

ANNEX 2

Qualitative results of ODB questions on policies

The following is a description of the new policy-related self-assessment questions introduced in the 3rd edition of the Open Data Barometer by the Web Foundation and their associated final responses for the OD4D IDRC Technical Report¹. More details on the methodology and method used during the evaluation are available at the Barometer Research Handbook².

New policy questions

C2) Is there a well-defined open data policy and/or strategy in the country?

Question description:

Describe your open data policy and/or strategy, including links to any relevant documents (guidelines, strategies, policies, etc.) and the description of other existing key elements such as the authority in charge of its execution, the applicable licensing schemes, publication recommendations (datasets, formats, standards, etc.), training programmes for civil servants and performance indicators and reports.

C3) Is there a consistent (open) data publication approach?

Question description:

Describe your data management approach, including links to any relevant documents and the description of other existing key elements such as metadata and technical standards, data models, codelists and identifiers, data user's guides and supporting documentation, data inventories, public data consultations and feedback management, the data release and update processes or quality controls.

¹ https://docs.google.com/document/d/1rmy5jxYkr-8rGE7A7iFoxo_YM4U-Ypw8hGOZnMHR8xU/edit?usp=sharing

² <https://docs.google.com/document/d/1t3MuJ4lctlbVY4a7U52MxgLA6toDdaULdtY4PjwL81E/edit?usp=sharing>

Responses to the survey

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Responses to the survey

Austria - Policies

Our OGD strategy is lined out in a white paper of the Cooperation Open Government Data Austria and was also translated in English, available at:

https://www.data.gv.at/wp-content/uploads/2013/08/Framework_for_Open_Government_Data_Platforms_1.1.pdf

Authority in charge:

The Cooperation OGD Austria is an innovative cooperation: despite its informal nature it was able to standardize open government data in Austria in a “grass roots” effort.

The Cooperation OGD Austria was founded in July 2011 together by representatives of the chancellery, as well as the Austrian cities of Vienna, Linz, and Graz for the purpose of aligning standards for open data publishing, creating a common portal and more efficient coordination of all stakeholders.

Austria - Data management

Metadata:

The common metadata used is published in English at:

https://www.data.gv.at/wp-content/uploads/2013/08/OGD-Metadaten_2-3_2014_11_10_EN.pdf

The Cooperation OGD Austria metadata working group aligned metadata structure to describe OGD datasets, which also includes the agreement of a common license to ease access and combinability of open datasets to together with representatives of universities, research institutes, companies, and OGD publishers.

Cross Border metadata Standardization

Germany, Swiss and Austria aligned their standards as closely as possible. The Austrian OGD standards thereby contribute to reconciliation and harmonization of Open Data efforts bottom-up within Europe (as a complementary effort to top-down EU directives such as INSPIRE) in a dynamic, participatory manner, involving various stakeholders and user groups.

User Guide:

The user guide for the national portal data.gv.at is only available in German at:

<https://www.data.gv.at/wp-content/uploads/Benutzerhandbuch-datagvat-Cockpit-v1.pdf>

Public data consultations:

The city of Vienna releases its datasets in phases. Until now there were 19. data-release phases with dedicated focus topics. For each release there are public feedback meetings with the developer community organised by the city of Vienna.

Bangladesh - Policies

Under development.

Bangladesh - Data management

Yes. The National Portal of Bangladesh is that kind of publication tool.

www.bangladesh.gov.bd

Belgium - Policies

On July 24 2015, the Council of Minister approved a new open data strategy and a Law transposing the 2013 PSI directive. The [open data strategy](#) states that open data is now by default (except for the exceptions provided by the law).

See also <http://www.digitalbelgium.be>

The ASA and FedICT will share the work. The former will address the legal framework (law, royal order, licence, etc.) and the general information of the administrations, the latter will address the technical framework (portal, format, api, DCAT-AP compatible metadata, etc.).

A standard licence (cc-by compatible) is already proposed to the administrations but a new one (cc-0 compatible) will probably be imposed for most datasets that will be available on the new portal.

Belgium - Data management

Below is the data management approach for the “publicdata.belgium.be” portal (but this portal will very soon be rebuilt).

- The metadata of the datasets (e.g. the Budget) are stored on a Sharepoint.
- The portal is built on a Drupal structure.
- The datasets stay on the website of the administration.
- Anyone with an access to the Sharepoint can add a link to a dataset (one person on each administration has an access). A user's guide is available on the Sharepoint. Direct meetings were also conducted to ensure that people can use the Sharepoint.
- The workflow gives the ASA the final check before the metadata are published on the portal.
- The metadata follow more or less the structure of the DCAT-AP.

Benin - Policies

No response.

Benin - Data management

No response.

Brazil - Policies

The open data policy in Brazil is defined by [Instrução Normativa SLTI nº 4/2012](#) as a set of standards, technologies, methods and control procedures to enable the publishing and sharing

of public sector information as open data. The norm reaffirms some of the same characteristics of open data recognized around the world – use of open standards, machine readability, data licensing, etc. Some of these are also present on the national access to information law (see question C4). This norm also establishes the role of the “*Secretaria de Logística e Tecnologia da Informação – SLTI*” (Secretariat for Logistics and Information Technology) in coordinating the open data policy.

Complementing this is the “[Estratégia de Governança Digital – EGD](#)” (Digital Governance Strategy), inspired by OECD's [Recommendation on Digital Government Strategies](#), which sets guidelines for federal government organizations' own strategic plans for the period 2015-2019. Open data is prominently featured in these guidelines, as access to information is one of its main three pillars (the other two being public services and social participation). This will be established by a presidential decree in August 2015. This date, however, makes it just out of the evaluation period of the Open Data Barometer.

As for guidelines on policy implementation, there is [Cartilha Técnica para Publicação de Dados Abertos no Brasil](#), which serves both as an overview of the policy and technical orientation (including recommendations on open formats), and [Kit para dados abertos](#), a step-by-step guide and description of the processes involved in implementing the open data policy within a public organization.

The need for a licensing scheme has been recognized since 2012, as it is referenced throughout the norm Instrução Normativa SLTI/MP nº 4/2012, and has been the object of [a commitment](#) in Brazil's Action Plan on the Open Government Partnership. A wealth of information about the legal status of open data in Brazil and the requirements for an open data licensing study are documented on a public [wiki page about open data licensing in Brazil](#). The licensing study itself has been conducted internally, but has yet to be published as of July 2015, pending validation from the legal department.

A recommendation on mandatory information to be released exists on the [Access to Information Law](#) (article 8, 1st paragraph): organizational structure, contact information, fund transfer data, expenditure data, procurement and contract data, general data about programs and projects, including construction projects, and FAQs. Many of these can be considered mandatory datasets that must be released.

Standards on metadata applicable to datasets are present on chapter 7.1 of the aforementioned [Cartilha Técnica para Publicação de Dados Abertos no Brasil](#). Other technical standards are also documented by [e-PING](#), the federal government's interoperability framework. Vocabularies for semantic interoperability are shared on the [e-VoG](#) repository.

As for training programmes, there has been a [workshop](#) on September 2014, targeted at public servants, on elaborating open data plans specific for their respective organizations.

Brazil - Data management

[Data publication](#) is part of the open data policy implementation guideline described on “*Kit para dados abertos*”. Some technical standards are mentioned there as well, on the document “*Cartilha para Publicação de Dados Abertos no Brasil*” and on the interoperability framework [e-PING](#). Semantic interoperability vocabularies and data models are shared on the [e-VoG](#) repository.

Metadata standards for cataloguing datasets are present on chapter 7.1 of the document “*Cartilha para Publicação de Dados Abertos no Brasil*”. Geospatial metadata standards are defined by the “*Comissão Nacional de Cartografia – Concar*” and the “[Infraestrutura Nacional de Dados Espaciais – INDE](#)”, and adopt international OGP standards. Codelists are defined by the “[Catálogo Padrão de Dados](#)”.

There isn't a data user's guide specific for using data released from this initiative, but there is a link on [dados.gov.br](#) to a data user's guide produced collaboratively and coordinated by the local chapter of the W3C - “[Manual do Desenvolvedor](#)”.

There is no single data inventory as that would be a huge undertaking and resources are limited. Rather, government organizations are encouraged to conduct their own data inventories as a step in building their own institutional open data plan. This is described on the “[Manual para a Elaboração de Planos de Dados Abertos](#)” (Open Data Plan Design Manual), a guide on how government organizations can devise their own open data plans.

Cameroon - Policies

There are some documents:

- Document de stratégies pour la croissance et l'emploi - DSCE
(<http://www.afdb.org/fileadmin/uploads/afdb/Documents/Projectand-Operations/Cameroon%20DSCE2009.pdf>)
- Programme National de Gouvernance - PNG
(http://www.spm.gov.cm/uploads/media/png_2006_-_2010.pdf)
- Plan Nation Informatique.
https://s3.amazonaws.com/files.formstack.com/uploads/2059752/34031634/207390244/34031634_e5723d01_dsce.pdf

Other documents are not available on line.

Cameroon - Data management

No response.

Canada - Policies

The Directive on Open Government (<http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=28108>) was launched in October 2014. The Directive supports the Government of Canada's Policy on Information Management (<http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=12742>) by promoting information management practices, which enable the proactive and unrestricted release of government information. The objective of the Directive is to maximize the release of government information to support transparency, accountability, citizen engagement, and socio-economic benefits. The Directive is a mandatory policy instrument that requires government department and agencies to meet compliance milestones staggered throughout the five-year implementation window and be fully compliant by March 31st 2020. TBS is also supporting the effective implementation of the requirements of the Directive on Open Government within federal departments and agencies by leading the design and delivery of various tools and resources including: a data inventory template; supplemental guidance on operationalizing the requirements of the Directive; a Release Criteria Checklist; and an awareness and communications package for use by departments.

In addition to the Directive, the Government of Canada has developed a number of open data tools, such as the open data portal at open.canada.ca and the Open Government Licence - Canada (<http://open.canada.ca/en/open-government-licence-canada>).

Additional guidance documents on datasets, formats, and standards are continually being developed by TBS and are provided through Open Government Across Canada (<http://open.canada.ca/en/maps/open-data-canada>) and Working with Data and Application Programming Interfaces (<http://open.canada.ca/en/working-data>).

Canada - Data management

There are a number of documents that make up the Government of Canada's open data publication approach. These include:

- Open Government Common Core Consultation on Github (<https://github.com/open-data/open-data>)
- DRAFT Project Plan to apply DCAT and Schema.org on Github ([https://github.com/open-data/open-data/blob/master/ProjectPlan- Applying DCAT and Schema.org to open.canada.ca -2015-07-22.docx](https://github.com/open-data/open-data/blob/master/ProjectPlan-Applying%20DCAT%20and%20Schema.org%20to%20open.canada.ca-2015-07-22.docx))
- Standard on Metadata (<http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=18909>)
- Standard on Geospatial Data (<http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=16553>)

- Open Data Metadata Application Profile
(https://s3.amazonaws.com/files.formstack.com/uploads/2059752/34031679/207852904/34031679_open_data_metadata_application_profile.docx)
- Open Data Metadata Implementation Guide (see attached on PREVIOUS QUESTION)
- Open Data Portal Dataset Inclusion Guide
(https://s3.amazonaws.com/files.formstack.com/uploads/2059752/34031714/207852904/34031714_open_data_portal_dataset_inclusion_guide.docx)
- Additionally, new open data publication guidelines are currently in development. These include:
 - Data Inventory Template (draft)
 - Release Checklist (draft)
 - Guidance on Data Release (in development)

Colombia - Policies

Please describe here your open data policy and/or strategy, including links to any relevant documents (guidelines, strategies, policies, etc.) and the description of other existing key elements such as the authority in charge of its execution, the applicable licensing schemes, publication recommendations (datasets, formats, standards, etc.), training programmes for civil servants and performance indicators and reports.

Yes, It is. And it develops the following 5 areas:

I. Legal framework and policy

The open data strategy as part of the e-Government strategy is an important component of the Colombian Action Plan under the Open Government Partnership and is related with Law of Transparency and Access to Information (Law 1712 of 2014). This open data strategy looks to develop a whole open data ecosystem where:

- Public entities produce data of public interest observing technical and quality standards that assure its accessibility and re-usage
- Entrepreneurs and private sector companies constantly use data to develop apps to attend citizens needs
- NGO, journalists, academy and other stakeholders use data to follow the public sector performance

At the same time, the open data strategy has been included in the national public sector information framework, being considered one of the essential components for promoting transparency and collaboration in the country. Colombia's open data strategy has developed the principal characteristics stated by international best practices in terms of:

Openness:

Among the general guidelines of the e-Government strategy established through the decree [2693 of 2012](#) and reinforced by [Decree 2573 of 2014](#), are the [prioritization](#) of the activities that promotes the spread of the use of open data, so third parties can use it, adding value for government, citizens and businesses. The Strategy has been developing [guides](#) in order to facilitate the openness, which includes identification of [inventory](#) of data and a methodology for prioritize the ones that are going to be opened.

Access and transparent conditions for re-use

In Colombia, all information is public except in cases expressly provided by law. Law 1712 of 2014 establishes only 2 exceptions for information access:

- When the information disclosure generates damage to persons, and
- When the information disclosure implies damage in the public interest and law expressly defines it.

Therefore, no authority can refuse to provide the information requested by anyone. There is some information that is confidential or classified that can be accessed only by the agencies with specific clearances, due to their mission, or by the owner of the information.

Officials of public entities, developer communities, IT industry, software companies, academy, journalists and civil society, are the main users of open data, and can have complete access to it. Open data platform allows the access to data and information, through basic datasets in different formats previously established. This access is also available through public agencies websites, using interactive databases, downloading documents, and so on. All public data is published or linked (in case it is published in the websites of the institutions) to the national Open Data Portal, as part of the guidelines established by the e-government strategy.

Quality

With its Open Data strategy, the e-Government Office from the Ministry of ICT has issued [guidelines](#) to facilitate the methodical identification and treatment of data in order to improve the quality and reliability of the information, and to publish this data in the [open data portal](#) with the aim of facilitate citizen access to information.

The public information access law includes the principle of the quality of information and data: “All information of public interest produced, managed and disseminated by the public entities, should be timely, objective, accurate, complete, reusable, actionable and available in formats accessible to the public interested in it, taking into account the document management procedures of the respective entity”.

Also, the open data initiative in Colombia formulated the following quality criteria for the data:

Accuracy: The public agency that publishes the data must ensure that they correctly describe the information being opened and that the data correctly reflects the situation of the business, industry

Completeness: Agencies must ensure that the published data is complete according to the updating period defined and the information being published.

Opportunity: The agency should ensure the updating of the data once published, independently of the publishing mechanism selected. The updating opportunity should correspond to the rate of change of the data being published.

Consistency: The information provided should be consistent with previous data sets that had been published. Also, in the event that an error is detected related to other data sets, the agency shall proceed to update and correct the data set.

Formats accepted: The following are the allowed formats in which to publish information: XLS, ODF, CSV, XML, JSON, TXT, RDF-XML, KML, KMZ.

Alignment with Colombian Common Language Exchange: Metadata must be semantically aligned and mapped to the concepts defined in the Common Language Exchange.

More information about this criteria can be found in the following link organized through the different dimensions of the Colombian Enterprise Architecture Management Framework
<http://estrategia.gobiernoenlinea.gov.co/623/w3-propertyvalue-8014.html>

Integrity

To ensure that public agencies use standards for the management of information, there is a regulation that establishes how sensitive information should be protected (Law 1581 of 2012 -habeas data- and following regulations). Furthermore, Law 1712 of 2014 establishes two different categories of information as special cases: when the information disclosure generates damage to persons, and when its disclosure implies damage in the public interest and is expressly defined by law.

[Law 1581 of 2012](#) dictates general provisions for the protection of personal data. This law develops the constitutional right of all people to know, update and rectify information gathered about them, in databases or files, and other rights, freedoms and constitutional guarantees. This rules shall apply to personal data on any database that makes them susceptible to treatment by public or private entities.

Finally, [law 1712 of 2014](#) indicates that government agencies should keep working on the guidelines outlined by the e-Government Strategy, which has a [Security model](#), supported by guides and instruments related with the implementation of the ISO 27000, currently this model is being updated according to the requirements of the above mentioned law and the guidelines set by the recently formulated Enterprise Architecture Management Framework.

Copyright

Regarding Copyright the main acts in the Colombian legislation are: [Colombian Constitution](#) article 61 (Adopts the concept of intellectual property of the World Intellectual Property Organization- WIPO). [Andean Decision 351](#) (general provisions on copyright). [Law 23 of 1982](#) (Dispositions about intellectual properties, and its registration on international authorities) and [Law 44 of 1993](#) (Modifications to Law 23 of 1982 about dispositions about intellectual properties). In addition, offenses against copyright in Colombia are punished by criminal law ([Law 599 of 2000](#))

Regarding the information produced by public agencies, no authorization is required to reproduce it. The [law 1712 of 2014](#) states that anyone using public information is accountable for that use. Therefore anyone can use and reuse the information unless this information is reserved or classified.

Pricing

[Law 1712 of 2014](#) establishes the principle of free access to public information. Consequently, anyone should pay for the use of the information, but only for the cost of reproduction. This law ratified previous laws in terms of gratuity of information.

Competition

Competition rules are set forth by the Colombian constitution with the article 333 of the [Colombian Constitution](#), Decree 2153 of 1992, and Law [1340 of 2009](#) which include unfair competition rules but does not consider the case of setting prices when private and public sector aggregate value to public information. As a consequence any public entity or person may use the information according to the competition rules, which include prohibition of unfair competition as shown above.

II. Incentives

Public private partnerships

E- Government strategy seeks the involvement of other actors in the implementation of the open government strategy, particularly the private sector and academia, who can develop actions in terms of technology solutions, training, promotion and dissemination, consulting services, among others, that stimulate funding sources different from the public ones.

Some of the activities developed for achieving this goal are:

- Calls for e-Government innovative projects on Open Data, or related with the use of information, to be co-financed by entities, agencies, academia and industry

Seal of Quality in e-Government

According to the guidelines established in Decree 2573 of 2014, the Ministry of ICT will design and implement a model of [Seal of Quality in e-Government](#), which will allow to assess the quality of the information services implemented to deliver services to citizens and the electronic channels available for promoting Open Government by public entities. This seal will allow the participation of private sector companies in this evaluation, and will contribute to strengthen the citizens' confidence in the usage of these services. This seal will also assess the quality of data sets opened by the public entities.

III. Guidelines

Enterprise Architecture Management Framework

The Ministry of ICT formulated, during the second semester of 2014, the framework of the Enterprise architecture for the management of information technology of the Colombian State. One of the objectives of this framework is to establish interoperability standards that facilitate searching and retrieving information from public entities.

This framework establishes guidelines, standards and best practices that public entities should apply in their IT management processes. The framework is organized around 6 dimensions:

- IT strategy
- IT Governance
- Information
- Information systems
- Technological services
- Usage and appropriation

The framework also defines different activities that should be executed by the public institutions to implement an interoperability model for the State. Promoting the usage of an interoperability platform, institutions must structure their information and systems using a common language, they should develop services that contribute to information exchange between entities, among others.

Government agencies must adopt this frame according to Decree 2573 of 2014. More information can be found in <http://www.mintic.gov.co/marcodereferencia/624/w3-channel.html>

Open data handbook

This [guide](#) is intended for public servants interested in acquiring knowledge and practical tools that enable government entities to implement public data opening processes and through this facilitate the development of value added services by third parties. It has been structured around phases of the open data methodology that allows the development of a progressive and guided process until the publication of data in an open format. Finally, it describes the proposed publishing structure, standards and formats in the File of Metadata description in order to control the quality of the information published.

E-Government Manual

It is the document that determines the guidelines to be followed by public entities and agencies that perform public functions for implementing the E-Government Strategy in Colombia. One of the 4 main axes of the Manual is ICT usage for Open Government that includes the efforts to encourage the building of a more transparent, participatory and collaborative state involving the different stakeholders in public affairs through the usage of ICT <http://estrategia.gobiernoenlinea.gov.co/623/w3-propertyvalue-8011.html>

IV. Training

The Ministry of ICT through the Program for Excellence in Government, a project developed in partnership with the United Nations Development Programme - UNDP, aims to strengthen the design, implementation and development of capacities through training in Electronic Government to civil servants of the country, including all the topics related to open government and open data.

V. Measurement and evaluation

In Colombia, the implementation of the open data strategy is monitored, assessing the compliance of the entities of the guidelines given by the e-Government strategy. This measurement provides information on the performance in the provision of open data from public entities through the information reported for the calculation of the [e-Government Index](#) in the country.

Colombia - Data management

Please describe here your data management approach, including links to any relevant documents and the description of other existing key elements such as metadata and technical standards, data models, codelists and identifiers, data user's guides and supporting documentation, data inventories, public data consultations and feedback management, the data release and update processes or quality controls.

Yes, it is. The e-government strategy defines targets to be met by public entities associating deadlines for a progressive achievement of the publication and reuse of open data in different regions and sectors of the public administration in Colombia. For this, e-government office provides guidance through guidelines, accompaniment, incentives through resources for co-financing projects for opening and re-usage of open data focused on specific sectors (health, public transport, education, security, etc) and also for the regional levels of government. To close the loop, e-government office periodically measures e-government index including open data related topics.

Additionally, the following are links to relevant documents related to the initiative and their description:

- Open data handbook: This guide is intended for public servants interested in acquiring knowledge and practical tools that enable government entities to implement public data opening processes and through this facilitate the development of value added services by third parties. It has been structured around phases of the open data methodology that allows the development of a progressive and guided process until the publication of data in an open format. Finally, it describes the proposed publishing structure, standards and formats in the File of Metadata description in order to control the quality of the information published.
http://estrategia.gobiernoonlinea.gov.co/623/articles-9407_Guia_Apertura.pdf
- Open data portal: It is the official open data portal of the Colombian state, in this site can be found, in a unified way, all the data published by public entities of Colombia, in an open format, so that they can be used by anyone to develop applications or value-added services, to make analyses and research, to exercise accountability or for any commercial or noncommercial activity. <http://datos.gov.co>
- Colombian Apps Portal: it is the official the App Store of the Colombian government where you can find all the mobile solutions developed by public entities of Colombia, some of them using open data. <http://aplicaciones.gov.co>
- Roadmap: This document aims to present the projects defined for the roadmap in 2015, it identifies the institutions that lead and are part of its implementation and define the actions that will be developed by the Ministry of ICT to support the design and implementation of this projects, according to the guidelines stated by the Decree 2573 of 2014, Article 11 states that the Ministry of ICT must define a roadmap that includes: i) services and procedures that should be prioritized to be delivered on line, ii) i projects for institutional and inter-institutional management improvement with the usage of electronic means and, iii) Actions to trigger the supply and demand of e-government, which in this case has focused on the publication and dissemination of open data. http://www.mintic.gov.co/portal/604/articles-8233_recurso_2.pdf
- E-Government Manual: The document determines the guidelines to be followed by public entities and agencies that perform public functions for implementing the E-Government Strategy in Colombia. One of the 4 main axes of the Manual is ICT usage

for Open Government that includes the efforts to encourage the building of a more transparent, participatory and collaborative state involving the different stakeholders in public affairs through the usage of ICT <http://estrategia.gobiernoenlinea.gov.co/623/w3-propertyvalue-8011.html>

- Enterprise Architecture Management Framework: The Ministry of ICT formulated, during the second semester of 2014, the framework of the Enterprise architecture for the management of information technology of the Colombian State. One of the objectives of this framework is to establish interoperability standards that facilitate searching and retrieving information from public entities. This framework establishes guidelines, standards and best practices that public entities should apply in their IT management processes. The framework is organized around 6 dimensions:
 - IT strategy
 - IT Governance
 - Information
 - Information systems
 - Technological services
 - Usage and appropriation

The framework also defines different activities that should be executed by the public institutions to implement an interoperability model for the State. Promoting the usage of an interoperability platform, institutions must structure their information and systems using a common language, they should develop services that contribute to information exchange between entities, among others. <http://www.mintic.gov.co/marcodereferencia/624/w3-channel.html>

National Data Archive: it is a tool that centralizes microdata and metadata files of statistical operations produced by entities in Colombia, through simple search and organization tools over the Internet. This is a development with support from the World Bank, presented as a pioneer in the country and the region, as it provides a centralized data repository, which promotes the use of open data for decision-making in public policy, academia and business opportunities. The stored information is displayed in different formats enabling data mining.

http://formularios.dane.gov.co/Anda_4_1/index.php/home

Czech Republic - Policies

The above mentioned project of the Ministry of Interior of the Czech Republic defines open data standards for Czech Republic. The standards are documented here: <http://opendata.gov.cz>. The scope of the project is broader:

- It defines guidelines which help public authorities with their publication process.

- It helps public authorities to define terms of use of their datasets while ensuring that published data is open data.
- It defines so called publication plans for different kinds of public authorities (central and governmental authorities as well as local municipalities). A publication plan defines a set of datasets recommended for publication. For each dataset it defines a CSV schema and provides predefined metadata an authority can use for cataloguing the dataset.

A training programme for civil servants is being prepared within the project. Trainings will be performed during September – October 2015 in Prague as well as other Czech regions.

Czech Republic - Data management

The National open data catalogue described above defines how public authorities in Czech Republic should catalogue their datasets. The documentation is available here: <http://portal.gov.cz/portal/obcan/rejstriky/data/97898/popis.html> (in Czech only). The National catalogue enables public authorities to insert catalogue records directly and it is also able to harvest open data catalogues of those authorities if they are running their own catalogues and support CKAN API.

The standards published at <http://opendata.gov.cz> define publication process as well as technical standards:

- 3* open data is the minimum (in few certain cases 2* is allowed)
- CSV is the basic format because anyone is able to create it
- Recommended datasets listed in the recommended publication plans (see the previous answer) are accompanied with CSV schemas which must be fulfilled.

The technical standards will be supported by a new legislation which also being prepared as a part of the afore-mentioned project.

Ecuador - Policies

On December of 2014, the Public Administration Secretariat of Ecuador (SNAP) published the public policy open data guide (Guía de Política Pública de Datos Abiertos) (<http://www.gobiernoelectronico.gob.ec/wp-content/uploads/2014/12/GPP-DA-v01-20141128-SNAP-SGE.pdf>), which has the main guidelines to publish open data. According to this guide, each public institution has the duty to create an internal commission, including technical, legal, planning and administrative people, in order to take decisions to publish, update, monitoring and analyze the open data publication cycle.

This guide, recommends two open licenses from the open definition principles (<http://opendefinition.org/>).

This guide, refers to the 5 starts publication scheme, and its currently focused on reaching the 3rd star, which means publishing each datasets in CSV format, aside from other formats such as PDF or EXCEL.

SNAP, is in charge of following the accomplishment of this guidelines through public institutions. SNAP has organize training for some public institutions, in order to socialize those guidelines. This guide currently does not have a legal background, however, it will evolve as a methodology inside the Innovation Regulation of Ecuador (Norma de Innovación), which will give a legal background to those guidelines.

Ecuador - Data management

SNAP leads the current open government data management approach and is the following:

- Each public institution must create an open data commission, conformed by: IT Director, Planning Coordinator, Legal Director and any other leader of the institution who can take decisions about the publication of datasets.
- Create a Yearly RoadMap document, with a list of datasets that will be published during the year.
- Create a metadata document, for each dataset listed on the previous roadmap document.
- Create a Data Dictionary document, for each resource of each dataset listed on the previous documents.
- Create a Commitment Letter, signed by all the members of the commission, to guarantee that the quality and content of each dataset, has been reviewed carefully and is ready to be published.
- Monitoring the accomplishment of datasets publication according to the roadmaps documents.
- Socialize the open data government approach to other public institutions.
- Create open data use initiatives through public challenges.

The last point is still on planning stage, since we are creating a public challenges portal, which will be published at the beginning of 2016.

The following, are the link to download the documents described before:

Roadmap document for each institution:

http://www.tramiton.to/docsda/hoja_de_ruta_de_publicacion_de_datos_abiertos.xls

Document to describe the Metadata for the datasets:

http://www.tramiton.to/docsda/tm_tabla_de_metadatos.xls

Document to describe the data dictionary for each resource of each dataset:

http://www.tramiton.to/docsda/diccionario_de_datos.xls

Document for the Commitment Letter:

http://www.tramiton.to/docsda/acta_de_declaración_de_datos_abiertos_v2.1.doc

Egypt - Policies

One is currently being formulated.

Egypt - Data management

Currently the initiative is working on promoting the concept with key entities with important data until the official strategy and policy are established, approved and published.

Estonia - Policies

Yes. we have green paper on open data policy.

https://s3.amazonaws.com/files.formstack.com/uploads/2059752/34031631/207767194/34031631_avaliku-teabe-masinloetava-avalikustamise-roheline-raamat-20141125_0.pdf

Also we have supporting law called "Public Information Act" -

<https://www.riigiteataja.ee/en/eli/ee/522122014002/consolide/current>

Estonia - Data management

Guidelines have been given in open data green paper mentioned before. It's not yet translated to english.

Ethiopia - Policies

There is no an Open Data Policy or Strategy. However we have an action plan to be implemented. https://s3.amazonaws.com/files.formstack.com/uploads/2059752/34031634/206631004/34031634_ethiopia_action_plan.docx

Ethiopia - Data management

Development on progress.

Estonia - Policies

The Government of Juha Sipilä was appointed on 29 May 2015. The former government launched an Open Data Programme that will end in June 2015.

http://vm.fi/avointieto?p_p_id=56_INSTANCE_UxOSoAVR7qOq&p_p_lifecycle=0&p_p_state=normal&p_p_mode=view&p_p_col_id=column-2&p_p_col_count=1&_56_INSTANCE_UxOSoAVR7qOq_languageId=en_US

One theme in the current government's strategic programme will be digitalisation. From the former government's programme: The goal-directed opening up of public information resources will also contribute to promoting open science and will create opportunities for the creation of a new kind of entrepreneurship and service innovations.

The new government programme highlights the re-use of open data in business.
https://valtioneuvosto.fi/documents/10184/1427398/Hallitusohjelma_27052015_final_EN.pdf/f1071fae-a933-4871-bb38-97bdfd324ee6 p.26

Estonia - Data management

Coming online: Open Data Handbook with related online courses (first version will be online in the end of the year 2015)

Interoperability tools in Avoindata.fi (Open data portal) - only in Finnish
https://www.avoindata.fi/data/en/dataset?collection_type=Interoperability+Tools

The Public Administration Recommendations (JHS recommendations) provide information management guidelines for public administration (both governmental and municipal).
<http://www.jhs-suositukset.fi/web/guest>

France - Policies

The French Government launched a clear open data strategy by reinforcing its commitment to free re-use of public data during the Interministerial Committee for the Modernization of Public Action (December 18th 2012) and in the Digital roadmap
(<http://archives.gouvernement.fr/ayrault/premier-ministre/le-gouvernement-presente-la-feuille-de-route-pour-le-numerique8716.html>) published on February 28th, 2013.

The Open Data initiative is also a key part of the "Digital State Strategy" (Press release explaining the Digital State Strategy can be accessed here:
http://www.gouvernement.fr/sites/default/files/action/piece-jointe/2014/09/dp_-_transformation_numerique_-_version_web.pdf). In the coming months, a law on digital matters is likely to be passed to renovate the legal framework of the Open Data policy and to reinforce its importance.

Furthermore, the roadmap for data.gouv.fr for 2015
(<https://www.etalab.gouv.fr/data-gouv-fr-31-decembre-2015>) highlights the need to move towards an approach also focused on the quality of the data and regular update. Additionally, community engagement will be encouraged through new tools for conversation amongst reusers. Etalab will also measure the progress of these new features.

By interacting with all government agencies, with innovators and civil society representatives, by entering into a dialogue around data, Etalab naturally opened up to the larger agenda of "open

government”, which covers transparency, participation and collaboration. This process led to the nomination of France for the OGP presidency starting in October 2016

(<https://www.etalab.gouv.fr/la-france-presidera-le-partenariat-pour-un-gouvernement-ouvert>)

and the publication of France National Action Plan for a Transparent and Collaborative Government, which includes many commitment on open data

(<https://www.etalab.gouv.fr/la-france-publie-son-premier-plan-daction-pour-un-gouvernement-ouvert>).

In parallel, working on public data, on its reuse, and on its maximal circulation and usage in public polices, led to the creation of the role of Chief Data Officer (<http://agd.data.gouv.fr/>). The CDO is in charge of working on the accessibility and interoperability of data, of ushering government into data-driven strategies, and of the disseminating data culture and data sciences within the administration.

The national strategy in terms of open data for the next years involves being able to integrate these three elements (open data, open government and data-driven public sector agendas) into a complete transformation approach.

France - Data management

The objectives of the data.gouv.fr portal, conducted by Etalab, are:

1. To foster democracy through enhanced transparency and the enlightenment of public debate
2. To encourage innovation by the coders community and entrepreneurs aiming at boosting the development of the digital economy
3. To contribute to administrative efficiency through the improvement of administrations' tasks

One of the main values of data.gouv.fr is the possibility to publish reuses. The portal functions as a platform, as opposed to a simple dataset catalogue, around which a community is built (547 organisations and 9477 users). Data.gouv.fr's roadmap for the next months (<https://www.etalab.gouv.fr/data-gouv-fr-31-decembre-2015>) focuses on enhancing community engagement through new tools that will intensify conversations amongst reusers.

(Presentation video:

http://www.dailymotion.com/video/x20lct0_data-gouv-fr-the-collaborative-open-data_tech)

The data published on data.gouv.fr is open licensed which ensures the most re-use freedom and guarantees judicial security to the public data producers and re-users:

- by promoting the larger re-use and authorizing the reproduction, redistribution, adaptation and commercial exploitation of public data.

- by inscribing in an international context compatible with the Open License standards developed abroad, particularly with the British government's (Open Government License) and other international standards (ODC-BY, CC-BY 2.0).

In 2011, Etalab conceived, the "Licence Ouverte/Open License" (http://wiki.data.gouv.fr/wiki/Licence_Ouverte_/Open_Licence) in collaboration with the main actors involved. This license is applied to all the free re-uses of public data issued by public administration. The law contemplates exceptions to this standard by instruction of the Prime Minister only.

In order to facilitate Etalab's mission of administration's public information gathering and transmission through data.gouv.fr, the May 26th, 2011 Prime Minister Decree established a unique point of contact in each Ministry. This actor is placed under the immediate authority of each Ministry's General Secretary. It meets with Etalab every month in order to agree on an action plan and a schedule of delivery of the databases, specifying the typology of the formats, the volume of the databases and the delivery dates. The frequency of updates varies in each case depending on the type of database and the degree of implication of the producer. In parallel, two technical approaches are used to encourage that the databases are duly updated: an API, on one side, and an e-mail reminding the update time is approaching (based on the update frequency of the database informed in the publication form).

In this context, Etalab elaborated a data publication guide, available as a wiki (https://wiki.data.gouv.fr/wiki/Guide_de_publication) that gives the best practices concerning datasets release on the platform. It provides methodology on naming, terminology, tags, associated resources, metadata, and ways to provide data directly or indirectly.

Moreover, www.modernisation.gouv.fr/sites/default/files/fichiers-attaches/vademecum-ouverture.pdf is a 10-page Vademecum, divided in four parts: 1/ why opening and sharing data?, 2/ the legal context of open data and what is open data?, 3/ how to implement open data?, 4/ what kind of reuses can be excepted?

Georgia - Policies

There is no separate strategy on open data in Georgia. Open Data initiative is interlinked with two major policy & strategy directions – Open Government Partnership and E-Government. In terms of OGP, action plan on Open data initiatives in 2014-2015 (together with other activities in the sphere of OGP) is approved by the Government Decree #557 dated September 18, 2014. This is the one of the major national strategy document on Open Data available through this link: <http://www.opengovpartnership.org/sites/default/files/OGP%20AP%20GEORGIA.pdf>

Also, Open data is part of e-government development strategy of Georgia which is available through this link: <http://www.dea.gov.ge/uploads/eGeorgia%20Strategy.pdf>

Georgia - Data management

Currently, public organizations are publishing open data on the open data portal: www.data.gov.ge. Publishing of open data is done in compliance with prescribed rules, namely:

1. Administrator (employee of Data Exchange Agency) registers the users of public organization on the portal;
2. After registration, administrator gives the user the User' s Manual, which describes in details the procedures for publishing the open data and managing, editing and updating of published data;

Procedures of publishing the open data on the portal is implemented in compliance with pre-determined standards. While publishing the open data on the portal, the user of the organization shall fill out the metadata of open data and upload the data sheet (resource), if necessary- s/he should upload data sheet usage guide/instruction. More than 1 resource can be uploaded within the scope of one open data.

Following metadata shall be filled out:

- Name of the open data;
- Description of the data;
- Date on the person responsible for the data (name, full name, phone, e-mail);
- Topic.

While uploading the resource it is obligatory to fill out the metadata of the recourse:

- Resource name or short description, for the purpose of versioning the resource;
- Resource language;
- Resource format.

Resources shall be uploaded in XML and CSV formats. it is also allowed to submit the resources in API format, with reference to the appropriate link.

Open data publishing and updating / editing process, as well as quality monitoring is carried out by the portal administrator. For this purpose, portal functionality includes mechanisms, under which it is impossible to publish, edit or update the open data, without administrator's consent. Portal ensures the involvement of visitors, namely, the possibility of evaluating open data, placing comment and requesting the open data.

Germany - Policies

The Open-Data-Action-Plan of the federal government:

http://www.verwaltung-innovativ.de/SharedDocs/Publikationen/Pressemitteilungen/nationaler_aktionsplan_open_data_englisch.pdf?__blob=publicationFile&v=4

Open Data on the federal level is part of the government programme “Digital administration 2020” (summary online at

http://www.verwaltung-innovativ.de/SharedDocs/Publikationen/Regierungsprogramm/management_summary_DiV_Druckversion_engl.pdf?__blob=publicationFile&v=2)

Regarding licensing, the responsible Federal Ministry of the Interior recommends the “Datenlizenz Deutschland 2.0” (<http://govdata.de/lizenzen>), an open license according to the Open Definition.

Regarding data formats, “SAGA 5” includes a list of (open) formats which had to be used by the federal administration (see

http://www.cio.bund.de/Web/DE/Architekturen-und-Standards/SAGA/saga_node.html)

Germany - Data management

The national data portal “GovData” uses a de-facto-standard for metadata regarding openly published datasets. Other data portals which should be harvested by GovData have to publish metadata in this specific format (more information:

<https://github.com/fraunhoferfokus/ogd-metadata>).

Standards regarding (file) formats– not only regarding Open Data – are defined in “SAGA 5” (see C2 à

http://www.cio.bund.de/Web/DE/Architekturen-und-Standards/SAGA/saga_node.html).

Data models and codelists may be defined for particular sectors, but not with a focus on Open Data.

All datasets published at GovData may be commented by users; comments are forwarded to the data publishers. At the federal level, opendata@bmi.bund.de is the central contact point for “data wishes”, comments and ideas for improvement which are forwarded to the responsible ministries and agencies. The implementation progress is monitored by the Federal Ministry of the Interior.

Data-publishing-actions of the Open-Data-Actionsplan are monitored at

http://www.verwaltung-innovativ.de/DE/E_Government/Open_Government/Monitoring/Monitoring_node.html.

Ghana - Policies

There is a strategy in place that could not be implemented due to lack of funds. We are still discussing open data policy adoption.

Ghana - Data management

There is a seemingly consistent open data publication approach. However the approach is not working due to lack of technical know-how and interest my most of the stakeholders.

Greece - Policies

In Greece, open data policy is mainly defined in Law 4305/2014 [10] (amending law 3448/2006 [11]).

Main provisions:

- 1. Open by default principle*
- 2. Open and readable formats*
- 3. Strong urge for the use, only when absolutely necessary, of online, open licences, with the minimum restrictions possible.*
- 4. Extension of the scope of the previous regulations (inclusion of libraries, museums and archives)*
- 5. The Inspector General of the Greek Public Administration is set as the “impartial review body”*

Furthermore a number of operational/binding provisions is set to ensure actual implementation:

- Specific employees/working teams are charged with the task of implementing the policy within each organization*
- Specific deadlines are set to either release the data or justify the non release, with provisions for the updating of the relevant data.*
- The aforementioned procedure is set under the audit of the Internal Audit Service of Public Administration [12]*

As far as motivation is concerned the law provides for:

- Annual contest on the use of open public data by natural and legal persons (developing apps based on the effective use of open public)*
- Excellence awards for public entities which have implemented effective and innovative procedures on open data and re-use policy*

Moreover, actively pursuing open data policies is a part of the mission and competences of the Ministry of Interior and Administrative Reconstruction, as described in Presidential Decree 99/2014 [13] ; it is also part of the 2014-2020 E-government Strategy [14]

Also see question C1 as far as guidelines and current strategies are concerned; please refer to the first [15] among the issued guidelines (8.1.2015-in Greek) especially as far licensing schemes, recommendations and legal/technical definitions are concerned.

Finally, a number of guidelines/directives are available via the website of our Ministry [16]; also open data policy papers are available through website of the National Centre of Public Administration [17] which, during 2014, has included open data in its public servants training curriculum.

[10]-http://www.et.gr/ids-nph/search/pdfViewerForm.html?args=5C7QrtC22wEc63YDhn5AeXdtvSoClrL8oeKAuTKOuIV5MXD0LzQTLWPU9yLzB8V68knBzLCmTXKaO6fpVZ6Lx3UnKI3nP8NxdnJ5r9cmWyJWelDvWS_18kAEhATUkJb0x1LldQ163nV9K--td6SIubMfH2r_a2DXjO6MJnF-5f9_LW7pRMszX0fGIInVmMlh

[11]-http://www.et.gr/ids-nph/search/pdfViewerForm.html?args=5C7QrtC22wFGQ40gSLPFOXdtvSoClrL8KoqaERu8wDDtII9LGdkF53Ulx942CdyqXSYNuqAGCF0IfB9HI6qSYTMQEkEHLwnFqmgJSA5WlsluV-nRwO1oKqSe4BIOTSpEWYhszF8P8UqWb_zFijM7pZ0uAVJnEIRDT8fgjDrktnVRzo5d-fi1RvYPzP-4

[12] <http://www.seedd.gr//tabid/131/Default.aspx>

[13]-http://www.et.gr/ids-nph/search/pdfViewerForm.html?args=5C7QrtC22wEc63YDhn5AeXdtvSoClrL8puV55ZCI0p15MXD0LzQTLWPU9yLzB8V68knBzLCmTXKaO6fpVZ6Lx3UnKI3nP8NxdnJ5r9cmWyJWelDvWS_18kAEhATUkJb0x1LldQ163nV9K--td6SIuQNuyUWxmWNgp-yvwxeqGYGJZNh8IGINa0vElxmrtBy

[14] http://www.ydmed.gov.gr/wp-content/uploads/20140415_egov_strategy.pdf

[15]-<https://diavgeia.gov.gr/search?query=ada:%22%CE%A9%CE%A9%CE%A1%CE%9C%CE%A7-%CE%9C%CE%92%CE%9B%22&page=0>

[16] <http://www.ydmed.gov.gr/?cat=18&paged=2>

[17] <http://www.ekdd.gr/ekdda/index.php/gr/2012-06-19-09-19-56>

Greece - Data management

There is a uniform approach to upload datasets in the repository www.data.gov.gr, according to the provisions of l. 4305/2014 (see above question C2 – [5]). Following a major redesign of the data.gov.gr portal a first edition of a user's guide [18] is available in the site while a FAQ's section is under construction. Planning for a feedback management mechanism is under way. Also see above [7] for the first among the issued guidelines (8.1.2015-in Greek) as far as metadata, technical standards etc are concerned.

[18] http://data.gov.gr/files/UserGuide_data.gov.gr.ver.1.0.pdf

Iceland - Policies

There is not an official open data policy in Iceland, although some work has been undertaken in that direction. There is, however, not any timetable for this work and it is not coordinated.

Iceland - Data management

No policy.

India - Policies

Yes, India has a well-defined policy for Open Government Data known as National Data Sharing and Accessibility Policy (NDSAP). The Policy was gazette notified on 17th March '12 after its approval by Cabinet of Ministers. The Salient features of the policy are as follows:-

- Ministries/Departments to **proactively release datasets** in an Open Format
- Negative List, if any to be maintained by the Ministries/Department and made public
- The datasets to be preferably published on the Open-Data-platform, <https://data.gov.in>
- For better discovery & compliance with technology & metadata standards
- Financial provision suggested in the policy for OGD efforts by respective department.
- Implementation of the policy entrusted to NIC, DeitY the premier ICT Organization of the Government

India - Data management

Yes, there is a consistent (open) data publication approach. **Open Government Data Policy** was gazette notified in March 2012 and there after the single-platform-data portal was developed and made live.

- **The OGD Platform, India** was launched in October 2012 having the following features to facilitate wider reach and having good UI interface:-
 - Quick Response Code (QR) –
 - Well defined Metadata.
 - Citizen Engagement and Community Collaboration features –
 - Citizens can express their views, demand for datasets, endorse
 - Rate the datasets on three aspects i.e. Quality, Accessibility and Usability on the scale of 5.
 - Embed the datasets in their blogs or websites.
 - Reach out through mails directly to the Chief Data Officers of the Ministries/departments
 - Tool for Intra-operability of Data formats – APIs have been developed to convert the source datasets from original published format to other five different formats. It helps developer to consume the datasets directly in their applications/tools.

- Metrics – Dashboard has been developed to give a bird's view of the contributed catalogs/resources on the platform, along with its popularity, usage and visitors statistics.
- Visitor Relationship Management – Feedback/suggestion received for any catalog/ resource is forwarded to the dashboard of the data controller for further action.
- Platform facilitates auto consumption of datasets exposed by the ministries/departments as web-services through their e-gov applications.
- **Chief Data Officers** have been nominated in the ministries/departments/organizations to spearhead the OGD initiative and facilitate publishing of datasets in an open format. **105 Chief Data Officers** have been nominated so far which has grown significantly over the time and currently **over 16,700 datasets have been published.**
- **Formation of a dedicated NIC OGD team** to develop, maintain and manage the OGD Platform as well as implement the policy in the ministries/departments/organization.
- Appointing **Data Analysts** for hand-holding the departments in curating the data (cleaning, converting datasets into open format) and also facilitate in publishing their data on the OGD platform.
- **Open Data Awareness** - Regular events/workshops are held to sensitize the government officials about the policy, its importance as well as implementation and training. Details could be viewed at <https://data.gov.in/whats-new>
- **Rapid Roll out of OGD Initiative** – a separate project has been formulated by NIC for rapid roll out of OGD initiative in Ministries/departments giving emphasis on capacity building, engagement with government departments, community and industry with financial support.
- **Participation of States/Cities** – Proactively Chief Data Officers are nominated in 7 states of India. A number of datasets are published by them. Workshops have been conducted by the NIC OGD team under the chairmanship of Senior Officials (Chief Secretary, Principal Secretary) of the states like in Himachal Pradesh, Goa, Madhya Pradesh, Chattisgarh, Tamil Nadu are some of them. Details could be viewed at <https://data.gov.in/whats-new>

Enhanced Participation of States/Cities – In order to increase the reach of OGD Initiative in the states/cities of India a separate project is being curved out by NIC **having funding provision.** This would facilitate in establishing the similar institutional arrangement for the states as done in the ministries/departments.

Indonesia - Policies

Freedom of Information Act ([Law No. 14, 2008](#)) serves as a foundation that facilitates Open Data implementation by giving the public the right to access public information and the obligation for government to fulfil.

In this early stage, the program focuses on rapid prototyping which it had succeeded to surpass its target in integrating 27 government institutions on data.go.id from its initial target of 20 government institutions while establishing technical regulation. The effort for the latter has been made by integrating the open data principles to the upcoming Presidential Decree on E-Government, set to be released by the end of 2015 which encompasses many aspects necessary to make Open Data a business as usual within the government. The program also aligned its effort with the Presidential Instruction on Corruption Prevention and Eradication [2014](#) and [2015](#) that covers broad topics of transparency in many government sectors.

Supporting Key elements:

- The completion for blueprint are targeted by the end of 2015 to provide roadmap and measurable target ahead.
- A single set of terms and conditions comply to the international standard for the use of open data released by the Government of Indonesia. Using the Indonesian version of the Creative Commons Attribution License 4.0, these terms and conditions has been applied to all data registered on the National Data Portal irrespective of which government institutions has custody of the data.

The program is one of the commitment included in the National Action Plan for Open Government Partnership which obliged to its monitoring and evaluation mechanism, and it is tied into the presidential reporting mechanism by the Executive Office of the President.

Indonesia - Data management

Standards and guidelines including Data release standard and publisher guidelines applies for all integrated government institutions in the National Data Portal (data.go.id) Since government capacities varies, technical assistance such as training and data discovery, a series of session to identify and prioritize data release, are provided. Although data release was still voluntary and dependent to government capacities that in general needs further enhancement, compliant practice by Badan Informasi Geospasial and Badan Meteorologi, Klimatologi dan Geofisika and Provincial Government of Jakarta provide evidence and model on how these standards and guidelines could well implemented.

Ireland - Policies

Please see the draft Technical Framework for the Open Data Initiative which sets out the recommended Open Data licence, formats, metadata schema and standards. It also sets out a commitment to continuing work on a Unique Resource Identifier for the Open Data Initiative (<https://data.gov.ie/technical-framework>).

A lifecycle approach to Open Data is set out in the foundation document for the development of a National Open Data Strategy, comprising approaches to audits, publication plans, publishing

datasets, and governance. The foundation document also sets out a coherent framework in which public bodies can facilitate, encourage and measure data usage.

(<https://data.gov.ie/strategy>)

These documents built on the significant progress already achieved under the approach outlined in the Insight Reports

(<http://www.per.gov.ie/minister-howlin-launches-open-data-initiative/>) and the associated Work Programme.

Ireland - Data management

Please see the draft Technical Framework for the Open Data Initiative which sets out the recommended Open Data licence, formats, metadata schema and standards. It also sets out a commitment to continuing work on a Unique Resource Identifier for the Open Data Initiative

(<https://data.gov.ie/technical-framework>).

The draft Technical Framework comprises five key components:

- **Open Data Licence** – a public consultation was undertaken in March and the recommendation is that an open licence with attribution of the source be used (e.g. CC-BY).
- **Formats** – data published in any format can be considered Open Data if associated with an open licence but the type of format used has implications for the usability of the data. The 5 star Open Data scheme is typically used to measure the level of openness, the more stars signalling the greater the openness. The aim is to begin with publishing in 3 star format and a list of recommended formats is provided.
- **Metadata Schema** – the metadata provides a summary description of the dataset making it easier to identify, understand, locate and retrieve. DCAT AP is the recommended metadata standard with appropriate geospatial extensions.
- **Standards** – these ensure that data is published in a permanent, persistent and consistent way this facilitating a common understanding of the data content and the smooth exchange of data. It is recommended that international standards be used in the first instance and where these are not available national standards or domain specific standards should be used. A list of data standards commonly used by public bodies in Ireland is provided.
- **Unique Resource Identifiers** – these are a reference (number, code, name) to identify objects for example schools, road numbers, company registration numbers, statute book numbers and so on. The requirement for this element is longer term when work is further advanced in relation to linked data and should not delay progression in publication of datasets in line with the other elements of the framework. Work continues on the development of this element with the assistance of public bodies.

This will mean that all datasets published on the Open Data portal will, within an agreed timeframe, be:

- Machine-Readable
- Non-Proprietary
- Associated with an Open Licence
- Described by standardised Metadata

Italy - Policies

In Italy the dissemination of data produced by the State is still limited and, in the various administrative areas, it is based on extremely variable rules and practices.

The quality of published data is generally low and the possibility of their reuse is often undermined by the use of non- open formats and licenses that don't allow their re-use for commercial purposes.

Although there are not regulatory barriers, public authorities find it difficult to publish open data (and update them).

Dati.gov.it, the National Portal of Open Data, was born in 2011 to host the catalog of open data published by ministries, regional and local governments. Over time, fostered by the adoption of national and regional laws, the number of open data published has increased significantly.

However, after more than three years, an increase of the amount of published data has not been followed either by an increase in the perceived transparency, or improved efficiency of the administration and - more generally - a re-use of the published information. This is caused by an approach based on the quantity rather than the quality of data.

Open data policies are central in two documents submitted by AGID - Agency for Digital Italy, in the year 2014: The National Agenda for the Enhancement of Public Information and the National Guidelines for the Public Information Enhancement. Both of them have been carried out in cooperation with public authorities and in response to specific requests from civil society with the purpose the quality of released data and, especially the guidelines, to provide technical guidance to facilitate interoperability, comparability and re-use of data.

Italy - Data management

We mentioned in the previous question the "The National Agenda for the Enhancement of Public Information" which is trying to foster some key datasets.

Actually there are more than 10000 datasets in the national open data portal.

Japan - Policies

The government implements following commitments on open data based on "Open Government Data Strategy" that was decided by IT Strategic Headquarters.

[Strategy] Cross-department strategy which includes the purposes, principles and main measures for open data.

[Plan] Roadmap which shows the main measures such as the launch of data catalog site, its schedule and the priority field of data.

[Rules to open data] Guideline document which shows the matters that ministries and agencies should carry out about opening data under suitable rules for secondary use and machine readable format. It also shows the important point to create data and change the rules of each ministries' and agencies' website to "The Government of Japan Standard Terms of Use".

[Expansion of open data to local governments] Guideline document which shows basic policy, proper procedure and reference information of open data for local government. Also we promote open high-value data according to the action plan on the basis of G8 Open Data Charter.

[Latest policy] Based on the results of our actions over years, we have revised basic policy and agenda toward a new objective which focus on utilization, change tracks to problem-solving approach, improve the quality and quantity of public data and expand actions internationally etc. And Key Performance Indicator (KPI) is used as a measure for promoting strategies and clarified in order to give a quantitative rating the above actions.

Supporting Files

[Plan] Roadmap for Promotion Open Data in Electronic Administration
<http://www.kantei.go.jp/jp/singi/it2/kettei/pdf/20130614/siryou3.pdf>

[Rules to open data]
Basic stance on public release of ministry information to encourage secondary use (guidelines)
http://www.kantei.go.jp/jp/singi/it2/densi/kettei/data/gl26_honbun.doc
http://www.kantei.go.jp/jp/singi/it2/densi/kettei/data/gl26_betten1.doc
http://www.kantei.go.jp/jp/singi/it2/densi/kettei/data/gl26_betten2.doc

[Development open data to local government]
Guideline to Promotion Open Data for Local Government
http://www.kantei.go.jp/jp/singi/it2/densi/kettei/opendate_guideline.doc
http://www.kantei.go.jp/jp/singi/it2/densi/kettei/opendata_tebikisyo.pptx

[Japan Open Data Charter Action Plan]

http://www.kantei.go.jp/jp/singi/it2/cio/dai53/plan_en.pdf

[Latest policy]

Toward New Development of Open Data

<http://www.kantei.go.jp/jp/singi/it2/densi/aratanaod/aratanaod.doc>

Japan - Data management

The government of Japan operates data catalog site "DATA.GO.JP" which allows to search open data of all ministries and agencies in a cross-sectoral manner. Besides all ministries and agencies provide data to IT Strategic Headquarters, they are requested to input data periodically. Basic policy about opening data of ministries and agencies for promoting secondary-use was decided at a CIO Liaison Committee and notified to ministries and agencies. Releasing detailed information such as the number of datasets by organization activates actions of open data.

The websites of all ministries and agencies are applied the government's standard terms of use which allow secondary-use without preliminary application. Therefore, by adding information on the websites, open data is improved even if data is not registered on the data catalog site.

Additionally, regarding to actions of open data by local governments, we explain the method of maintenance of catalog and the method of classification for appropriate data format and data management.

Supporting Files

[Basic stance on public release of ministry information to encourage secondary use]

<http://www.kantei.go.jp/jp/singi/it2/cio/dai57/nijiriyoushi1.pdf>

[Example of number of registration to data catalog site by ministries and agencies]

<http://www.kantei.go.jp/jp/singi/it2/densi/kwg/dai2/siryou1.pdf>

[Government of Japan Standard Terms of Use (Version 1.0)(English)]

http://www.kantei.go.jp/jp/singi/it2/densi/kettei/gi_betten_1_en.doc

[Example of a term of use of a ministry's website]

<http://www.mofa.go.jp/about/legalmatters.html>

Kazakhstan - Policies

There is a change in law of informatisation, which is being considered by Ministry of Justice and is agreed to be implemented by the end of the current year. The law would state that government officials would be required to publish required data in machine-readable formats

(such as xml, json). The law would define the open data as all the information which can not be opened to public due to political reasons.

Kazakhstan - Data management

Officials coordinate required obtainable data with Ministry of Innovations and Development. After they agree on eligibility of the data, they gather the data according to the defined format: description, name and data in 2 main languages (Kazakh and Russian), data must be in machine-readable format, the date of publication and responsible person are also stated. Afterwards, our team receives the data, it is observed for possible mistakes and uploaded on the portal via workstation.

Kenya - Policies

At the moment a nationwide Open data Policy is being drafted by the KODI Team. For the Most part this is being held back by the access to information bill and data protection bills that are at the attorney general office awaiting debate in parliament and presidential assent. The Open data policy ascribes much of its mandate from these two pending bills so without them it will be difficult to push the open data policy agenda. At a legal level we are also determining if ICT Authority through the Ministry of ICT can set a Nation Wide Policy that does not need to go to Parliament for debate.

In Addition to this we are also setting Guidelines and recommendation for Open data publishing that at the very least we can suggest to agencies to use as a guide to implement open data principles.

Kenya - Data policies

Not responded

Korea - Policies

The strategy includes the Open Data Act, open data management guidelines, policy on open data use (license), implementing organization and license, data standard, public servant education program, achievement index, etc.)

1. Guaranteeing people's rights to open data kept/managed by public institutions in accordance with the "Act on the Promotion of the Provision and Use of Public Data" (Article 1 ,3 of the law)
 - "Act on the Promotion of the Provision and Use of Public Data":
<http://www.law.go.kr/main.html> (Search "ACT ON THE PROMOTION OF THE PROVISION AND USE OF PUBLIC DATA")
 - Implementing organization: Government, local government, and public institution (Article 2 of the law)

- Provision of open data: Public institutions deliver to users -- in machine-readable format -- open data acquired and managed for the purpose stipulated in legislation. (Article 2 of the law)
- Machine-readable state: State wherein the content and internal structure of data can be checked or data can be processed (e.g., modification, conversion, extraction) using software
 - Basic Principles: Universal access by anyone, allowing commercial use; compliance with legislation and terms of use (Article 3 of the law)
- 2. Open data management guidelines: Establish detailed guidelines for the enforcement of the open data release policy pursuant to Article 11 of the law.
 - Overview of management guidelines: Giving examples that can be referred to by administration hands-on workers; systematic management of open data by public institution by designating the officer responsible for the provision of open data and working-level employees and by making the line officers notify at all times the officer in charge of providing open data and the person in charge of field work of the application and enforcement details of the management instructions
 - Management of open data provision: Subdividing the phases of management of open data provision into 6 sub-phases, presenting the management standard and principle for each phase (generation and collection - processing and operation - registration and management - provision, follow-up management, and destruction)
 - Quality management: Stipulating matters to be observed by quality control phase (development, operation, and utilization) to manage the quality of the data generated/acquired and managed by the public institution in a stable manner and to secure proper quality level (Article 22 of the law)

Open data management guidelines:

http://www.mogaha.go.kr/frt/bbs/type001/commonSelectBoardArticle.do?bbsId=BBSMSTR_00000000016&nttId=44459

- 3. Policy on open data use
 - Conveying the basic definition and principle of using open data/Guaranteeing the free utilization of the provided data including commercial use, resolving the license issue
 - Complying with the existing laws and policies by excluding the information that should be protected as listed under Information Act (e.g., personal information) and the information that includes the right of the third party, which is protected by the copyright law and other laws, but the proper use permission was not obtained, in accordance with the pertinent legislation (Article 17 of the law)

Open data portal > Policy on open data use:

https://www.data.go.kr/e_subMain.jsp#/L3B1YnMvcG90L2VuL0Iyb3NHdWlkZWxpbmUkQF4wNjFtNjU=

4. Standard for open data release: Defining more terms (e.g., dataset, open API) and standard for methods of open data provision, besides the legal definition of open data release
 - Dataset: Set of data by data area
 - Open API: Standard interface for the shared program
 - Provision method: Defining the file format (CSV, JSON, XML), naming convention, and standard by provision area

Standard for open data release (Open data portal > Information > PDS > No.77):

(Kor)-<https://www.data.go.kr/subMain.jsp#/L3B1YnlvcG90L3Bkc9Jcm9zUGRzL29wZW5EZXRhaWwQYwIdJEBeMDQybTQyJEbecmVjc3Jyb21JZD1QRfNfMDAwMDAwMDAwMDAwMDEzMyRAXnBkc0lkPVBEU18wMDAwMDAwMDAwMDAwMTMz>

(Eng)-https://www.data.go.kr/e_subMain.jsp#/L3B1YnIvcG90L3BkcY9Jcm9zUGRzL2VuL29wZW5EZXRhaWxQYWdlJEBeMDQybTQyJEBeCMVjc3Jvb21JZD1QRFNfMDAwMDAwMDAwMDAwMDEzMyRAXmxvY2FsZT1lbiRAXnBkc0lkPVBEU18wMDAwMDAwMDAwMDAwMTMz

5. Civil servant education: Implementing cyber education and offline education by developing mobile education contents
- Implementing online education for civil servants using the online education system of the Central Officials Training Institute (12 times composed of 20 ~ 25-minute training for each time, 165 civil servants completed the course by May 2015)
 - Implementing specialization training to strengthen the specialization and competence of the person in charge of business in the public institution (6 times, 1,200 attendees)
 - Held a briefing session on the development strategy for open data release on September 25, 2014 and a seminar celebrating the first anniversary of the Open Data Act on October 31, 2014

Holding a seminar celebrating the first anniversary of the Open Data Act:

<http://www.datanet.co.kr/news/articleView.html?idxno=76339>

<Briefing session on the development strategy for open data release on September 25, 2014>

<Seminar celebrating the first anniversary of the Open Data Act on October 31, 2014>

6. Reflecting the result of open data release on institution evaluation
 - Reflecting the result of open data release in evaluating the government organization (central/local government) and public institution from 2014, in order to induce the active open data release of various organizations
 - Reflecting the result of open data release/utilization as an evaluation index when the government performs performance appraisal

- Evaluating the "Government 3.0" implementation result of the central administrative agency and local government (December 2014) and management of the public institution (December 2014)

The Ministry of Government Administration and Home Affairs evaluated the "Government 3.0" implementation result and announced the findings:

<http://www.itdaily.kr/news/articleView.html?idxno=59582>

Korea - Data management

The approach includes data list management using the open data portal, collective data provision, guideline and related data for users, and management of consultation and feedback related to open data.

1. Management of the open data list

- The open data portal provides meta-data of the provided dataset, regardless of the provision method (file data and open API)

File data meta-data:

https://www.data.go.kr/e_subMain.jsp#/L2NybW0vY29tbW9uU2VhcmNoL2VuL29yZ2luRGF0YVNiZCRAXjAxMm0xJEBebG9jYWxlPwVuJEBebHVibGJlRGF0YVBrPTMwNzkyNzgzQF5icm1DZD1PQzAwMTMkQF5leGNlbnVndW50PTAkQF5kb3dubG9hZENvdW50PTE4JEBeb3JnSW5kZXg9REFUQQ==

Open API meta-data:

https://www.data.go.kr/e_subMain.jsp#/L3B1YnlvdXNlL3ByaS9Jcm9zT3BlbkFwaURldGFpbC9lbi9vcGVuQXBpTGZldFBhZ2UkQF4wMTJtMSRAXmxvY2FsZT1lbiRAXnB1YmxpY0RhZGFQaz0xNTAwMjAxNyRAXmJybUNkPU9DMDAxNSRAXnJlcXVlc3RDZ3VudD0xJEBeb3JnSW5kZXg9T1BFTkFQSQ==

- ("Purpose of collection" meta-data item) The purpose (legal basis) of data collection should be identified by registering the "basis for retention (legislation)" when registering the open data list. (It is stipulated that open data should be collected to guarantee people's right to use open data in accordance with the Open Data Act.)
- ("Collection method" meta-data item) The collection method should be identified by specifying the scope of use permission, the inclusion of third-party rights when registering open data, public works. (It is stipulated that open data should be internally generated or collected/acquired from the external source and provided to the public in accordance with the Open Data Act.)

Detailed description of the open data portal(e.g. Include public data):

https://www.data.go.kr/e_subMain.jsp#/L2NybW0vY29tbW9uU2VhcmNoL2VuL29yZ2luRGF0YVNiZCRAXjAxMm0xJEBebG9jYWxlPwVuJEBebHVibGJlRGF0YVBrPTMwNzkyNzgzQF5icm1DZD1PQzAwMDQkQF5leGNlbnVndW50PTAkQF5kb3dubG9hZENvdW50PTIyOCRAXm9yZ0luZGV4PURBVEE=

- Conveying present status on maintenance of entire data lists held and additional maintenance plans; method of checking the non-arranged data by organization and the arrangement method; method of checking and registering the open data to be provided; guide to registering the list of open data

Data list guide (Information > PDS > No.63):

(Kor)-<https://www.data.go.kr/subMain.jsp#/L3B1YnlvcG90L3Bkcy9Jcm9zUGRzL29wZW5EZXRhaWxQYWdlJEBBeMDQybTQyJEBecmVjc3Jvb21JZD1QRFNfMDAwMDAwMDAwMDAwMDA5NSRAXnBkc0lkPVBEU18wMDAwMDAwMDAwMDAwMDk1>

(Eng)-https://www.data.go.kr/e_subMain.jsp#/L3B1YnlvcG90L3Bkcy9Jcm9zUGRzL2VuL29wZW5EZXRhaWxQYWdlJEBBeMDQybTQyJEBecmVjc3Jvb21JZD1QRFNfMDAwMDAwMDAwMDAwMDA5NSRAXmxvY2FsZT1lbiRAXnBkc0lkPVBEU18wMDAwMDAwMDAwMDAwMDk1

Document for registration of open data list (p23)

Document for registering the open data to be provided (p27)

2. Consistent data can be provided by establishing open data standards

- Establishing a standard on the provision item, terms, attributes, and provision method of the data released by institutions with different standards by designating key datasets (30 datasets in 2014 and 2015, 20 datasets in 2016 and 2017)
- Securing data quality by increasing the production of open-format data (8.8% in August 2014 → 20% in 2015 → 30% in 2016 → 50% in 2017) and establishing a quality certification system (developed a maturity model for open data quality control in 2014, applying the model on a trial basis in 2015)

Open data portal > Download > Development strategy for open data release (Information) > PDS > No.84):

(Kor)-<https://www.data.go.kr/subMain.jsp#/L3B1YnlvcG90L3Bkcy9Jcm9zUGRzL29wZW5EZXRhaWxQYWdlJEBBeMDQybTQyJEBecmVjc3Jvb21JZD1QRFNfMDAwMDAwMDAwMDAwMDE0MSRAXnBkc0lkPVBEU18wMDAwMDAwMDAwMDAwMTQx>

(Eng)-https://www.data.go.kr/e_subMain.jsp#/L3B1YnlvcG90L3Bkcy9Jcm9zUGRzL2VuL29wZW5EZXRhaWxQYWdlJEBBeMDQybTQyJEBecmVjc3Jvb21JZD1QRFNfMDAwMDAwMDAwMDAwMDE0MSRAXmxvY2FsZT1lbiRAXnBkc0lkPVBEU18wMDAwMDAwMDAwMDAwMTQx

3. Guideline and related data for users

- The open data portal has a Q&A bulletin board for data users.

https://www.data.go.kr/e_subMain.jsp#/L3B1YnlvcG90L3FuYS9lbi9Jcm9zU2VsZWN0UW5hTGldzCRAXjE0MW00NSRAXnNraXBSc3dzPTAkQF5tYXhSb3dzPTEwJEBec2VhcmNoQ25kPSRAXnNIYXJjaFdyZD0kQF5xbmFUEUNvZGU9UU5EQjAyJEBebG9jYWxlPWVWu

<http://www.odmc.or.kr/home/homeIndex.do?menuCode=mediation>

5. Other support activities

- Consultation on open data utilization: A total of 15,070 inquiries were accepted and processed (8,470 inquiries in 2014 and 5,670 inquiries as of June 2015).

Related video: "Open Field Meeting about open data":

http://science.ytn.co.kr/program/program_view.php?s_mcd=0046&s_hcd=&key=201407211343061832

Macedonia - Policies

The open data initiative is included in the current government's election program 2014-2018 stating the goals and deadlines for this initiative. Currently, the Ministry for information society and administration is the national authority tasked with the execution of this strategic goal.

The Ministry for Information society and Administration has published a [Rulebook for minimum requirements regarding open data](#) as a supplement to the Law on Public Sector Data Use. The Open Data team in MISA has an internal roadmap on publishing new datasets but this information is not publicly available.

MISA in cooperation with the Open Data Institute (ODI) from London, UK, has organized and conducted several trainings and lectures on open data to key stakeholders in the open data initiative in Macedonia (public institutions)

This is included in the current government's election program 2014-2018 stating the goals and deadlines for this initiative

Considering that Open Data is a key strategic goal of the Government, all ministries and government institutions are striving to contribute as much as possible in achieving this strategic goal. Furthermore, MISA is ranking the institutions that publish open datasets on the national open data portal (www.otvorenipodatoci.gov.mk) based on the number and quality of published datasets

(<http://www.otvorenipodatoci.gov.mk/Templates/Pages/BarometerPage.aspx?page=54>)

Macedonia - Data management

This issue is covered by the Law on Public Sector Data Use and the Rulebook for minimum requirements regarding open data. In short, every published dataset on the national open data portal has a predefined frequency for update. MISA is keeping track of this and coordinating with the institutions if necessary.

Comprehensive machine readable metadata is regularly provided for all published datasets on the national open data portal. Usually data is available for download as CSV, MS Excel and XML.

Detailed standards are not yet available but MISA is working on semantic standards and guidelines for publishing datasets. A more general guideline is provided in the Rulebook for minimum requirements regarding open data.

MISA is working on establishing an exhaustive data inventory for the central government, including non published data.

Complete user's guides and supporting documentation for reference data is planned for the next upgrade of the national open data portal.

MISA cannot change the content or the structure of the data provided by the institutions. However, we have multiple mechanisms for ensuring data accuracy, completeness and consistency, one of which is interaction with the end users of the data through the build in mechanism for reporting of incomplete or flawed datasets (comments section of each published dataset).

Malawi - Policies

We have not developed an open data policy for the country neither do we have a strategy for the same at the moment. However, segments of open data exist depending on the type of data being sought. Economic indicators would be one of the open data in the country.

Malawi - Data management

The data publication approach for open data has not been in existence during this period of review.

Malaysia - Policies

During MSC Malaysia Implementation Council Meeting (ICM) 2014, Prime Minister of Malaysia had mandated Malaysian Administrative Modernisation and Management Planning Unit (MAMPU) along with Multimedia Development Corporation (MDeC) to drive Big Data Analytics (BDA) and Open Data Initiative in Malaysia. MAMPU is responsible to drive Open Data Initiative for public sector while MDeC will drive open data initiative for private sector.

BDA framework has been created and endorsed during the ICM meeting whereby Data Governance and Policy (Open Data) is identified as one of the key imperative to position Malaysia as regional BDA hub by 2020. The framework and Open Data Guidelines are available to public at data.gov.my, Malaysia Open Data Portal.

Link to BDA framework:

<http://bigdataanalytics.my/national-big-data-analytics-initiative-2015-priorities-talent-open-data-and-coe/>

Open Data framework has been developed by MAMPU and has been presented to government agencies.

Link to Open Data framework:

http://data.gov.my/folders/others/framework_open_data_01042015.pdf

Open Data Institute (ODI) has reviewed Open Data Guideline and the feedback has been incorporated in the Malay version of the guidelines.

Link to Open Data Guidelines for Public Sector:

http://data.gov.my/folders/others/Garis_PanduanBeta_Ver_1.0_01042015.pdf

Malaysia - Data management

Yes, currently, the publication approach is via data.gov.my. There is a defined process (as illustrated in Open Data Guideline for Public Sector) for government agencies to upload their datasets on the open data portal.

Link to Open Data Guidelines for Public Sector:

http://data.gov.my/folders/others/Garis_PanduanBeta_Ver_1.0_01042015.pdf

Mauritius - Policies

The Open Data Initiative is at its inception. However, the e-Government Strategy 2013 - 2017 recommends the implementation of an Open Data policy.

Link:

<http://cib.govmu.org/English/Documents/eGov%20Strategy%20final%20ver%202013-9-3.pdf>

Mauritius - Data management

The report of the Open Data Readiness Assessment exercise will assist in defining the data publication approach.

Mexico - Policies

National Strategies:

The Open Data Policy was established through the Open Data Executive Order, that instructs all Federal agencies to initiate the provision of their public data as Open Data in datos.gob.mx. The main authority responsible of coordinating the delivery of the strategy is the Office of the President of Mexico, in conjunction with the Ministry of Public Administration.

Apart from open and machine readable formats, the data published in datos.gob.mx has an associated Open License catered specially for Mexico: Términos de Libre Uso MX <http://datos.gob.mx/libreusomx/>, which is compatible with Creative Commons.

The Executive Order instruct government institutions to prioritize the Publication of Open Data according to the objectives of the current National Development Plan, and will take into account citizen participation.

It also promotes the execution of cooperation agreements with the governments of states and municipalities; with the legislative and judicial powers of the Federation, as well as the bodies to which the Constitution of Mexico or the laws of autonomy endow, to lay open data available to anyone interested in datos.gob.mx.

The Order also mandates the publication of an Official Open Data Implementation Guide with the specific steps to publish Open Data. The Guide was published in the Official Gazette (June 18) and contains 4 basic steps and specific actions that all government institutions have to follow to comply with the Open Data Policy: 1) Plan 2) Post 3) Refine and 4) Promote containing specific actions to accomplish the Open Data Executive Order.

International strategies:

International Open Data Charter - Mexico as lead steward in the development of the International Open Data Charter, through which the country is cooperating in the development of a set of foundational principles for open data, as well as associated tools and guidelines to enable accessibility, timeliness, interoperability and use of public data. Mexico will make a global call to action for the Charter's adoption at the United Nations General Assembly in September, and kickstart rolling launches for its adoption by other countries starting at the OGP Global Summit in Mexico, G20 Leaders' Summit in November and COP21 in France.
<http://opendatacharter.net/>

G20 - Mexico leads the development of the G20 Open Data Anti-Corruption Principles, a compendium of best practices and use cases of Open Data and Anti-Corruption which are thought of as an interoperable, sectoral framework, that will feed the Charter, highlighting the impact of open data in the prevention of and fight against corruption.
https://star.worldbank.org/star/sites/star/files/g20_acwg_2015-16_anti-corruption_implementation_plan_australia_2014.pdf

Data Revolution - We live in a world where millions of people matter so little that they are uncared for. Their births are not recorded, they cannot access basic health care, sufficient food, lifesaving antiretroviral medicines, or an education. To successfully deliver the SDGs and end extreme poverty, we need governments, businesses, civil society, international organisations and citizens to build on official statistics and invest in new approaches to collecting and using data. On the margins of the Financing for Development Summit, governments, businesses, civil

society and international organisations made commitments to address gaps in data production, openness and use. Together the ONE Campaign, the US and Mexican Governments, the UN Economic Commission for Africa and the UN Sustainable Development Solutions Network announced the launch of a Global Partnership for Sustainable Development Data.

<http://www.one.org/international/blog/harnessing-the-data-revolution-for-sustainable-development/>

Mexico - Data management

The Open Data Implementation Guide, in its first two steps, include the specific actions that all 278 federal government institutions have to follow when publishing Open Data:

Step 1-Plan: designate the public servants responsible for the implementation of the policy and an internal Open Data Council to coordinate the efforts; create an institutional data inventory; prioritize the data inventory; and create an Open Data institutional plan.

Step 2- Publish: Transform datasets into open formats; publish datasets in the specific institutional websites; create adequate metadata following the DCAT standard; reflect the links to the datasets in datos.gob.mx

Steps 3 and 4 of the implementation guide refer to the maturity and promotion of Open Data and its impact in Mexico. These two steps are used to inform the annual iteration of the Policy and the Institutional Open Data Plans in the Federal Government. <http://mxabierto.github.io/guia/>

Moldova - Policies

In august 2014 the Government of Moldova has voted two important documents that set up the principles of open data. The role of these Government Resolutions is to institutionalize the methodologies of data publication and reuse that were being developed during the last 4 years, but also to promote the open data by default principle across the Governmental operations.

The first document, the Government Resolution no 700 from 25 august 2014 was adopted to create a regulatory framework on the open data principles applied nation-wide and define the minimum open data requirements that will guide publishing of open data by ministries, other central administrative authorities under the Government and their organizational entities. The major objective of this Concept paper is to define the open government data principles and their implementation. The specific objectives of this document are: 1) To publish as many public government data in open and computer-processable formats for re-use by the public, according to the defined principles. 2) Standardize the requirements to the structure and formats of published data. 3) Increase transparency of government and accountability of civil servants. 4) Facilitate the access of citizens to valuable public information both for transparency purposes and economic benefits.

The Methodology for publishing open data that was adopted in August 2014, was developed in order to establish a mechanism for publishing, editing, accessing the unique government open data portal (www.date.gov.md) information and the open government data accessible for reuse. This methodology is applied by ministries, by other central administrative authorities subordinated to the Government and by autonomous public institutions through the persons officially delegated to publish open data on the portal.

The re-use of public sector information including open government data is being licensed by the PSI re-use law nr. 205 from 26th of december, 2012 and the Government Resolution nr. 886 from 2013.

The legal framework was necessary in order to back-up the initiative with legal documents but also to institutionalize the open data by default principle. An additional effort is being done in training the civil servants through regular meetings where we discussed together the challenges that the institutions face while opening data and how they can be overcome. Such meetings take place once in a month. Also, several meetings with open data users on one side and open data publishers on the other side took place. During these meetings the aim is to bring both data re-users and data suppliers at the same table so they can discuss and create a feedback loop.

<http://egov.md/en/legislation/government-resolution-no-700-policy-concept-principles-open-government-data>

<http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=354534>

<http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=350277>

Moldova - Data management

The open data publication process is being regulated by the Open data publication methodology adopted through the Government Resolution nr. 701 in 2013. This methodology is setting up the rights and responsibilities of the data publishers, such as: to apply the principles of open government data when publishing them on the portal, in compliance with applicable law; to publish, update and edit data sets, apps and databases on the government open data portal. Each of the open data coordinators is having an account on the open data portal where he logs in and manages the data that is being published by their institution. In the Help menu of the account there are two user's guides that describe the publication process, what metadata has to be introduced, what format should the data be and other information. The second guide is an instruction for API integration, that aims to help the institution integrate their databases with the open data portal so that the data can be published in an automatized way and reduce the human factor dependence. The institutions are the ones who manage the data release, according to the internal data collection procedures. The data is being published with it's collection frequency.

As a part of the government e-transformation agenda Moldova is being developing an interoperability platform that will ensure data exchange and management within the Government. This year we have designed a procedure to connect the open data portal to the

interoperability platform. Within this initiative data inventories will be implemented so it will help us see how much information is within the Government and how much of that data is public data and it has to be released. Another tool that we use to identify open data sets in the institutions is the Open data catalogue. This instrument is an inventory exercise done by the institutions where they have to identify and list all the public data within the institution. An example is the data catalogue implemented by the Ministry of Defence:

<http://date.gov.md/ckan/ro/dataset/13033-catalogul-de-date-deschise>

Morocco - Policies

Within the framework of the eGovernment program, the Ministry for Industry, Trade and New technologies has established this web-site in order to gather in only one point of entry, a set of public data of Morocco available on several web-sites, in a straightforwardly usable format. The collected data come mainly from:

- Data resulting from investigations/collections carried out by the Government Departments/Local Communities /Public Agencies.
- Statistics and public indicators made by Government Departments/Local Communities/Public Agencies.
- Data of infrastructures localization managed by the Government Departments/Local Communities/Public Agencies.
- Data forming the frames of reference maintained by the Government Departments/ Local Communities /Public Agencies.

The National Council of Information and Digital Economy Technologies held on November 27, 2012 chaired by the Moroccan Head of Government, decided the Open Data as a priority project of the Moroccan e-Government Program

Morocco - Data management

The datasets are collected from different Ministries and public establishment through their representatives. All the datasets are published under ODBL licence

<http://www.data.gov.ma/fr/la-licence>

Netherlands - Policies

Open data policy is the responsibility of the ministry of Interior. Open data is enforced by 2 laws:

1. "The Freedom of information Act" WOB, Wet Openbaarheid van Bestuur
http://wetten.overheid.nl/BWBR0005252/geldigheidsdatum_30-07-2015
2. "PSI directive" The European PSI directive is implemented in a law, Wet Hergebruik van Overheidsinformatie.
<https://zoek.officielebekendmakingen.nl/dossier/34123/stb-2015-271?resultIndex=1&sorttype=1&sortorder=4>

The “WOB” is regulating the availability of Government information, The “Wet Hergebruik” is regulating re-use of open data. Regulations concerning publications are given as guidance: <http://www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2015/07/10/kamerbrief-over-resultaten-inventarisatie-open-data.html> and: <https://data.overheid.nl/leidraad-open-data-gebruik>

- Open data is free of costs
- Open data is available “as-is”
- Open data is openly licensed through CC0
- Open data is available without registration
- Open data is computer processable and available in an open standard
- Open data is been described through meta-data
- Open data is available in a “raw” form
- Open data is as soon as is relevant to the data
- Open data is published on data.overheid.nl

The **expert team** is giving support to central and local governments on implementing and executing on open data initiatives through learning sessions, keynotes, inspiration sessions, blogs and guidelines on www.open-overheid.nl. In 2015 more than 200 support sessions will be given.

Netherlands - Data management

The publication of Open Data is done through data.overheid.nl. The data.overheid.nl portal has a clear registration process with built-in guidelines. For support during registration direct support is available either on-site or via email or a telephone support desk.

A high level overview of data.overheid.nl is available on <https://data.overheid.nl/nieuw-portaal>. Publication of open data is supported by a legal framework check on <https://data.overheid.nl/handreiking-bij-openen-van-data>

Standardization of registration is based on DCAT metadata description, Open standards for datasets and CKAN as open data repository. <https://data.overheid.nl/standaarden-en-techniek>. Metadata is supported by metadata schemas in a Dublin Core scheme with specific elements for the Netherlands (OWMS) <https://data.overheid.nl/lijsten>.

The European DCAT standard for dataset metadata is fully implemented. A specific DCAT application profile for Dutch dataset has been developed. All datasets and the API on data.overheid.nl are compliant with DCAT.

data.overheid.nl has an open API documentation: <https://data.overheid.nl/uitwisseling-dataset-informatie>

Feedback on data is given through the availability of contact details of the datasets owner, or through the open data support desk <https://data.overheid.nl/contact-met-dataoverheidnl-0>
Data quality is measured by link checking per month, see here the linkcheck report of July 2015: <https://data.overheid.nl/linkcheck-juli-2015>
General information about quality <https://data.overheid.nl/data-kwaliteit>

New Zealand - Policies

Cabinet approved and directed all Public Service departments, the New Zealand Police, the New Zealand Defence Force, the Parliamentary Counsel Office, and the New Zealand Security Intelligence Service; encouraged other State Services agencies; and invited State Sector agencies and local and regional government authorities to commit to releasing high value public data actively for re-use, in accordance with the [Declaration on Open and Transparent Government](#), the [New Zealand Data and Information Management Principles](#), and the [New Zealand Government Open Access and Licensing \(NZGOAL\)](#) Review and Release process, and to notify it on Data.govt.nz. NZGOAL was updated to adopt Creative Commons 4.0 International licences in April 2015.

The Programme is also Action Area 4 of the all-of-government [ICT Strategy](#) and Action Plan to 2017 ([Action Plan updated in 2014](#)) and an action of the [NZ Open Government Partnership Action Plan 2014-16](#).

Adoption of this set of policies and guidelines forms the basis of the Secretariat's relationship with the tier-2 executive Data Champions in each department (they report to the Chief Executives of their departments). Through one-on-one meetings with Data Champions the implications of policies are discussed and support provided to help the champions implement "open by design" into business as usual. Some of the larger agencies have also appointed a "Data Coordinator" who champions open information and data release at an operational level within agencies. There is an online [Toolkit for Agencies](#) to support both the Data Champions and the Data Coordinators.

Regular training NZGOAL (guidance on how to review and release information and data using Creative Commons licences) is carried out, over 150 civil servants trained over the last year. The NZGOAL training material has also been broken down into 13 modules and published in online video format ([landing page for video links](#)). [NZGOAL Guidance Notes](#) also set out advice on website copyright statements, file formats, procuring copyright works, databases and datasets, and comparing Creative Commons 3.0 New Zealand and 4.0 International licences.

The Secretariat has published 3 annual progress reports on agencies' adoption of the Declaration, the latest published is the [2014 report](#). Agencies have been surveyed as at 31 March 2015, but the report has not yet been published.

New Zealand - Data management

There is significant variation across government in terms of data types and complexity, ranging from simple spreadsheets to complex geospatial and statistical data.

Policy principles in the [New Zealand Data and Information Management Principles](#) and the [New Zealand Government Open Access and Licensing framework](#) (NZGOAL) (para 44) require the publication of data in open formats.

The [NZGOAL Guidance Note 2: File Formats](#) sets out open data formats, and the [Toolkit for Agencies](#) provides guidance for Data Champions and staff releasing their open data as required by the Declaration.

[Guidance for managers on csv formats](#) explains why they must publish in both human and machine-readable formats.

There is an ongoing programme of work to improve the release of geospatial data across both public and private sectors. This work delivers the [New Zealand Geospatial Strategy and the Spatial Data Infrastructure](#).

Statistics New Zealand is responsible for the consistent release of government statistics according to international standards, and advising government agencies on data confidentiality and anonymization.

Wherever possible the use of existing international standards is encouraged, for example in the [“Better APIs for Business”](#) blog.

An example of consultation on a data API at [Govt.nz](#) is described in the blog [“Why we took down our API”](#).

Consultation was also carried out regarding expansion of the open government programme as part of the Government’s response to the New Zealand Data Futures Forum recommendations. One (very helpful) arm of the feedback can be found in this [Open NZ Forum discussion thread](#).

Further learning on what data the public wants to see released was gathered through two sessions the Programme Secretariat facilitated at the [Open Source // Open Society Conference](#). The clear message that a complete inventory of all government data is very much needed also came through at this conference.

There is no complete inventory of all government data as yet. However our most recent survey of agencies (as at 31 March) indicates that over 60% of agencies have established or have in their work plans to complete a data inventory for their agency as one of the steps in reforming their data management and to achieve open by design.

Norway - Policies

The government's Digitaliseringsrundskriv (circular of digitization) point 1.4 states that sharing of data has to be designed for when making new public services or when upgrading existing ones

<https://www.regjeringen.no/no/dokumenter/digitaliseringsrundskrivet/id734925/>

Government's Guidelines for open data:

<https://www.regjeringen.no/no/dokumenter/retningslinjer-ved-tilgjengeliggjoring-a/id708912/>

The Norwegian Licence for Open Government Data (NLOD), provided by Ministry of Local Government and Modernisation: <http://data.norge.no/nlod/en/1.0>

Norwegian open data handbook (provided by Difi): <http://data.norge.no/veileder>

Including links to any relevant documents (guidelines, strategies, policies, etc.) and the description of other existing key elements such as the authority in charge of its execution, the applicable licensing schemes, publication recommendations (datasets, formats, standards, etc.), training programmes for civil servants and performance indicators and reports.

Norway - Data management

All open data is to be registered on the national data portal, <http://data.norge.no>

DCAT-AP is a recommended metadata standard for describing datasets and data catalogues by the Norwegian standardization board (Mai 2015)

Please describe here your data management approach, including links to any relevant documents and the description of other existing key elements such as metadata and technical standards, data models, codelists and identifiers, data user's guides and supporting documentation, data inventories, public data consultations and feedback management, the data release and update processes or quality controls.

Paraguay - Policies

There is already a law on access to information, decree N° 5282/2014, which requires state institutions to publish their data to the public and opening mechanisms enable data.

You can download the document entering: <http://www.bacn.gov.py/MzAxMw==&ley-n-5282>

Paraguay - Data management

We are currently working on a regulation of the law on access to information, which will include the definition of technical standards related to the way of publishing data in open formats. This will be undertaken by the Information and Communication Technology National Secretary.

Some sites that already apply these best practices in compliance with the technical standards
<https://www.contrataciones.gov.py/datos>

Philippines - Policies

The prevailing mandate to release open government data is in Section 26 of the 2015 General Appropriations Act (GAA) or the National Budget (Republic Act No. 10651).

Link to the General Provisions of the 2015 GAA:

<http://www.dbm.gov.ph/wp-content/uploads/GAA/GAA2015/GAA%202015%20Volume%20II%20A-B/GENPRO.pdf>

This implementing guidelines of the said General Provision in the 2015 National Budget is Joint Memorandum Circular (JMC) 2015-01 issued by the Open Data Philippines Task Force comprised of the following three (3) agencies: Office of the Presidential Spokesperson (OPS), Department of Budget and Management (DBM), and the Presidential Communications Development and Strategic Planning Office (PCDSPO).

Link to the summary of the JMC, which also contains a link to the actual document:

<http://data.gov.ph/news/guidelines-open-data-implementation-jmc-no-2015-01>

As aforementioned in C1, prior to these two policy instruments, the program was introduced through a JMC 2014-01, which was also jointly issued by the same three (3) agencies. This policy instrument laid out introductory implementation requirements. Link to this JMC:
http://www.dbm.gov.ph/wp-content/uploads/Issuances/2014/Joint%20Memorandum%20Circular%20JMC%20no.2014-1_Jan22.pdf

Prior to these 3, the Task Force published the Open Data Philippines Action Plan 2014-2016. This Action Plan serves as the program's overarching strategy.

Link: <http://www.gov.ph/2014/01/16/document-open-data-philippines-action-plan-2014-2016/>

Prospectively, the open government data provision was retained, with minor revision, for the proposed 2016 National Budget, which the President recently (July 28, 2015) submitted to the House of Representatives. See Section 25 in this link:

<http://www.dbm.gov.ph/wp-content/uploads/NEP2016/GENPROV.pdf>

Also, particular government agencies have been issuing internal open data pronouncements or guidelines following the policies of the Open Data Philippines. The following are these agency-specific pronouncements, policies, or guidelines (attached likewise)

- Department of Science and Technology: Administrative Order No. 003: Adoption of the DOST Data Sharing Policy

- Department of Transportation and Communications: Department Order 2013-12: Adopting the Open Data Initiative as a DOTC Priority
- Department of Justice: (1) Department Circular 033: Open Government Data (Creation of Open Data Team within every constituent agency/office), (2) Department Circular 547: Constitution of Open Data Team in the Department Proper
- Department of Social Welfare and Development: (1) Special Order 863: Creation of DSWD Open Data TWG, (2) Memo on Regular and Timely Submission of Datasets for DSWD Open Data Website, (3) Special Order 2295: Amendment of Special Order 863 (DSWD TWG Members)

<https://s3.amazonaws.com/files.formstack.com/uploads/2059752/34031634/207245162/PhilippinesC2.zip>

Philippines - Data management

Recently, we transitioned to a data management system using a platform the Task Force developed called the Agency Management Tool (AMT), which uses CKAN, the backend platform of data.gov.ph.

Comprehensive documentation on the AMT:

<http://govph.github.io/open-gov-ph-documentation/ckan-manager/ckan-manager.html>

The program uses the JSON metadata schema. This is articulated in the program's Action Plan and JMC 2015-01 (see C2), and integrated into the CKAN.

Poland - Policies

Policy documents in the scope of access and re-use of public information include:

- Act on Access to Public Information (<http://isap.sejm.gov.pl/Download?id=WDU20011121198&type=3>) that specifies general rules of accessing and re-using public information in Poland. The Act also provides legal basis for the Central Repository of Public Information (DanePubliczne.gov.pl portal);
- Other acts may specify particular access and re-use regimes for specific types of information (e.g. statistical, environmental data) provided they not hinder publishing information resources in the Central Repository of Public Information (art. 2 of the Act on Access to Public Information);
- Efficient State Strategy (<http://isap.sejm.gov.pl/Download;jsessionid=4A3D480375D14084A091273CB04EB91D?id=WMP20130000136&type=2>) in chapter 1 "Open Government" lists i.a. activities aimed at increasing access and re-use of public sector resources;
- National Interoperability Framework (<http://dziennikustaw.gov.pl/DU/2012/526/1>) specifies which formats and standards may be used in public IT systems to achieve interoperability.

- Long Term National Development Strategy. Poland 2030. Third Wave of Modernity;
- National Development Strategy 2020;
- Strategy for Innovation and Efficiency of the Economy - Dynamic Poland 2020;
- National Integrated Informatisation Plan.

Poland - Data management

Metadata standard and publication standards of the national data portal are specified in the Ordinance of the Council of Ministers on the Central Repository of Public Information (<http://www.dziennikustaw.gov.pl/DU/2014/361/1>).

Technical standards for public IT Systems are specified in the National Interoperability Framework (<http://dziennikustaw.gov.pl/DU/2012/526/1>).

Portugal - Policies

The project management of Dados.gov defines a series of operational policies regarding the publishing and reuse of open data, which AMA communicates and promotes to its partner organizations. As of yet, there are no government issued guidelines for opening data and publishing.

Portugal - Data management

There are not, as of yet, mandatory guidelines for open data publishing, although several efforts are directed towards streamlining processes and publishing operations.

Saint Lucia - Policies

An official Open Data policy has not been published for Saint Lucia, however, the government has recognized the value of Open Data and under the Division of Public Sector Modernization the government is moving towards this with the development of the Open Government portal and the support of Open data initiatives.

Saint Lucia - Data management

No, there is not a consistent (open) data publication approach throughout government.

Saudi Arabia - Policies

Our strategy was to build the suitable environment and infrastructure for the open data across the Kingdom of Saudi Arabia. The first stage was spanned over two years. It was focused on four pillars: Policies & Frameworks, Technologies & Tools, Human Capital & Knowledge, and Marketing & Global Competition.

In Policies & Frameworks Pillar, we developed the first version of the policy and guideline of the open data besides developing the complete action plan for the whole initiative. The National Open Data Policy and the Open Data Publishing & Management framework planned to be finalized and published by end of 2016. This should have all the related regulations (Open Data Charter, Policies, Licenses, ...etc) on national wide.

In Technologies & Tools Pillar, we developed and launched the new Open Data Portal based on Dkan platform. The portal has the facility of user management. Therefore, every government agency assigned a different user account(s) to upload their data. Also, we are developing specific APIs to integrate the uploaded data with their portals.

We are now working on developing the certificate program for the open data publishers, and to enhance the portal to be more interactive and including different ratios reports. In addition to that, we are working to include Geo-representation for the data.

Regarding the Human Capital & Knowledge, we formed a specialized team within Yesser to handle the initiative. Also, we are planning to enlarge the team to include different team members from different government agencies and different specialities. We are developing an intensive specialized training program for the National Team to be able to handle this initiative on national scale. Beside this, we are developing a training and awareness program for the government agencies' member those are handling open data.

In Marketing & Global Competition, we did many workshops focused on open data and participated in many events with Open Data papers. We are planning to sponsor awards and competition for the open data. Besides that, publishing the success stories for government agencies regarding open data or other third parties participated in open data.

The screenshot* below summarized the Roadmap for Open Data strategy from 2014-2016.

**P.S. Please note that the image below doesn't show all the activities, but the important mile stones. We Summarized it for the sake of the presentation. A lot of works isn't listed below.*

Saudi Open Data Roadmap



Saudi Arabia - Data management

All data management regarding the open data are now under review and should release the first official Data Management Standard by end of 2015 for open data.

Singapore - Policies

The aims of our open data efforts are to **unlock economic and social values for Singapore by co-creating solutions with the public**. Open data is an important part of the Smart Nation initiative launched by the Prime Minister on 24 November 2014. Data sharing is one of the three key priorities of Smart Nation, and data is envisioned as a way to unleash value and innovation. The **Ministry of Finance** owns the policies and coordinates the open data initiatives across the Singapore Government, together with the **Infocomm Development Authority (IDA)** and **Singapore Land Authority (SLA)** as partners. The newly formed **Smart Nation Programme Office (SNPO)** is also actively involved in coordinating our Open Data efforts as a pillar to our national push to become the world's first Smart Nation.

Our publication **standards** are adapted from Sir Tim Berners-Lee's 5-star rating system. As a minimum, agencies have to publish all datasets in machine readable format, and we are continuing to work with agencies to make their datasets even more usable for developers and analysts. We also have a set of [data sharing principles](#) to guide agencies.

We have **terms of use** on both our open data portals (data.gov.sg and [OneMap](#)) which are aligned with open licenses in allowing for our open data to be freely used and re-used. We

continue to review our terms and have plans to simplify and align with the latest international standards, and to make the terms more usable and simple to understand for users.

In terms of **training**, we have visited international experts (both government and non-government) in leading open data jurisdictions across the world, including the US, UK, South Korea, Australia and New Zealand amongst others. We consult regularly with some of the experts who we have engaged on these trips, and have brought in trainers from the UK's Open Data Institute to conduct some of their courses for our civil servants. ODI conducts these courses for UK public servants and we worked with them to adapt the course content to the local context here in Singapore.

In terms of **performance indicators**, we started out with quantitative metrics measuring the number of datasets and APIs that had been released, in order to encourage more data to be shared with the public, and in machine readable formats. However, as we have learnt from the initial stages of our open data initiative, we have moved to more outcome-based indicators, focusing on the use of our open data to develop actual solutions and applications. This has led to a shift to focus on pushing out high-value datasets, and ensuring that they are in usable forms, not just technical machine-readable formats.

Singapore - Data management

The Singapore government has holistic internal regulations that govern the management of data. These include policies on ICT governance, technical architecture, security and personal data protection. In recent years, the Ministry of Finance has made a conscious effort to enhance our data management rules so that they not only *protect* data, but also facilitate an open culture of sharing of data, both internal to government, and with the public (open data).

Internally, we have a set of data standards that govern the technical formats and definitions for data at source (i.e. collection or entry). This ensures interoperability between government agencies. We also have an internal meta-data catalogue that serves the function of data discovery for government.

The principle that undergirds our open data initiative is for all non-confidential data to be shared with the public, and to do so in a machine-readable format. Beyond machine-readability, we are focusing on making our open data even more usable, working with agencies to provide APIs for high-value data. Our open data standards are adapted from the 5-star rating system created by Sir Tim Berners-Lee. Our open data sharing principles can be found [here](#).

We have actively engaged the data and developer community (see response to C6 below), and our data portals also contain channels for the public to feedback on data quality issues and request for data they may find useful.

Slovakia - Policies

On 22nd of February 2012 Slovak Government adopted the first "Action Plan of Open Government". Basic areas of scope:

1. Open Government- Actively making the data of State Administration available to public.
2. Government Open for Governance - dialog with stakeholder activists
3. Transparent Government - transparent governance, whistleblowing, etc.

<http://www.otvorenavlada.gov.sk/ogp-home/>

On 11th of February 2015 the Slovak Government adopted an update of this Action Plan

<http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=24263>

Also in:

<http://www.tretisektor.gov.sk/akcny-plan-2015-iniciativy-pre-otvorene-vladnutie-verejne-politiky/>

Slovakia - Data management

Open Data publication policy is set up in principles of the Action Plan of Open Government.

1 - Open information- Actively making the data of State Administration available to public. It is considered to be a basic principle of communication between state and citizens and it is one of the most important commitments of our Action Plan as a part of international OGP Initiative. Therefore, portal data.gov.sk was launched.

www.data.gov.sk, established in 2013 within the national project: Electronic Services of the Government Office of the Slovak Republic - eDemocracy and Open Government.

Spain - Policies

Aporta initiative (<http://datos.gob.es/acerca-de>), Spanish open data policy, is developed around eight strategic lines of action:

1. Dissemination, awareness and training

Datos.gob.es portal offers general information, dissemination materials and news on the re-use of public sector information (see: prezi.com/3uuupukqrvn-/datosgobes)

In the sections " [Latest News](#)", "[PSI re-use community](#)", "[Applications](#)", and so on, visitors interested in open data can find updated information on key issues related to the re-use of public sector information, different PSI re-use stakeholders points of view and apps and new information services developed reusing data.

Through Aporta profiles in social networks, Twitter (@datosgob) and LinkedIn, Aporta team publishes daily the latest news and developments about PSI re-use. In this way almost 9,000 followers can learn about national and international news about this topic.

In addition, Aporta team arranges several events and conferences to promote the culture of re-use of public information at national level. Annually, it is organized a meeting addressed to public and private sectors that's a reference in open data at national level. On 26 February 2015 took place the fifth edition under the title "The public data in a digital society" (spainesdata.es/). The event held in Madrid brought together more than 200 professionals and its aimed was the exchange of experiences regarding the opening of public data and re-use for the development of business and increased transparency in public policies.

2. Public information catalogue.

The [Catalogue](#) of re-usable public information enclosed in the portal datos.gob.es was launched in October 2011. Nowadays the catalog hosts 8,802 data sets from more than 100 sources from the central government, local and regional. More than 25 of the sources are already functioning in an automatic federation process.

The objective of the catalogue is to facilitate the access to data sets available encouraging the re-use of the information that is now offered by the different public administrations in Spain.

3. Sectoral statistics

The Characterization Study of the Infomediary Sector, regularly conducted by the National Observatory of Telecommunications and the Information Society (ONTSI), as part of the Aporta Initiative, aims to show the current state of the infomediary sector that re-uses public sector information in Spain and to study its evolution. The Study focuses on analyzing the main characteristics of infomediary companies and their products and services, as they are considered as a key agent in the re-use value chain.

Additionally in 2015, it was carried out a sectoral study case, evaluating the huge economic benefits derived from using meteorological public data in the electricity sector.

Also in 2015, the Study has undertaken an evaluation of the economic impact of the re-use of private sector information, in order to have a complete picture of the Infomediary sector in Spain.

Additionally to these Infomediary and Data Value Economic Studies, we have progressed with an action to better catalogue and diffuse the operating open data portals in Spain. We have elaborated a Map of open data portals, showing easily and visually the main characteristics of those portals and facilitating the access to the website of each of them (mapa.datos.gob.es/)

4. Legislative and national cooperation

PSI re-use legal framework, described in C1 section, is developed within Aporta initiative.

Also in the context of Aporta, there has been developed:

- The Technical Interoperability Standard for the Re-use of Information Resources (<http://datos.gob.es/saber-mas/guias-normas?q=node/2672>), aimed at setting forth the basis guidelines for the re-use of documents and information resources produced or stored in the public sector.
- A standard general re-use conditions (similar as a general licence) that public sector bodies are encouraged to use. It is included in the [Royal Decree 1495/2011](#). (see: [Anexo. Aviso legal para la modalidad general de puesta a disposición de los documentos reutilizables](#))

5. *International cooperation*

Aporta initiative cooperates with various international projects among which:

- *Open Data Monitor*: a pan-European initiative that allows a variety of analytical functions such as: compare public bodies (national/local), indicate changes and updates of catalogues; show quality of meta data; sort available catalogues for specific thematic domains; show licensing information; availability of data in specific open formats; divergence among available open data of EU member states; percentage of population (and SIGs) with access to purposeful data; automatic scores that indicate level of openness.
- *Share-PSI 2.0*: an European network for the exchange of experience and ideas around implementing open data policies in the public sector. It brings together government departments, standards bodies, academic institutions, commercial organisations, trade associations and interest groups to identify what does and doesn't work, what is and isn't practical, what can and can't be expected of different stakeholders.

6. *Training and support*

To ensure compliance with the existing rules for re-use, Aporta initiative offers from October 2012 a PSI re-use support and advice to public bodies, both virtual and in situ. Through this service we have already answered over 1,500 questions.

From June 2012 there have developed more than 125 on- site support sessions and more than 20 global training sessions specially designed for RPSI (Re-use of Public Sector Information) technical managers in the Spanish public sector.

In addition, in the section "[Learn More](#)", on datos.gob.es, information technology professionals engaging with the government regarding open data can find training and awareness materials through reports and guides on key issues related to the re-use of public sector information. For example:

- [The guide to implementation of the royal decree 1495 / 2011](#) which reports and facilitates for the agencies of the AGE compliance with this law and the regulations that the provided.
- [The guide to implementation of the interoperability Technical Standard for re-use of information resources](#); addressed to inform and empower the organs of public administration the interoperability Technical Standard for re-use information resources.

7. Forum public/private partnership

Within the framework of the Aporta initiative, in June 2013 the [public-private partnership forum](#) was launched to boost cooperation in the context of the re-use of public Sector information (CPP-RISP Forum), with the aim of fostering the innovation and economic activity based on public sector information.

The Forum gathers the Ministries of Industry, Energy and Tourism and Finance and Public Administrations, the public entity red.es, private sector associations representing the technological and the infomediary industry and other organizations active in the re-use of public sector information.

8. Indicators and reports.

The High Council for E-Government prepares an annual report of the re-use of public sector information.

Spain - Data management

The Technical Interoperability Standard for the Re-use of Information Resources (<http://datos.gob.es/saber-mas/guias-normas?q=node/2672>), sets forth the basis guidelines for the re-use of documents and information resources produced or stored in the public sector. It includes:

- Main recommendations on reusable datasets selection.
- How to identify datasets (URIs importance and how to built them)
- How to describe the datasets (minimal metadata, metadata values, and so on)
- Which ones are the most useful formats (open standards and complementary standards that are widespread among citizens, distributions importance, formats providing semantic representation, and so on)
- Recommendations about terms and conditions or use
- Information about availability of documents and information resources (information required for their interpretation, availability through dynamic access points, web addresses, and so on).
- How important a catalogue of reusable public information is (public interfaces to share metadata, search interfaces, catalogue contents though automatically processed

information allowing for the re-use of the catalogue's metadata and for interoperability with other catalogues, and so on).

There are also several relevant official records that establish priority domains. These are:

- The Technical Interoperability Standard for the Re-use of Information Resources sets the main topics of the document and/or information resource. (see Annex IV. Primary sector taxonomy)
- UNE 178301:2015 Smart Cities. Open Data (see <http://www.en.aenor.es/aenor/normas/normas/fichanorma.asp?tipo=N&codigo=N0054318#>)
- The Act 19/2013, of 9 December, on Transparency, Access to Public Information, and Good Governance (see:Article 8. Financial, budgetary and statistical information)
- Digital Agenda for Spain, that encourage re-use of information from the public sector in such strategic sectors as tourism (see:Comprehensive plan for the digital content Industry)

Sweden - Policies

Open data and PSI are mentioned in both the Digital agenda and the e-Gov strategy documents for Sweden. There is no policy or central actions for making more data available.

<http://www.government.se/reports/2011/12/ict-for-everyone---a-digital-agenda-for-sweden/>

The revised PSI directive was implemented in law 1st of July 2015. It is the minimal requirements in the directive that are written into law, to include libraries, archives and museums, and to make marginal costs the maximum charging the standard. Public agencies are required to in advance publish an index of available data (PSI).

<http://www.regeringen.se/informationmaterial/2015/06/viktigare-lagar-och-forordningar-infor-halvarsskiftet-2015/>

A number of public agencies have been asked (government assignment) to report how much they charge for public information (PSI). This can be described as indirect policy or action.

Sweden - Data management

There are no mandatory rules for publishing, only recommendations.

Vidareutnyttjande.se are the official guidelines for publishing open data (PSI). It has a number of recommendations, like all organisations should make their data available at /psidata on their site. It also lists methods and checklists for how to make your open data available.

The site <http://www.psidatakollen.se/> lists an automated check of how many of the public organisations that follow the /psidata recommendation (today: 156 out of 655).

The recent oppnadata.se is a harvesting portal that will automatically fetch metadata if published in the DCAT-AP format. The Swedish recommendation and interpretation of the DCAT-AP 1.0 specification is at

<https://docs.google.com/document/d/1A7OUPtqWlvKGdaArOORIJKlowFynA0UWBO1M4BnE4Ak/edit?pli=1>

For Swedish actors, an online course and tools for DCAT-AP are available at

<http://lankadedata.se/dcat-utbildning/>

A tool to write and validate DCAT-AP has been made available, at <https://dcat-editor.com/>

Switzerland - Policies

Yes, the OGD Strategy Switzerland. Starting from it different recommendations (i.e. Metadata Standards, terms of use, publication processes) are currently being elaborated. The strategy and the recommendations which were recently published can be found here:

egovernment.ch/ogd.

Switzerland - Data management

Not yet, it is currently being formulated. A metadata standards is indeed already available. A publication process, an “OGD-handbook” are among others being currently produced. They should be ready for the beginning of 2016.

Tanzania - Policies

Open data policy is in the making (work in progress). In the meantime, we have circular which provides guidance on what data to be opened and how. Permanent Secretary, Ministry of Finance is in charge of the process. On the implementation side, 3 Institutions are helping him; National Bureau of Statistics (NBS), e-Government Agency (eGA), and Record and Achieve Agency. Regarding the data format is as per Open data definition and as presented through

<http://www.opendata.go.tz/>

Tanzania - Data management

We are still in the take off stage, not much have been done in this area, apart from proving status on where are we on the initiatives.

Thailand - Policies

Currently, EGA works with National Reform Council to establish Open Data Policy for Thailand. We have set up a working group to draft the strategy and policy currently.

Thailand - Data management

EGA has drafted the standard for data.go.th booklet. We will have a final public hearing next month and we hope to publish the booklet by September.

Tunisia - Policies

The country's new constitution is the only one in the world to expressly calls for the adoption of "the principles of open governance" (Art 139).

The country new e-government strategy 2015-2020 is getting built on the open government ideology and is putting in place a new model of governance based on transparency (open data), cooperation and collaboration.

Tunisia also joined the Open Government Partnership (OGP) since January 2014. An ambition action plan to open data is already been put in place (<http://www.ogptunisie.gov.tn/>). It includes 20 commitments. Among them, commitments to release more public data (<http://www.ogptunisie.gov.tn/>)

The eGovernment Unit at the presidency of the Government is mainly the authority that monitor this program. The unit is working, hand in hand, with civil society organisations to implement it. This include policy design implementation and evaluation, besides training and communication at the national and local level.

Tunisia - Data management

Data publication approach is clearly described on the Tunisian open data portal. The policy applies to all governmental institutions. See the link:

http://www.data.gov.tn/index.php?option=com_content&view=article&id=177&Itemid=191
(available only in arabic version)

UK - Policies

Each central government organisation has it's own:

- open data strategy
- transparency practitioner responsible for locating and publishing open data

Training is available through Civil Service Learning

An open data publication maturity model and a self assessment service is available to publishers (funded by the UK government - <http://theodi.org/guides/maturity-model>, <http://pathway.theodi.org/>)

Local Authorities need to abide by the transparency code

(<https://www.gov.uk/government/publications/local-government-transparency-code-2015>) which includes open publication

The UK has the Open Government License for all crown copyright content. Departmental Open Data Strategies can be found at

<http://data.gov.uk/search/everything/open%20data%20strategy?solrsort=score>

The UK government standards board has adopted several open standards for data, such as ODT, ODS and CVS as well as a standard encoding; Unicode 6.2 and UTF-8

(<https://www.gov.uk/government/publications/open-standards-for-government>)

For geospatial data, the UK has published complete guidance on the setting up of open source based geographical services and its publication. Note that licensing within these geospatial files is not always OGL (as some of the copyright belongs to other european agencies)

(<http://data.gov.uk/location>)

The UK government has sponsored training for civil servants via the Open Data Institute and the Open Knowledge foundation. The Cabinet Office also runs a 'code club' to bring civil servants closer to digital technologies and data principles.

Several Local authorities are now officially recognise by government as champion local authorities in open data

(<https://www.gov.uk/government/news/local-authorities-setting-standards-as-open-data-champions>)

The Prime Minister launched the Open Data commitment with two letters to departments;

<http://www.number10.gov.uk/news/letter-to-government-departments-on-opening-up-data> and

<http://www.number10.gov.uk/news/letter-to-cabinet-ministers-on-transparency-and-open-data>

UK - Data management

data.gov.uk has a standardised format for listing datasets, includes standardised meta data (Dcat) Data.gov.uk uses open formats for its data as default

The UK is exploring the use of open canonical registries with views to implement them to support the key data identified in the National Information Infrastructure

As part of the first wave of the implementation of the National Information Infrastructure, datasets selected as part of the NII will provide:

- File structure information

- Any vocabulary or code list used
- Agree to an SLA for reliability and obtainability of the data

User guides are available at datagovuk.github.io/guidance/

Data.gov.uk also provides a live inventory of data that is not yet public, with details of the data and prospective release dates (currently 4093 datasets)

Functionality on reporting issues with quality of data at the dataset level is being tested and should go live by the autumn

Anyone can request data via <http://data.gov.uk/data-request> which is managed by the Cabinet Office Transparency and Open Data team. We then liaise with the data owner and work with them to try and publish the data. Recently we have upped the external engagement around this process, making sure requesters are regularly updated with progress. We've also started tweeting overall progress stats from @DataGovUK and intend to interact with users here as well. Previously interactions were done via personal accounts.

Uruguay - Policies

In 2011 launches the first data portal in Latin America, datos.gub.uy includes a collection of government organizations public data. That same year the first action plan on open data was written by members of the [open data working group](#). The open data working group it's integrated by [Engineering Faculty of the Republic University](#), [Statistics National Institute](#), [AGEV from the Planning and Budgeting Office](#), [Montevideo Local Government](#), [AGESIC](#) and an NGO, [DATA.Uy](#).

In Dec. 2012 the national open data catalogue was online with the first datasets and organizations. Also [Dateidea](#) was the first open data contest, an initiative that is now on it's 4th edition to be held in Oct. 2015.

In 2013 the [First Conference on Open Data for Latin America and the Caribbean](#) in Montevideo, was the first regional conference a.k.a [ConDatos](#).

In 2014 the second [Databootcamp](#) was held in Montevideo for journalists, designers, developers and hacktivists as part of the open data strategy to foster the use of open data.

In 2015, a workshop for government organizations was done in May, 12th to 14th where different organizations could learn about the process to open and publish data in open formats. Also was the first encounter to work in the second open data action plan that shall be released before the end of 2015.

You can have more information about the open data initiative at [AGESIC's](#) web site.

Uruguay - Data management

With 111 datasets published and 31 related elements, our approach to publication focuses on the use of data and not in the fact of publishing everything that can be published.

We promote the use and demand of datasets with workshops, hackatons and datacamps. This activities includes all the open data ecosystem, government agencies, academy, NGO, citizens and journalists.

Here are some examples of fostering the use of open data for citizens:

- In last year hackathon we received 70 proposals from citizens at the hackathon [Facebook fan page](#). The hackathon reunited 72 participants in 12 groups.
- Both DataCamps for journalists reunited near 90 participants, 50 at the first edition and 40 this year.

For government agencies there is also an strategy to improve the publication of open data:

- Last year we have [the first webinar](#) to reach local governments.
- We published two guides about open data:
[Quick reference guide](#) and [Guide to open data and reuse of open data](#) .
- Several workshops were made about opening data and reached more than 500 civil servants:

[UNDESA and AGESIC workshop](#)

[Introductory workshop on open data](#)

The data catalogue is based on CKAN, and each government agency has its own space to publish open data in a distributed way. AGESIC developed a piece of software to check broken URIs, not updated datasets, etc. This software checks the dataset's status and sends an email notification to the open data team.

USA - Policies

The key authorities are the Open Data Executive Order, Open Data Policy, and the technical guidance at Project Open Data, cited above.

Most federal open data, U.S. government work, is not subject to copyright in the United States.
<http://www.usa.gov/publicdomain/label/1.0/>

USA - Data management

Pursuant to the Open Data Policy, agencies provide metadata following a specified schema:

<https://project-open-data.cio.gov/v1.1/schema/>

There is additional guidance at Project Open Data:

<https://project-open-data.cio.gov/>

Working level guidance on how datasets are added to Data.gov are provided here:

<https://www.digitalgov.gov/resources/how-to-get-your-open-dataon-data-gov/>