For discussion on
10 December 2018

Legislative Council Panel
on Information Technology and Broadcasting

Open Data Policy

Purpose

This paper updates Members on the new open data policy and implementation measures.

Background

Open Data

2. Open data provides raw materials for technology research and city innovation, facilitating the development of digital economy and smart city. Experience and various researches in other countries and cities indicate that opening up government data can bring benefits to the public and the society as a whole. The industry (including start-ups) can make use of the data opened up by the government to develop more applications and enhance quality of services, thereby providing the public with greater convenience and more innovative products and services.

3. The Chief Executive announced in her 2017 Policy Address that the Government would step up its efforts in eight major areas of work for innovation and technology development, including opening up government data. The Government also released the Hong Kong Smart City Blueprint in December 2017, which includes, as one of the measures under Smart Government, promoting the opening up of more data of the public and private organisations in digital formats.

Public Sector Information Portal

4. The Office of the Government Chief Information Officer ("OGCIO") set up the one-stop Public Sector Information ("PSI") Portal (data.gov.hk) in 2011.

Currently, over 3 300 datasets under 18 categories from 51 government bureaux and departments ("B/Ds") and 9 public and private organisations[1] are available on the PSI Portal for free use by the public.   These datasets cover various areas, including medical and health, traffic, education, commerce and economy, environment, leisure and culture, housing, land development and matters relating to people's livelihood.

5.   OGCIO estimates that over 70 mobile applications in the market have been using data from the PSI Portal.   In the first half of 2018, the number of data download from the portal exceeded 1.8 billion (i.e. on average 10 million daily downloads).

6.   Apart from providing more datasets of different categories, OGCIO has been making every effort to enhance the functionalities of the PSI Portal in recent years.   At present, about 1 250 Application Programming Interfaces ("APIs") are available to support different applications.   Historical public data has also been provided since March 2017 for interested parties to conduct trend analysis and big data analytics applications.   Making use of "Design Thinking", OGCIO revamped the PSI Portal in end-2017 to provide the public with better user experience.   To facilitate the use of the datasets by the public, the PSI Portal provides a map-based interface to select an area on the map and download the relevant data of the selected area.

New Open Data Policy and Implementation Measures

7.   OGCIO conducted a comprehensive review in the past year on the implementation of the existing government open data initiative.   In doing so, reference has been made to the demands from the public for different public data, the experience of other cities and relevant international reports and researches, including the detailed analysis of Hong Kong's ranking in the Global Open Data Index (GODI)[2] 2016/17.

8.   To facilitate the development of smart city and big data, the

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[1]   Including CLP Power Hong Kong Limited, Insurance Authority, Hong Kong Examinations and Assessment Authority and Hospital Authority.
[2]   According to the GODI 2016/17 ranking, Hong Kong ranks 24 out of 94 economies.

Government formulated in September 2018 new policy on opening up government data, and OGCIO issued the concerned guidelines to B/Ds in the same month. Under the new policy, B/Ds should as a matter of principle endeavour to release their data for free public use via the PSI Portal, unless there are justifiable reasons (e.g. involving personal data). B/Ds are also required to ensure that the opening up of data is in compliance with relevant regulations such as the Personal Data (Privacy) Ordinance (Cap. 486).

9. To take forward the new policy in a more effective manner, we have drawn up a number of implementation measures. They are set out in the following paragraphs.

Annual Open Data Plans

10. B/Ds are required to formulate and publish their annual open data plans on their departmental web pages covering the datasets which have been released in the PSI Portal and datasets to be released in the following three years. Relevant information on the datasets such as the target release date and updating frequency should be included in the plan. This measure will not only enable B/Ds to open up their data in an orderly and more transparent manner, but also facilitate the public to provide feedback and suggestions on the types of data to be further opened up and their potential applications, thereby facilitating B/Ds to assess priority in opening up various data. In adddition, OGCIO will collate B/Ds' open data plans from and provide a full list of the plans on the PSI Portal. All B/Ds are required to publish their first annual open data plans by the end of December 2018.

11. OGCIO is still consolidating the first annual open data plans provided of B/Ds. At the moment, it is estimated that the number of new datasets to be opened up by the Government in 2019 will exceed 500. The first annual open data plan of OGCIO is at **Annex**.

Data Usability

12. To align with international practices and ensure convenient access by the public, the datasets uploaded to the PSI Portal should meet the following usability requirements:

(a)   released in machine-readable formats, including JSON, XML and CSV (except for images and video clips);

(b)   updated timely, particularly for real-time data like traffic and weather;

(c)   annotated with proper data description; and

(d)   removing unnecessary terms and conditions (e.g. restrictions on commercial use).

13.   Besides, in developing/re-developing their IT systems, B/Ds have to include the necessary technical components to support the opening up of data in the PSI Portal as well as develop the associated APIs to facilitate the use of the datasets by the public.

Public Bodies and Commercial Organisations

14.   Members of the public and various sectors have in the past few years raised various demands and suggestions relating to the data possessed and collected by public bodies or commercial organisations (e.g. real-time public transport data).   Although such data may be regarded as property of the private organisations, under the new open data policy, relevant B/Ds are required to explore options in collaboration with the concerned organisations with a view to releasing more data which is related to public facilities or with high degree of public interest, and include specific measures in their annual open data plans.

Support from OGCIO

15.   To support B/Ds to implement their annual open data plans, OGCIO will provide the necessary technical and financial support.   OGCIO has set up a dedicated helpdesk to support B/Ds in formulating their plans and provide technical support for B/Ds to enhance their IT systems for expediting the release of datasets.   OGCIO will also accord priority to applications relating to opening up of data under the Capital Works Reserve Fund Head 710 - Computerisation.

16.	To further enhance the PSI Portal, OGCIO plans to introduce a city dashboard function in 2019 for the public to view and select city data (including data related to traffic, weather, environment, etc.) on the PSI Portal conveniently and effectively.

17.	In addition, OGCIO will continue to promote the open data initiative through various channels by co-organising or participating in promotional activities (e.g. seminars, competitions, etc.) with public and private organisations, so as to encourage various sectors to make use of open data from the PSI Portal to develop innovative applications.

Advice Sought

18.	Members are invited to note the content of this paper.

Innovation and Technology Bureau
Office of the Government Chief Information Officer
December 2018

Office of the Government Chief Information Officer (OGCIO)

2018 Annual Open Data Plan

A. **Departmental datasets to be released in 2019** (*next year*)

	Type of Data/ Name of Dataset (*Note 1*)	Target Release Date (*Note 2*)	Frequency of Updating (*Note 3*)	Remarks (*Note 4*)
1.	Information Technology ("IT")/ List of datasets for open data	04/2019	Quarterly	Data provider, name of datasets, type of data, data format, number of APIs (JSON)
2.	IT/ Usage statistics of open data	04/2019	Annual	Data provider, number of datasets download (JSON)
3.	IT/ Statistics on government forms	04/2019	Annual	Name of B/D, number of government forms provided, number of government forms supporting e-submission (JSON)
4.	IT/ Statistics on government mobile apps	04/2019	Annual	Name of mobile app, cumulative number of downloads (JSON)
5.	IT/ GovHK usage statistics	04/2019	Quarterly	Number of visits to GovHK, number of page views of GovHK (JSON)
6.	IT/ Statistics on central payment service	10/2019	Monthly	Name of B/D, online payment service type, number of online payment transactions, amount of online payment transactions (JSON)
7.	IT/ Statistics on e-Government services	10/2019	Annual	Number of e-Government services, number of e-transactions, take-up rate (JSON)
8.	IT/ Statistics on information security incidents in the Government	01/2019	Monthly	Number and types of information security incident reports in the Government (JSON)
9.	IT/ Approved IT projects funded under Computerisation Block Allocation	01/2019	Quarterly	Project name, name of B/D, estimated cost, planned start and end dates, actual completion date of approved IT projects (CSV) Note: Projects funded under Computerisation Block Allocation are those more than $200,000 but do not exceed $10M.

10.	IT/Awarded service contracts of SOA-QPS	04/2019	Quarterly	Work assignment name, name of B/D, contractor name, price, date of service award (CSV)
11.	IT/Statistics of Central Internet Mail Exchange Service	04/2019	Monthly	Number of Internet e-mails sent, received, filtered (as spam mail) by the Central Internet Mail Exchange Service between B/Ds and the public (JSON)
12.	IT/List of ICT related learning resources for the elderly and people in need	11/2019	Quarterly	List of ICT related learning resources, link to the resources in the web-based learning portal (JSON)
13.	IT/Total number of T-contract staff engaged in the Government	01/2019	Monthly	Number of T-contract staff engaged in the Government, OGCIO and other B/Ds (CSV)
14.	IT/Monthly expenditure on engagement of T-contract staff in the Government	07/2019	Half-yearly	Staff category, average monthly expenditure on engagement (CSV)

B. Departmental datasets to be released in 2020 and 2021

	Type of Data/ Name of Dataset	Target Release Date	Frequency of Updating	Remarks
	/	/	/	/

C. Datasets planned to be opened up by other organisations [*for which the concerned B/D has housekeeping responsibilities*]

(1) Hong Kong Computer Emergency Response Team Coordination Centre (HKCERT)

	Type of Data/ Name of Dataset	Target Release Date	Frequency of Updating	Remarks
1.	IT/ Statistics on security incident reports received by HKCERT	01/2019	Monthly	Number and types of security incident reports received by the HKCERT (JSON)

D. Progress: Datasets already uploaded to PSI Portal by Department and other organisations [*for which the concerned B/D has housekeeping responsibilities*]

	Type of Data/ Name of Dataset	Release Date	Frequency of Updating	Remark
1.	Housing/ Address Lookup Service	12/2015	Monthly	Hong Kong address records (JSON and XML)
2.	Social Welfare/ Approved fund-raising activities	12/2015	SWD, HAD, HAB: As and when necessary; FEHD: twice daily	Information of approved fund-raising activities for Public Subscription Permit, Temporary Hawker Licence, Lottery Licence and Non-Charitable Fund-Raising Permit (JSON and XML)
3.	Recreation and Culture/ EventHK information	12/2015	As and when necessary	Details of events from various B/Ds and organisations (ICS and JSON)
4.	Miscellaneous/ GovHK Notifications	12/2015	As and when necessary	Alert notifications from B/Ds disseminated through the one-stop GovHK Notifications platform (JSON)
5.	IT/ Hong Kong Supplementary Character Set related information	12/2015	As and when necessary	Information related to the Hong Kong Supplementary Character Set including ISO/IEC 10646 code point, character, compatibility point, Cangjei, Cantonese pinyin and Big5 code, etc. (JSON)
6.	Transport/ Parking Vacancy Data (One-Stop Version)	06/2017	Real-time	Parking vacancy data and basic car park information provided by (i) Transport Department and (ii) the Energizing Kowloon East Office (EKEO) (JSON)

7.	IT/ Statistics on computer and Internet access provision to government staff	12/2015	Every 6 months	Percentages of staff with designated workstation, internet access and internal email account (CSV)
8.	IT/ List of Job Vacancies of OGCIO	12/2015	As necessary	Job vacancies of OGCIO (JSON)
9.	IT/ List of Notice of Open Tender of OGCIO	12/2015	As necessary	Notice of open tender of OGCIO (JSON)
10.	IT/ GovCERT.HK Security Advisories and Security Alerts	12/2015	When advisory or alert is issued	Title and link of security advisory/alert, the publishing date and a high level description (XML)
11.	IT/ IT Services Suppliers	12/2015	Monthly	List of suppliers (CSV)
12.	IT/ Listing of Government Public Cloud Services Providers	12/2015	Monthly	List of service providers (XML)
13.	IT/ Contractor list of centrally organised IT contracts	12/2015	Monthly	List of contractors (CSV)
14.	IT/ Past Programmes in Encouraging ICT Adoption among the Elderly by OGCIO	12/2015	As necessary	List of completed programmes funded by the OGCIO in encouraging ICT adoption among the elderly (JSON)
15.	IT/ Web/Mobile App Accessibility Services Providers List	12/2015	As necessary	List of suppliers that provide IT professional services for the implementation of web/mobile app accessibility designs (JSON)
16.	IT/ Digital Inclusion Mobile Apps	12/2015	As necessary	List of mobile apps developed under the Funding Scheme for Digital Inclusion Mobile Apps (JSON)
17.	IT/ Common Wi-Fi.HK Brand	10/2018	As necessary	Information of organisations joining the Wi-Fi.HK and their Wi-Fi.HK hotspot locations with geo-referenced data (JSON)

Note: Guidelines when completing the plan

1. "Type of Data" refers to corresponding business area (e.g. transport, education, health, etc.) and the "Name of Dataset" should be concise.

2. "Target Release Date" refers to the start date when the dataset is made available on the PSI Portal.

3. The "Frequency of Updating" of the datasets (e.g. real-time, daily, weekly, monthly) will be released together with the datasets when opening up on the PSI Portal.

4. B/Ds should provide the release format of the dataset (e.g. JSON, XML, CSV) and a concise description of the content of the dataset under the "Remarks" column.

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