projects which include developing an international Innovation and Technology Hub and expediting Infrastructural Connectivity, building smart city clusters and a

GBA big data centre, promoting the use on mutual recognition of electronic signature certificates and enhancing the level of cyber security protection, etc.

The Hong Kong/Guangdong Expert Group on Co-operation in Informatisation was set up to strengthen co-operation in promoting the development and adoption of new generation digital technologies such as 5G, big data, artificial intelligence in both places, as well as deepening the collaboration between the two governments and facilitating the exchanges among the industry, academia and research sectors of the two places. The Hong Kong/Guangdong Expert Group on Co-developing a Smart City Cluster was also set up to expedite the development of digital economy and smart city, and jointly promote the development of a Guangdong-Hong Kong smart city cluster. OGCIO has put in place the mutual recognition scheme of electronic signature certificates between Hong Kong and Guangdong which helps enhance security and reliability of cross-boundary e-commerce.

Smart Hong Kong Pavilion - OGCIO set up the Pavilion at the InnoEX on 13-16 April 2024 to showcase over 100 technology solutions that are closely related to people's daily lives, including innovative solutions from various government departments and award-winning entries from local I&T sector and students, showing the fruitful achievements in developing I&T and smart city in Hong Kong by the concerted efforts of various sectors. Please visit the website (www.smartlab.gov.hk/en/highlights/smarthkpavilio n.html) for details.



Digital Economy Summit (DES) - Inaugurated in 2016, DES is an annual signature event to promote Hong Kong as the region's digital economic hub. The DES 2023 held in April 2023 was concluded with resounding success attracting over 4,000 participants from over 40 countries/regions to unveil global and regional visions on how smart city technologies would supercharge smart economies as well as accelerate the formation of futureproof societies. Themed digital on "Smarter Technovation for All: Forging a Sustainable Future", the DES 2024 will be held on 12-13 April 2024 to exchange insights on how the exponential growth of smart city innovations will benefit the future sustainable societies, as well as how businesses and societies can engage in smart city development to spearhead growth and

transformation in the era of digital economy. Please visit the thematic website (www.digitaleconomysummit.hk/) for details.



"Innovative Application with AI" Innovation Competition - With a view to promoting the adoption of AI by government departments for enhancing public services, OGCIO launched the innovation competition in 2023 and invited government personnel to join the competition. Smart Lab organised a series of thematic seminars, workshops and technology forums to strengthen the knowledge of AI amongst government personnel and spur their creativity. Smart Lab also matched the 10 shortlisted competition proposals with technology solutions from the industry players (including local start-ups) and arranged proof-of-concept. All winners were selected in March 2024. Winning proposals may be implemented in relevant departments to improve public services. Please visit the thematic website (https://www.smartlab.gov.hk/en/competition) for details.



China" "Maker in SME Innovation and Entrepreneurship Global Contest - Since 2019, OGCIO has been collaborating with the Ministry of Industry and Information Technology of the People's Republic of China and the Liaison Office of the Central People's Government in the HKSAR in organising the Hong Kong Chapter of the national global contest - "Maker in China" SME Innovation and Entrepreneurship Global Contest (www.smeiegc.hk) facilitate to better understanding of local innovative technology products and solutions among Mainland investors and enterprises. It also facilitates local technology SMEs to set up their business networks in the GBA and the Mainland. In its 2023 edition, a total of 148 innovation and technology teams signed up for the Hong Kong Chapter. The final competition was held on 13 September 2023.



 Hong Kong ICT Awards – OGCIO has been collaborating with the local ICT industry in organising the Awards annually since 2006 to recognise outstanding achievements and to showcase Hong Kong's ICT innovation and successes. In its 2023 edition, the Hong Kong ICT Awards has received 1,313 entries under eight categories of the Awards. The Awards Presentation Ceremony was held on 3 November 2023. Please visit the thematic website (www.hkictawards.hk) for details.



Asia Pacific Information and Communications Technology Alliance (APICTA) Awards – Jointly organised by OGCIO and the Hong Kong Computer Society, the APICTA Awards 2023 was hosted in Hong Kong on 5-8 December 2023 for the third time after 2004 and 2013. APICTA 2023 brought together over 600 leaders and elites of the ICT industry from across the Asia Pacific region, with Hong Kong teams winning a record-breaking total of 20 awards among over 250 entries, ranking first among the 16 participating economies. Please visit the thematic website (apicta2023.hk/) for details.



Data Centres - OGCIO champions initiatives and measures to develop Hong Kong as a prime location for high-tier data centres in the region. The Centre Facilitation Data Unit (www.datacentre.gov.hk) established under OGCIO provides information and one-stop support to assist enterprises interested in setting up data centres in Hong Kong, including conversion of existing industrial buildings and industrial lots for data centre use, and working with government departments on measures, to facilitate the setting up of data centres taking into account their unique mode of operation.



- Wi-Fi Connected City OGCIO has been promoting free public Wi-Fi services which are offered by public and private organisations under the common Wi-Fi brand "Wi-Fi.HK" since 2014. There are currently around 45,000 hotspots under the "Wi-Fi.HK" brand.
- Cyber Security Through various means such as Cyber Security Information Portal (www.cybersecurity.hk), social media, seminars and school visits, OGCIO collaborates with key partners including the Hong Kong Computer **Emergency Response Team Coordination Centre** (HKCERT), Hong Kong Police Force, Hong Kong Internet Registration Corporation Limited (HKIRC) and professional bodies to provide businesses (in particular SMEs), organisations, students and general users with the latest information on cyber threats, professional advice on preventive and recovery measures, and technical assistance (e.g. web scanning) to mitigate security risks.



In addition, OGCIO partners with HKIRC to run a public-private partnership programme underpinned by a collaborative platform (<u>www.cybersechub.hk</u>) and professional exchange activities to promote cross-sector sharing of cyber security information, best practices and experiences. The programme raises the community's awareness of cyber security, strengthens alert capability, promotes collaboration and ultimately helps the community as a whole meet the challenges of cyber attacks.



Facilitating Cross-boundary Data Flow within the Greater Bay Area - The facilitation measure on "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 announced in December 2023 with a view to streamlining the arrangements on cross-boundary flow of personal information from the Mainland cities in the GBA to Hong Kong. Adoption of the GBA Standard Contract is on a voluntary basis and it will benefit the public and businesses of different sectors in providing more convenient cross-boundary services in the GBA. lt also promotes the development of the GBA's digital economy and helps Hong Kong better integrating into the national development. Meanwhile, the processing and export of personal data from Hong Kong will continue to be regulated in accordance with the Personal Data (Privacy) Ordinance of Hong Kong.

#### (iii) Development of the next generation of e-government services

We facilitate service transformation in both the public and private sectors through -

 GovHK – GovHK (<u>www.gov.hk</u>) provides a one-stop portal of government information and e-services and an account-based platform – MyGovHK to provide single access to an array of personalised e-government services. The GovHK Chatbot (Bonny) was launched in the GovHK portal in December 2019. It makes use of Artificial Intelligence technology to interact with users by text to assist them in searching for government forms and related e-government services.



- Open Data OGCIO launched the revamped DATA.GOV.HK portal (<u>data.gov.hk</u>) in December 2017 to release government open data free of charge in digital machine readable format, with a view to tapping creativity and wisdom of the community in developing more innovative applications with open data, thereby bringing about convenience to the citizens and business opportunities to the industry. Regarding spatial data, the Development Bureau launched the Common Spatial Data Infrastructure portal (<u>portal.csdi.gov.hk</u>) in December 2022 for free use by the public.
- IT Strategy OGCIO formulates government-wide IT strategy and actively facilitates government

bureaux and departments to plan and execute their IT-enabled change initiatives in a more agile, cost-effective and joined-up manner by adopting cloud computing and other emerging technologies. These initiatives include:

- Electronic Information Management The government-wide electronic information management strategy embraces content management, records management and knowledge management. OGCIO. in collaboration with Government Records Service and Efficiency Office, is deploying a central Electronic Recordkeeping System (ERKS) to support full implementation of ERKS in the Government to enhance efficiency in preserving and managing government records.
- Electronic Procurement OGCIO is rolling out its cloud-enabled electronic procurement service to government bureaux and departments to enhance procurement efficiency. Suppliers also reap the benefits of shorter transaction turnaround time and greater business opportunity.
- Government Human Resources Management Services (GovHRMS) – Providing common IT services to facilitate human resources management activities of staff members as well as strategic manpower planning and human resources management decision making in Government. OGCIO monitors the development and implementation of the GovHRMS.
- Government Electronic Communications Infrastructure – OGCIO establishes and maintains an advanced and secure electronic communications infrastructure for effective and efficient communications and collaboration in government operations and delivery of public services.
- Information Security OGCIO implements and regularly reviews the "Government IT Security Policy and Guidelines" to ensure that they are in pace with technology advancement and international best practices. The latest versions of the policy and guidelines are available on government websites for public reference. OGCIO also enforces compliance by government bureaux and departments with the security requirements. GovCERT.HK (www.govcert.gov.hk) run by OGCIO is dedicated to coordinating and managing information security incident response for government bureaux and departments. It also collaborates with other CERTs locally and globally to assist public/private sectors and individuals in protecting their information and digital assets.

#### (iv) Fostering a digital inclusive society

We seek to narrow the digital divide through implementation of the following –

 Web/Mobile App Accessibility Campaign – To facilitate access to online information and services by everyone including persons with disabilities, OGCIO has been implementing a Web/Mobile App Accessibility Campaign since 2011 through a multi-pronged strategy ranging from Government leadership, fostering awareness, promulgating guidelines and tips, nurturing expertise and organising recognition scheme to encourage adoption of accessibility design. Since 2018, HKIRC has become the organiser of the Digital Accessibility Recognition Scheme (formerly known as the Web Accessibility Recognition Scheme).

Encouraging ICT Adoption among Elderly -OGCIO has been conducting the ICT Outreach Programme for the Elderly since 2014 to help institutionalised and hidden elderly, and elderly receiving day care services and home care services experience how ICT can spice up their lives. An Enriched ICT Training Programme for the Elderly was introduced in 2019 for elderly persons with basic ICT knowledge to learn about the adoption of digital technology in their daily living and serve as trainers to help more elderly people acquire technology knowledge. A web-based learning portal was launched in the same year to help the elderly acquire digital skills, so that they can benefit from the advancement in digital technology in their daily living. From the end of 2021 to early 2023, mobile outreach service stations have been set up at various community locations under a pilot scheme to proactively introduce useful mobile applications to elderly people and answer their questions on the use of smartphones. In light of the good response, we continue to organise mobile outreach service activities at all districts in Hong Kong from the 3rd quarter of 2023, with a view to further promoting digital inclusion.



# **Facts and Figures**

To keep Hong Kong at the forefront of ICT development, OGCIO has implemented various measures to create the right environment, infrastructure, skills and culture for developing and adopting ICT, as reflected in –

- Hong Kong has a robust telecommunications network, with eight submarine cable landing stations connecting to twelve regional and trans-Pacific submarine cable systems;
- Hong Kong's median download speed over fixed broadband at 198.53 Mbps is among the fastest in the world (February 2023);
- Many participants from Mainland China, Taiwan, Korea, Japan, Singapore and other Asian economies join the Internet exchange service with direct connection with Hong Kong. Hong Kong's household broadband penetration rate reached 97.8 per cent, among the highest in Asia (September 2023);
- Hong Kong's mobile subscriber penetration rate reached 311.8 per cent, one of the highest in the world (September 2023);
- The penetration of public Wi-Fi is among the highest in the world with 86,796 wireless hotspots installed by the Government and the private sector (November 2023);
- The DATA.GOV.HK portal currently provides over 5,300 unique machine-readable datasets under 19 open data categories and 2,200 Application Programming Interfaces;
- The Common Spatial Data Infrastructure portal is currently for free use by the public. Over 840 spatial datasets from more than 50 government departments have now been made available through the portal. The datasets are also wide-ranging, covering different aspects such as planning, lands, buildings, works, population, transport, etc.
- There are about 60 colocation data centres in Hong Kong, with an estimated total data centre floor space of about 970,000 square metres.