**Office of the Government Chief Information Officer
The Government of the
Hong Kong Special Administrative Region**

HONG KONG
ASIA'S WORLD CITY

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

Mission
- Deliver effective, secure and citizen-oriented e-Government Services, meeting rising public expectations.
- Nurture and develop Information and Communications Technology (ICT) talents in Hong Kong, enhancing competency and professionalism.
- 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.

Establishment
The Office of the Government Chief Information Officer (OGCIO) was set up on 1 July 2004. The establishment of the OGCIO provides a streamlined government structure and leadership for delivering the ICT functions within the Government and enables the Government to take a proactive, leading role in championing ICT development in the community.

Organisation Structure
Headed by Government Chief Information Officer (GCIO), 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 1,600 government IT professionals working in different government bureaux and departments.

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 3,000 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 —

- Driving E-business – Providing the necessary infrastructure for Hong Kong's digital economy to flourish.

- 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. The Postmaster General is a recognised certification authority by virtue of the ETO and offers Hongkong Post Certification Authority services.

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

- Enriched IT Programme in Secondary Schools – OGCIO is implementing an eight-year Enriched IT Programme in secondary schools from the 2015/16 school year with an aim to nurture young IT talents to meet future development needs. Through collaboration among secondary schools, tertiary institutions, industry and the Government, eight partner secondary schools have established enriched IT classes to provide intensive IT training to students (from secondary two to secondary six) who are interested and talented in IT. The Programme also supports secondary schools to organise IT activities every year to foster a pro-IT atmosphere and stimulate interest in IT in the school community.

- Smart City Development – The Government published the Smart City Blueprint for Hong Kong ("the Blueprint") in December 2017, outlining the Government's vision and mission to build Hong Kong into a world-class smart city. The Blueprint maps out development plans up to 2022 and beyond, covering six major areas, namely "Smart Mobility", "Smart Living", "Smart Environment", "Smart People", "Smart Government" and "Smart Economy", and providing a clear and concrete direction for the smart city development in Hong Kong. The Blueprint is available at the dedicated smart city portal (www.smartcity.gov.hk).

- Development of three digital infrastructure in supporting Smart City Blueprint: eID, Pilot Multi-functional Smart Lampposts Scheme and Next Generation GovCloud and Big Data Analytics Platform.

  - eID – OGCIO will set up a one-stop online eID system to provide an eID for all Hong Kong residents free of charge on a voluntary basis, enabling them to use a single digital identity and authentication method to conduct government and commercial online transactions. This will foster the development of a new economic service model that emphasises direct interface with residents and consumers. The eID system is expected to commence operation by mid-2020.

  - Pilot Multi-functional Smart Lampposts Scheme – We plan to implement a pilot scheme of replacing some existing 400 lampposts with smart lampposts in four selected districts in the territory with higher pedestrian flow, including Central / Admiralty, Causeway Bay / Wan Chai, Tsim Sha Tsui and Kwun Tong / the Kai Tak Development Area. The three-year pilot scheme is expected to install smart devices in the smart lampposts to provide convenient data services and collect various real-time city data, enhance city and traffic management, and complement the future infrastructure development for fifth generation (5G) mobile communications services in Hong Kong.

  - Next Generation GovCloud and Big Data Analytics Platform – To support the development of digital government, OGCIO will modernise the existing government cloud infrastructures and adopt a new application architecture. Through implementing this new platform, bureaux and departments can expedite the development and delivery of digital government services, including the big data analytics and artificial intelligence applications. The Next Generation GovCloud platform will go live in the third quarter of 2020.

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

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

- Outsourcing Policy – OGCIO facilitates the Government to adopt an outsourcing policy for its IT projects through establishing and managing procurement arrangements.

- Collaboration with the Mainland – OGCIO takes active steps to facilitate exchange 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 "Made in China 2025" 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.

  We collaborate closely with Guangdong Province with the establishment of the Hong Kong/Guangdong Expert Group on Co-operation in Informatisation. We have 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 between the two places. The Hong Kong/Guangdong ICT Expert Committee has been set up to strengthen co-operation of the two places in promoting the development and adoption of cloud computing, big data, Internet of Things, smart city and other technologies. The Committee will also work on formulation of standards in the said technical areas that are applicable to both places. In 2016, Hong Kong joined the Cloud Computing Working Group of the National Information Technology Standardisation Committee to participate in formulation of the "Cloud Service Purchase Guideline".

  To promote further development of the local ICT industry, we have stepped up efforts to attract Mainland ICT companies to set up research and development (R&D) facilities in Hong Kong. Such R&D facilities will help enhance technological capabilities of the local ICT ecosystem, as well as to create employment opportunities for the local ICT work force.

- Internet Economy Summit (IES) – IES is an annual signature event to provide a platform for Mainland and international ICT visionaries and business leaders to share their insights on the development of Internet Economy, and promoting Hong Kong as a bridge connecting the Mainland and international markets. The third IES was held on 12-13 April 2018, attracted more than 2,000 industry leaders joining the forums and 600 secondary and tertiary students joining the youth events.

- Hong Kong ICT Awards – OGCIO has been collaborating with the local ICT industry in organising the Awards since 2006 to recognise outstanding achievements and to showcase Hong Kong's ICT innovation and successes. In its 2018 edition, the Hong Kong ICT Awards has received more than 1,100 entries under eight categories of awards.

- Data Centres – OGCIO champions initiatives and measures to develop Hong Kong as a prime location for high-tier data centres in the region. The Data Centre Facilitation Unit 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 works 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 – To make it easier for the public and visitors to access free Wi-Fi services in Hong Kong, OGCIO has been collaborating with the industry to promote public Wi-Fi services which are offered by the public and private organisations completely free of charge or free for a certain period of time under the common Wi-Fi brand "Wi-Fi.HK" since 2014. There are currently over 22,500 hotspots under Wi-Fi.HK. Different measures are being taken to continue to increase the number of free Wi-Fi hotspots across the territory through the Wi-Fi Connected City programme.


- Cyber Security – OGCIO collaborates with key partners through various means such as the Cyber Security Information Portal (www.cybersecurity.hk) and school visits in order to provide general users, SMEs and students with practical advice and step-by-step guidelines for them to conduct health check on computers, mobile devices and websites, as well as tips and techniques to guard against cyber attacks.

Through the Hong Kong Computer Emergency Response Team Coordination Centre (HKCERT), businesses, organisations, and individuals receive the latest information security threat information, professional advice on preventive measures and recovery, and technical assistance to meet the challenges of cyber attacks.

- Cyber Security Information Sharing – Through public-private-partnership, OGCIO aims to promote cross-sector sharing of cyber security information, establish information sharing and collaboration platform (www.cybersechub.hk), and organise cyber security exchange activities in order to raise the industry's and the general public's situational awareness of cyber security, strengthen collaboration and early alert capability, join efforts to deal with cyber attacks, and help the community as a whole reduce security risks.
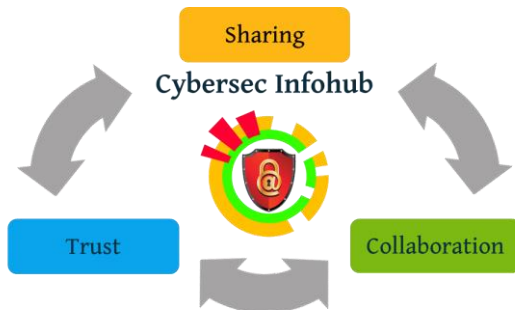
(iii) Development of the next generation of e-government services

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

- GovHK – GovHK (https://www.gov.hk), the one-stop portal of government information and e-services, was launched in 2007, followed by its account-based platform – MyGovHK in 2010, to provide single access to an array of personalised e-government services. The GovHK portal was revamped in November 2016 with responsive web design to enhance user experience and meet the increasing demand of the public for mobile services.
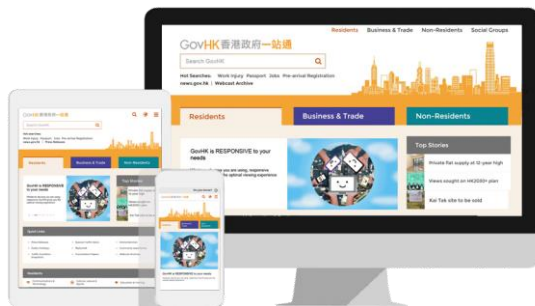

- data.gov.hk – OGCIO launched the revamped Public Sector Information (PSI) portal in December 2017 to make government information already released online and free of charge for public consumption available in digital format with new and enhanced functions such as visualisation of multiple datasets on a map, with a view to tapping creativity and wisdom of the community in developing innovative applications with PSI, thereby bringing about convenience to the citizens and business opportunities to the industry. The portal currently provides over 3,200 unique datasets under 18 broad categories and 1,200 Application Programming Interfaces.

- Electronic Health Records – OGCIO provides advice to the Food and Health Bureau on the development of a territory-wide patient-oriented electronic health record (eHR) sharing system which has been launched in March 2016.

- Mobile E-government Services – As of September 2018, there were 96 government mobile applications and 165 government mobile websites. OGCIO facilitates the implementation of mobile e-government services through providing support to Government departments and developing mobile applications commonly used by them for public services.

- IT Strategy – OGCIO formulates government-wide IT strategy and advises government bureaux and departments in their formulation of departmental IT strategy addressing the policy objectives. We facilitate 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 – In line with the government-wide electronic information management strategy that embraces content management, records management and knowledge management, OGCIO is implementing common shared services such as electronic recordkeeping and collaborative workspace on cloud platform for adoption by government bureaux and departments.

  - Electronic Procurement – OGCIO is rolling out its cloud-enabled electronic procurement service to government bureaux and departments to enhance efficiency from the automated and integrated procurement processes. Suppliers also reap the benefits of shorter transaction turnaround time and greater business opportunity.

  - Government Cloud Platform – Leveraging on this Cloud platform, OGCIO continues with the further development and provision of common e-government services in an agile way to meet the rising public expectations and citizen's demand for quality e-government services.
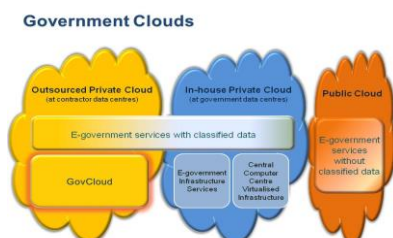
- Government Human Resources Management Services (GovHRMS) – Providing common IT services to facilitate human resources management activities of staff members as well as strategic manpower planning and human resources management decision making in Government. OGCIO monitors the development and implementation of the GovHRMS.

- Government Data Centre Service Arrangements – OGCIO will build a government data centre complex that consolidates some of the existing government data centres, leading to better economy of scale, cost effectiveness as well as greener management in the overall government data centre operations.

- 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 keeps the "Government IT Security Policy and Guidelines" in pace with technology advancement and international best practices and enforces compliance by government bureaux and departments.

- GovCERT.HK – OGCIO runs a dedicated governmental computer emergency response team, GovCERT.HK (www.govcert.gov.hk) to coordinate and manage information security incident response for government bureaux and departments. GovCERT.HK 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 —

- Internet Learning Support Programme – OGCIO launched the Internet Learning Support Programme "i Learn at home" in 2011 to assist students from low-income families to undertake web-based learning at home. The Programme helps eligible families procure economical Internet access services and suitable computer equipment, and provides the students and their parents with free training and user support. As at May 2018, over 149,000 families had participated in the Programme and received over 477,000 services. The Programme ends in end-August 2018. Relevant government departments and non-profit-making organisations will continue to support needy students in undertaking Internet learning through various means.

- Digital Inclusion Mobile Apps – Since 2012, we have been providing funding to support social service organisations to develop 17 mobile apps for persons with special needs, including persons with disabilities, ethnic minorities, elderly, children with special learning difficulties, etc. The Government will continue to provide funding support to develop more mobile apps for the underprivileged under the Innovation and Technology Fund for Better Living.

- 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. In 2018, HKIRC is the organiser of the new round of Web Accessibility Recognition Scheme, while OGCIO co-organises the scheme.

- Encouraging ICT Adoption among Elderly – OGCIO has organised three rounds of the ICT Outreach Programme for 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 life and facilitate an active and healthy ageing. In the latest round launched in November 2017, services are extended to cover elderly people with dementia.

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 eleven regional and trans-Pacific submarine cable systems;

- More than 98% of intra-HK Internet traffic stay within Hong Kong. Hong Kong's average peak Internet connection speed at 129.5 Mbps and average Internet connection speed at 21.9 Mbps are among the fastest in the world (1st Quarter, 2017);

- Many participants from Mainland China, Taiwan, Korea, Japan, Singapore and other Asian countries join the Internet exchange service with direct connection with Hong Kong. Hong Kong's household broadband penetration rate reached 92.8 per cent, among the highest in Asia (May 2018);

- Hong Kong's mobile subscription rate reached 248.2 per cent, one of the highest in the world (March 2018);

- The penetration of public Wi-Fi is among the highest in the world with 56,577 wireless hotspots installed by the Government and the private sector (August 2018);

- Hong Kong is the most suitable location in Asia Pacific for setting up new data centre according to Asia Pacific Datacenter Index published by International Data Corporation in 2014; and

- Over 19 hectares of land in Industrial Estates have been granted for data centre development and the Tseung Kwan O Industrial Estate is currently housing a total of 11 high-tier data centres.