Open Government Data Strategy

In accordance with the principles set forth in the New Strategy in Information and Communications Technology (IT) (adopted by the IT Strategic Headquarters on May 11, 2010) and The Basic Action Plan for the Promotion of e-Government (adopted by the IT Strategic Headquarters on August 3, 2011), the IT Strategic Headquarters adopted the Open Government Data Strategy set forth below as a fundamental strategy on promoting the use of public data when supporting open government with the understanding that public data is an asset of the people. The purposes of the strategy are to immediately undertake measures for encouraging the use of public data and to implement them broadly in order to raise the standard of living and invigorate business activities, contributing to the development of Japan's society and economy as a whole.

I. Significance and Objectives

The significance and objectives of promoting the use of public data are set forth below.

1. Enhance Transparency and Confidence

The provision of public data in formats that allow for secondary use will facilitate independent and adequate analysis and determinations concerning government policies by the public or through private services. This will serve to enhance the transparency of government administration and build public confidence in government.

2. Promote Public Participation and Collaboration between the Public and Private Sectors

The use of public data by a broad range of entities and the sharing of information between the public and private sectors will encourage the provision of public services through collaboration by the public and private sectors and also support the creation of private services using the information provided by the government. This will enable the rapid and efficient provision of diverse and innovative public services and appropriate responses to the various circumstances that the country is facing, including harsh fiscal

conditions, diversification of needs and values in various activities, and advancing information and communications technologies.

3. Economic Stimulus and Higher Efficiency in Government

The provision of public data in formats that allow for secondary use will lead to the creation of various new businesses and the efficient implementation of corporate activities through each stage in the market, including data editing, processing, analysis, and so on, providing economic stimulus to the entire country.

In addition, the national government and local governments will be able to increase the efficiency of and advance their operations through analysis of policy decisions and the like by making use of public data.

II. Prior Initiatives and Current Status

1. Prior Open Government Initiatives

The government has provided public information on ministry websites and through other media in accordance with the Basic Thinking (Guidelines) Regarding Electronic Provision of Government Information (adopted by the Chief Information Officer's (CIO's) Council of government agencies in November 2004; referred to as the "Electronic Provision Guidelines"). The content of information and the provision methods are standardized to a certain degree with respect to the provision of information for direct access by users on ministry websites and so on.

In addition, the New Strategy in Information and Communications Technology (IT), The Basic Action Plan for the Promotion of e-Government, and the Policy on Reforming Regulations and Systems for Promoting the Use of Telecommunications Technologies (adopted by the IT Strategic Headquarters on August 3, 2011) provide for the rapid investigation and implementation of measures to encourage the secondary use of statistical information held by the government while placing the highest priority on disclosing information in the government's possession in formats that facilitate secondary use and, in principle, making all information easily accessible on the internet, as well as the need to promote the provision of statistical, measurement, and disaster prevention data in standard formats that allow for secondary use, and obtaining accurate statistical information.

Also, the specific measures described in the following section were implemented at the time of the recent Great East Japan Earthquake.

2. Measures for Recovery and Reconstruction following the Great East Japan Earthquake and Lessons

Following the Great East Japan Earthquake on March 11, 2011, which caused great harm to Japan, the government launched updated websites using Twitter and other social media, held press conferences broadcast live on the internet, and adopted response guidelines for disseminating information using social media in order to distribute information in a timely manner. The government provided the Recovery and Reconstruction Support Program Database in cooperation with Reconstruction Headquarters and other ministries. This is a one-stop service site where users can search through a wide variety of support programs operated by the central and local governments. An application programming interface (API) to allow the use of support program information by external services will be provided. In response to tighter electricity supply-demand balance due to the nuclear power situation, the Agency for Natural Resources and Energy implemented the "Smart phone application award 2011 for electricity saving" with the aim of raising consciousness on electricity saving. As a result, numerous applications relating to energy-saving were developed.

On the other hand, when businesses and others attempt to broadly disseminate earthquake-related information by using evacuation site information, map data, and so on in the possession of administrative agencies, the data is often provided in formats such as PDF and JPEG, which is not suitable for machine reading and must be re-input by hand, making secondary use difficult. In addition, formats differ among administrative agencies, and there are cases where considerable time is required to gather and organize data. These and various other issues have been indicated.

3. Overseas Developments and Circumstances in Japan

(1) Overseas Developments

Initiatives concerning open data are being actively undertaken in various other countries, including the United States and the EU.

(a) United States

In the United States of America, a presidential memorandum [1] called for raising confidence in government, strengthening democracy, and improving government efficiency and effectiveness. The federal government implemented various measures including creating the "Data.gov" data portal site and is publicly releasing not only numerical data, but also unstructured data, such as documents, in accordance with a

Digital Strategy[2] announced in 2012. Contests concerning the use of public data have also been held in Washington DC and New York.

(b) OECD

In the OECD, the Committee for Information, Computer and Communications Policy adopted the OECD Recommendation of the Council for Enhanced Access and More Effective Use of Public Sector Information in 2008, and called on member countries to take into consideration the development of Internet access environments, the establishment of copyright handling rules, and to promote the effective use of a broad range of public data and create new methods of use.

(c) European Union

In 2003, the EU adopted the Directive on the Re-use of Public Sector Information, which provides, "In cases where the re-use of information in the possession of public agencies is possible, member states must ensure that the re-use of the information is possible, whether for commercial or non-commercial purposes." In 2011, the Open Data Strategy for Europe was adopted, and support was provided for establishing an EU data portal, presenting a proposal to revise the Directive on the Re-use of Public Sector Information, and research and development of data processing technology.

In addition, the Open Knowledge Foundation, a non-profit organization, supports the use of open data through means such as the provision of open source software for data portal site operation and management as well as consulting.

(d) United Kingdom

The United Kingdom established the Office of Public-Sector Information within the Ministry of Justice to perform centralized management of information concerning which the government owns the copyright and in 2010 created the "data.gov.uk" website. The government also announced "transparency principles" that call for data to be released publicly in reusable and machine readable formats, for information to be released under a uniform open license that allows for free use, including commercial uses, and for data to be accessible from a single, easy-to-use online access point.

(e) France

In France, Etalab was established in 2010 by Cabinet decision as an organization for encouraging the use of public sector information. In 2011, the government adopted guidelines on the provision of public sector information using a single portal,[3] making

it obligatory for government ministries to appoint an officer responsible for coordinating with Etalab and providing for the allocation of operations among organizations and specifying data provision formats. Etalab adopted its own licenses concerning public sector data, established the "data.gouv.fr" site, coordinates with government ministries, and encourages the public release of data for which there is high private sector need and which can be provided easily.

(f) Australia

In 2010, the Australian government adopted the Declaration of Open Government, which states, "information possessed by the government is an important asset, and release of this information will lead to the development of new services and the creation of new public value."

(2) Circumstances in Japan

In Japan, specific examples are limited. In addition to the responses to the Great East Japan Earthquake, the Cloud Test Bed Consortium, whose membership includes the Ministry of Internal Affairs and Communications, National Statistics Center, National Institute of Information and Communications Technology, and companies, is investigating methods of providing statistical information in machine readable formats. In addition, a private sector attempt is being made in Sabae City in Fukui Prefecture to prepare evacuation maps using information on the sites of evacuation sites, artificial external defibrillators, restrooms, and so on.

4. Changes in Technologies and Services

As a result of the widespread expansion of the Internet, it has become possible to provide public data immediately and at low cost. In addition, the development of search sites has resulted in the development of technical environments that enable members of the public who have received information to easily access public data. In conjunction with the expanded use of cloud services, the analysis of so-called big data (large volumes of data, including information in non-standard formats in the possession of government and large volume data with real-time characteristics) is expanding, and it has been pointed out that the promotion of use of such data may lead to the creation of diverse businesses with substantial economic effects.

Today, many government ministries are making use of private sector services as a means of disseminating information, including the distribution of information using social media, and broadcasting meetings and press conferences on the Internet.

1. Fundamental Principles

The fundamental principles concerning measures for promoting the use of public sector information in Japan are set forth in (1) through (4) below:

(1) Government shall actively release public data.
(2) Public data shall be released in machine-readable formats.
(3) The use of public information shall be encouraged whether for commercial or non-commercial purposes.
(4) Specific measures shall be taken such as the prompt disclosure of public data that can be released, and results shall be steadily accumulated.

When taking measures in accordance with these fundamental principles, it is necessary to examine fully the specified use needs of citizens and businesses concerning public data and the handling of confidential information, including privacy concerns as well as cost-benefits, taking into consideration reviews of necessary operational processes and the accompanying costs.

Also, specific measures shall be taken, such as the prompt disclosure of public data that can be released, and results shall be steadily accumulated. In parallel with these measures, an environment for the use of public data will be developed based on the results of these undertakings and the various measures discussed below, and feedback shall be provided for subsequent measures.

2. Public Data Subject to Measures

Measures will be taken first with respect to data in the possession of the government (excluding information not suitable for public release, such as information relating to security), and the measures will be expanded to independent administrative institutions, local governmental bodies, public utilities, and so on.

Also, in light of the lessons from the Great East Japan Earthquake, it is important that measures be taken soon with respect to data that may be valuable in times of emergency.

3. Collaboration with the Private Sector and Local Governmental Bodies

From the perspective of encouraging the use of public data through various means that

take advantage of creative innovations, the government will collaborate fully with the private sector and local governmental bodies. By having the private sector and local governmental bodies actively make proposals to the government concerning specific use needs, it is expected that they will cooperate with the identification of needs by the government.

Also, local governmental bodies possess public information that is closely related to citizens, and taking the initiative to actively encourage the provision of such data is expected to create opportunities for citizens to experience the benefits of open data. It will also be necessary to improve the efficiency and raise the level of the government's own operations.

IV. Specific Measures

The following measures will be implemented in fiscal 2012.

1. Promoting the Use of Public Data

The Ministry of Internal Affairs and Communications and the Ministry of Economy, Trade and Industry will implement the trial programs as set forth in (1) through (3) below with respect to public data in the possession of government ministries, independent administrative institutions, local governmental bodies, and so on in collaboration with government ministries, independent administrative institutions, local governmental bodies, and the private sector. To support the implementation of these trial programs, cooperation will be obtained from the Cabinet Secretariat and the Ministry of Internal Affairs and Communications to conduct a survey of public data that government ministries currently provide, with a focus on databases.

(1) Identification of Public Data Use Needs

By conducting investigations in collaboration with the private sector and holding service development contests and so on, public data use needs will be investigated and analyzed, and issues concerning current use will be examined and organized.

Also, specific usage scenarios will be identified by creating on a trial basis an environment for the centralized provision of ministry databases that are currently available to the public.

(2) Examination and Organization of Issues Relating to Current Data Provision Methods

Issues will be examined and organized through trial projects, surveys, and research in

order to create the rules necessary for the use of the public data described below, develop data catalogs, and promote standardization of data formats and structures.

(3) Development of Private Sector Services

By conducting investigations in collaboration with the private sector and holding service development contests and so on, examples of service development by the private sector using public data will be accumulated. Relevant agencies in possession of public data for which there is believed to be particularly high demand for private sector use needs (e.g., map, topological, and geological information, censor information, permit and filing information, public facility and land-use plan information, and statistical information), in particular will provide full-scale cooperation to encourage the development of private sector services.

2. Development of Environments for the Use of Public Data

The Cabinet Secretariat will obtain the cooperation of relevant ministries and develop the following environments for the use of public data based on the results of the various measures undertaken, including the trial programs described in 1 above, at the implementation working committee consisting of members from the public and private sectors described below.

(1) Creation of Rules Necessary for the Use of Public Data

Rules necessary for the use of public data will be created with respect to the handling of copyrights at the time of disclosure of data by government ministries, use conditions, rules on access from machines, allocation of responsibilities between users and providers, and handling of confidential information, adequately taking into account convenience for users in protection of the rights of rights holders.

(2) Development of Data Catalogs

Data catalogs that collect metadata, including summaries and data formats, will be developed with respect to data that is available for secondary use. Also, investigations will be conducted on systems for reflecting in the data catalogs public data for which it has become clear through surveys and so on that there is high demand at all times.

(3) Promotion of Standardization of Data Formats and Structures

Standardization concerning data formats and structures, and methods of prevention will be promoted, and manuals and support tools will be developed to enable machine

reading, collaboration, and searches among multiple agencies and fields, taking into consideration the characteristics of the information, the current status of use, and opinions from the private sector.

Also, investigations will be conducted regarding systems for categorizing and efficiently identifying data and for the effective use of information for which there is high demand for secondary use even though it is managed on paper media or as image data.

(4) Investigation of Support to Provider Agencies

Investigation and organization of the issues concerning reviews of operational procedures suitable for the provision of public data by provider agencies and fees relating to the provision of public data and of feasible policies will be conducted from the perspective of providing support to agencies that provide public data.

Also, measures for disseminating information to and making it widely known by provider agencies and users will be investigated.

Starting in fiscal 2013, the Cabinet Secretariat will take concrete action with the cooperation of relevant government ministries for the continuation and implementation of the various policies outlined above in accordance with a roadmap adopted by the implementation working committee mentioned above pursuant to the general direction discussed in III and will implement the policies newly investigated by that conference. Individual government ministries will implement concrete measures concerning the release of public data, starting with those that are possible, taking into consideration the results of these various policies.

V. Implementation Structures

1. Creation of Implementation Structures and Systems

The Cabinet Secretariat shall, with the cooperation of the Ministry of Internal Affairs and Communications, Ministry of Economy, Trade and Industry, and other relevant ministries, promptly establish and operate the implementation working committee with the roles set forth below as the body for implementing open data policies:

(1) Investigation of fundamental matters, including the development of environments for the use of public data;
(2) Investigation of policies to be implemented in the future and adoption of a roadmap;

and
(3) Review and follow-up of policies.

Each ministry shall provide comprehensive cooperation with respect to the investigations by the implementation working committee, the trial programs described in IV above, and ensuring the effectiveness of the adopted roadmap by providing public data in its possession, investigating reviews of agreements concerning the use of public data, and so on.

When developing systems relating to open data, the relationship with the system of government CIOs, who conduct separate investigations, shall be taken into account, and systems for the implementation of open data policies will be flexibly reviewed based on the status of investigations of that system.

Open data measures are being implemented in various foreign countries as described above, and investigations will be conducted on frameworks for encouraging international collaborative measures while adequately surveying and investigating trends in and lessons from foreign countries.

2. Review of Electronic Provision Guidelines

Inter-ministry and ongoing reviews concerning the general provision of electronic information on the websites of individual ministries shall be conducted on a continuous basis in accordance with changes in the times and the needs of the public as a fundamental means of promoting open data.

To carry this out, the results of the measures described in IV above shall be reflected in the Electronic Provision Guidelines under a liaison conference of the chief information officers (CIO) of each ministry, and follow-up frameworks that are currently not systematized will be introduced. Structures will be created for the inter-ministry and autonomous review of the scope and content of information to be provided and the provision methods in light of user opinions and requests, taking into account usability and accessibility.

VI. Review of this Strategy

This strategy shall be flexibly reviewed according to technological developments, changes in the international environment, and so on, taking into account the results of various measures and the opinions and requests of members of the public, businesses, and others.

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[1] Transparency and Open Government.

[2] Digital Government: Building a 21st Century Platform to Better Serve the American People.

[3] Circulaire du 26 mai 2011 relative à la création du portail unique des informations publiques de l'Etat « data.gouv.fr » par la mission « Etalab » et l'application des dispositions régissant le droit de réutilisation des informations publiques.