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ОЦЕНКА ГОТОВНОСТИ К ИСПОЛЬЗОВАНИЮ ОТКРЫТЫХ ДАННЫХ

КЫРГЫЗСКАЯ РЕСПУБЛИКА

OPEN DATA READINESS ASSESSMENT

THE KYRGYZ REPUBLIC

JULY 2015

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FOREWORD

Creative re-use of data from public databases aims to designing and adoption of various innovative services and products. As we see from international case studies sharing open data with people, businesses, and academia facilitates the development of ICT sector and value-added economy.

We, at the Ministry of Economy, as a responsible by the Government of the Kyrgyz Republic government entity for open data development in the country, have strong intentions to develop the national open data initiatives as part of efforts to improve the quality of public services for the citizens. The high potential of information assets is a key factor in promoting public-private partnership at the whole-of-country level. Entrepreneurs and IT developers are actively relying on and anticipating further increase of freely available valuable data collected and provided by public agencies.

Encouraging open access to public databases, we pursue the goal of turning attention of businesses and IT developers to the new opportunities for creation of modern interactive e-services which can satisfy key needs of stakeholders and customers. Fundamentals for advancement in open data have been laid down by approved the E-Governance introduction Programme of the Kyrgyz Republic for 2014-2017.

As the next step, extensive work on comprehensive Open Data Readiness Assessment in Kyrgyzstan has been done by the team of international and local experts within November 2014 – March, 2015. Findings are presented in this report and there are really encouraging insights. Moving on we are to design and develop a roadmap for practical implementation of plans in upcoming years.

The Open Data Readiness Assessment (ODRA) report of Kyrgyzstan offers clear vision and specific recommendations for public agencies, business leaders, civil society and international donor community. From personal point of view, among key recommendations suggested to ensure data-driven economic development of the Kyrgyz Republic the most important one is building partnerships across public setor, businesses and civil society organisations. I believe that all stakeholders will benefit from such cooperation and can unleash the full potential of open data for economic growth of our country.

Aidai Kurmanova
State Secretary of the Ministry
of Economy of the Kyrgyz Republic

EXECUTIVE SUMMARY

Kyrgyzstan is in a position to move forward quickly with an Open Data Initiative. With the adoption of the e-Governance policy in November 2014, a clear starting point (including the goal to publish 500 datasets by 2017) has been created, well integrated with other government priorities that are being met by well-articulated societal demand and support.

Additionally, existing digitization and modernization programs, including the creation of new e-services, already underway, make it possible for the Kyrgyz Republic to rapidly expand open data, by starting from the current mandated publication of information in some 36 categories as leverage to publish the same as open data. This includes government transparency in budgeting, procurement and expenditures, where some relatively simple steps would position Kyrgyzstan both as a regional and global example of good practice for open data in the categories of information that are already being published.

This assessment has found strength at the leadership and policy level concerning open data, and a strong demand from the business community and civil society. Several institutions, in particular Ministry of Economy, Ministry of Education, Ministry of Healthcare, Ministry for Emergency Situation and agencies, such as the State Registry Service are ready for open data in the context of adopted e-governance policies, or already acting towards it. This provides strong opportunities for straightforward pilot projects that projects, that in turn will provide the experience and motivation that will bring other agencies to the table as well.

However a successful National Open Data Initiative in the Kyrgyz Republic would require:

1. Raising much larger awareness across government on what open data is and it's potential, thus creating more collective political commitment and sustained leadership across government.

2. Centralized guidance on the interpretation and application of the existing framework of laws concerning access to information. This includes the rationalization and possibly partial removal of existing charging practices such as for maps.

3. A strong collaborative attitude between government agencies, civil society and the business and developer communities.

The outcome of this assessment contains both the overall assessment and a suggested list of actions. Given the ongoing work of the Kyrgyz Government the Open Data Action Plan is likely the primary outcome. It is strongly focussed on integrating actions at the top, middle and bottom, including the active involvement of civil society and the business community. First focus of those actions is making open data available where that is easy to do so, and to form pilot groups of government agencies, civil society, business and developers to quickly create a few practical examples of the usage of open data, that can serve as example for further extension of the open data program.

The costs of an Open Data initiative then would not need to be substantial: where data exists in digital form, or is already being published as web-based information, it is easy to extract the data for publication in re-usable form, and several ministries and agencies are in principle willing to do so. For regional and local entities the current ICT infrastructure may not be fully adequate yet, but the ability to produce and publish open data should be seen here as part of the requirements within ongoing digitization. Likewise where data is still held in paper form, publication as open data should be seen as part of any justified digitization effort.

METHODOLOGY

This «Open Data Readiness Assessment» (ODRA) was prepared for the Government of Kyrgyz Republic. It is the product of a joint team of experts representing the World Bank and the UNDP.

The purpose of this assessment is to assist the government in diagnosing, what actions the government could consider in order to establish an Open Data Initiative. This means more than just launching an Open Data portal for publishing data in one place or issuing a policy. An Open Data initiative involves addressing both the supply and the re-use of Open Data, as well as other aspects, such as skills development, financing for the government's Open Data agenda and targeted innovation financing linked to Open Data.

The World Bank Open Data Readiness Assessment Framework uses an "ecosystem" approach to Open Data, meaning it is designed to look at the larger environment for Open Data – "supply" side issues like the policy/legal framework, data existing within government and infrastructure (including standards), as well as "demand" side issues like citizen engagement mechanisms and existing demand for government data among user communities (such as developers, the media and government agencies).

This Assessment evaluates readiness based on eight dimensions considered essential for an Open Data Initiative that builds a sustainable Open Data ecosystem. Its recommendations assume that an Open Data initiative will address various aspects of an Open Data ecosystem.

The readiness assessment is intended to be action-oriented. For each dimension, it proposes a set of actions that can form the basis of an Open Data Action Plan. The recommendations and actions proposed are based on global best practices while also incorporating the needs and experiences of the Government of the Kyrgyz Republic to date. Within each dimension, the assessment considers a set of primary questions, and for each, notes evidence that favors or disfavors readiness.

The evaluation of each dimension and primary question is color-coded:

- Green (G)   means there is clear evidence of readiness

- Yellow (Y)   means that evidence of readiness is less clear

- Red (R)   means there is evidence for absence of readiness

- Grey (O)   means insufficient information to assess readiness

When addressing a particular question, evidence of readiness has a «+» sign. Evidence against readiness has a «-» sign. Evidence that has mixed implications or neither favors nor weighs against readiness has an «0» sign.

Not all evidence is weighed equally when determining the overall color indicator for a given primary question. Certain factors may weigh more heavily when deciding readiness status.

ACKNOWLEDGEMENTS

OBJECTIVES OF THE ASSESSMENT

In general an Open Data Readiness Assessment (ODRA) aims to provide a general overview of where the starting points for open data in a country are. In this case the ODRA also takes a more practical approach to suggest specific actions that help the prioritization and implementation of the open Government and open data elements in the e-governance policy of the government of the Kyrgyz Republic. Specifically it also aims to look at where government, civil society, business and the developers community can work together to move open data forwards, as well as learn along the way on how to extend open data across the whole of government.

Therefore each section of the Assessment lists a number of proposed actions that range from more generic to the highly practical, and where possible suggests a specific agency, or non-government actor to take the lead.

Open data, as Tim Berners-Lee stated when talking about how to do open data well, starts from the top down, starts from the bottom up, and starts from the middle outwards. The actions suggested in this assessment are aimed at making sure those three levels are connected and mutually reinforcing. Only by connecting the efforts on all three levels, it will be possible to move forward with some speed, while keeping the needed resources at a minimum.

DISCLAIMER

The analysis and recommendations in this Open Data Readiness Assessment report are based on information and opinions collected from interviews undertaken and materials provided by the government and other local stakeholders during this study. This Open Data Readiness Assessment is not based on detailed, legal due diligence and does not constitute legal advice. Accordingly, no inference should be drawn as to the completeness, adequacy, accuracy or suitability of the underlying assessment of, or recommendations or any actions that might be undertaken resulting there-from, regarding the enabling policy, legal or regulatory framework (including institutional aspects thereof) for Open Data in the country.

1 SENIOR LEADERSHIP

Importance: Very High

Context: Open Data Programs require the implementation of change – often including legal, institutional, technological and cultural changes - and may affect stakeholders both inside and outside government. Focused, strong, sustained, political/senior leadership is therefore critical to helping a government overcome resistance and inertia of all kinds, to helping incentivize actors to make the necessary changes in a timely and effective manner and to achieving the desired objectives and benefits of an Open Data Program.

1.1. To what extent is there visible political leadership of Open Data/Open Government? (Importance: Very High)

+ The Prime Minister in a public cabinet meeting in November 2014 during the Kyrgyzstan Open Data Days spoke publicly and positively about open data in his opening speech.

+ Open data is the 6th component in the National e-Governance Programme that was adopted in the fall of 2014. Specific actions are listed as planned there, including the creation of a national data portal, potential membership of the Open Government Partnership and the publication of at least 500 datasets across 36 (as yet unspecified) categories as open data.

+ The e-governance policy that contains open data provisions is implemented under the leadership of the state-secretary of the ministry of economy Mrs. Aidai Kurmanova by appointment of the National ICT Council, with formal responsibility being placed at the (to be fully activated/formed) State e-Governance Center.

+ An Open Data Working Group (ODWG) has been established early 2015, likewise under the leadership of the state-secretary of the ministry of economy Mrs. Aidai Kurmanova. The ODWG is an inter agency group comprised of deputy heads of ministries and agencies, further comprised of civil society and business community representatives. The first ODWG meeting took place in March 2015, which was also attended by the Head of the Government Office.

+ Various ministries and agencies have expressed interest and motivation concerning open data, including the Ministry for Economy Affairs, Ministry of Finance / Central Treasury, Ministry of Transport and Communications, Ministry of Emergency Situations, Ministry of Education, Ministry of Healthcare, the National Statistics Committee, and the State Registry Service.

+ At least one Member of Parliament has spoken about the need for open data on national TV in November 2014.

- Awareness of what Open Data is and it's potential, despite it being mentioned favorably and being planned, is generally very low, and often conflated with both the provision of e-government services, and ongoing digitization processes. This is a primary concern.

1.2. To what extent is there an established political leadership and governance model for policy and implementation of programs across multiple institutions or across government as a whole? (Importance: High)

+ The National ICT Council works to coordinate inter-ministerial agency programs concerning ICT and e-governance, and designates specific leaders for projects and programs

+ A government wide e-government center is being actualized that aims to provide cross-government consistency in the implementation of the national e-governance policy.

+ The 'single window' policy program creates inter-agency IT processes and information exchange.

- Various ministries and agencies in conversations indicate discrepancies in implementation of national policies, and regularly refer to not wanting to work / being able to work together with other ministries and agencies.

- The implementation of several ICT related programs are delegated to state owned enterprises, which in turn don't have much coordination between each other, creating islands in implementation.

1.3. What existing political activities or plans are relevant to Open Data? (Importance: Medium)

+ Across ministries there are programs to digitize government processes and build digital databases. Digitization is a prerequisite for open data publication.

+ The reduction of corruption is partly sought by reducing the amount of person-to-person interaction in government services. This makes digitization and electronic service delivery a central concern of the Kyrgyz Government.

+ The Access to Information Law lists 36 categories of information that need to be published proactively by government institutions, and this includes financial transparency. These categories of information, where they are made available online are well suited to publication of the same material as open data.

+ There is political importance to Disaster Risk Management, and the important role of data in planning and in response is recognized by the Ministry of Emergency Situations.

+ Reducing the costs of doing business, which is the reduction of friction between different steps in e.g. import- and export processes, is of significance and the motivation behind e.g. the 'single window' policy. This can be a stepping stone for increasing open data into other areas of doing business, such as the legal entity register, for which businesses voice similar demands. This type of reduction of the costs of doing business is also important to stimulating foreign investment, a priority of the Kyrgyz Government.

+ Tourism is a growing industry that has not fully capitalized on its potential. Tourism information often proves hard to find (such as a tourist map of Bishkek), and open data can further the development of good tourist information services.

1.4. How does the wider political context of the country help or hinder Open Data? (Importance: High)

+ The wider political context is one of modernization and promotion of economic growth. The ongoing digitization and e-governance efforts are witness to this.

+ Kyrgyzstan has a liberal market, which is conducive to the adoption of open data for its business potential.

0 The ascension of Kyrgyzstan to the Eurasian Customs Union may impact its economic position as an import/export hub between China and the Russian Federation, / Kazakhstan.

- The ascension of Kyrgyzstan to the Eurasian Customs Union is also introducing hesitation in several agencies to move forward with certain policies, as it is unclear how it will, for instance, affect relations with donor organizations that play a role in financing many change projects.

+ The e-governance policy under component 6 describes a range of actions concerning open data and open government, one of which is to consider joining the Open Government Partnership Initiative (OGP) by 2017, embedding the planned efforts in the global open government movement.

Assessment

QUESTION AREA	IMPORTANCE	ASSESSMENT RATING	COMMENTARY
Political Leadership	Very High	Green	High-level commitment and official policy exist.
Political Structure	High	Green	Cross-government structures established (though in practice islands may remain)
Existing Activities	Medium	Green	Existing policy priorities provide early opportunities for open data
Wider Context	High	Yellow	The connection of open data to wider context can be more strongly developed, while existing hesitation concerning the impact of the customs union needs to be monitored/mitigated.
Overall	Very High	Green (with concern)	As key concern does remain that Open Data, while being promoted, is not yet widely understood.

2 POLICY/LEGAL FRAMEWORK

Importance: High

Context: The long-term success and sustainability of an Open Data Program is greatly impacted by the policy and legal framework that exists. Open Data requires that a range of policy and legal issues be addressed – for example, with respect to the licensing of data reuse. It is important to identify at an early stage the existing policies, laws and regulations with respect to a core set of issues, and to identify actual or perceived obstacles in order that policy or legal change can be initiated early if essential[1].

2.1. What is the legal and policy framework for the protection of personal privacy? (Importance: Very High)

+ There is a 2008 law on the protection of personal information (Titled "On personal information"), which is generally harmonized with the Strasbourg convention for the protection of individuals with regard to automatic processing of personal data.

- The 2008 Law "On personal information" does not have a functional enforcement or redress mechanism (e.g. when there are no bylaws regulating security, consent, process of notifying individuals that their information is being passed over to third parties). Redress can however be sought individually through the office of the national Ombudsman, through the prosecutor's office, or the courts. The law itself mentions an office for complaints that however has not been instituted.

+ Dataholders such as the State Registry Service and National Statistics Committee are governed also by their own laws, which contain requirements for the protection of personal information. In the case of the National Statistics Committee it requires anonymization and aggregation of data, in line with international standards for national statistical offices.

+ Dataholders such as the State Registry Service (SRS), the Social Fund (SF) and National Statistics Committee (NSC) in conversations refer often to not sharing personal information with the public or with other government agencies, in keeping with the law "On personal information" and the Laws that govern their respective agencies.

+ Dataholders such as the State Registry Service allow access to people's own personal data to verify their accuracy.

2.2. What rights of access to information exist? (Importance: Very High)

+ The right to access to information is established in the Constitution, the procedure for which is to be further specified by law. Article 33 of the Constitution grants the right "to freely seek, receive, store, use such information, and disseminate it orally, in writing or otherwise."

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1   Disclaimer

The preliminary analysis and recommendations in this section are based on information and opinions collected from interviews undertaken and materials provided by the government and other local stakeholders during this study. This section is not based on detailed, legal due diligence and does not constitute legal advice. Accordingly, no inference should be drawn as to the completeness, adequacy, accuracy or suitability of the underlying assessment, or recommendations, or any actions that might be undertaken resulting therefrom, regarding the enabling policy, legal or regulatory framework for Open Data in the country. It is therefore recommended that, prior to undertaking any legal action to address any legal assessment issue raised herein, a formal legal due diligence be performed by competent, locally qualified legal counsel, preferably assisted by international legal experts with relevant experience and knowledge of these areas.

+   There is a 2006 Law "On access to information under the jurisdiction of government agencies and local self-governance authorities" that provides two separate ways to government information. The law mandates the at least annual proactive publication of 36 listed categories of information, which includes financial transparency (article 20), in addition to annual performance reports (article 18) and current decisions (article 17). Next to that citizens can request information, for which there is a response window of 2 weeks (with a bill currently under review in Parliament to reduce that response window to 48 hours for emergency information, and to 5 days for other requests).

-   There is no redress procedure in the Access to Information Law, that would allow seeking administrative or disciplinary liability for unjustified refusal to grant access to information (nor for other actions and decisions by an official that violate the requirements of the law), leaving the general way of going through the courts or appealing to the Ombudsman of the Kyrgyz Republic.

+   The Access to Information Law refers to two underlying laws as grounds for not providing information: the Law «On personal information", and the Law "On protecting the state secrets".

0   Many other by laws, regulations and normative legal acts of the government, as well as internal instructions and provisions refer to the (non-)disclosure of government information, which cover various agencies and departments.

-   The criteria and procedure for classifying information as state, military or internal government secret is not publicly available.

-   Citizens and organizations do not experience uniformity in decisions on the provision of government information requested under the access to information regulations, and regard decisions as often arbitrary.

2.3. What is the legal and policy framework for data security, data archiving and digital preservation? (Importance: High)

+   The Law "On Informatization" society, adopted in 1999, establishes the legal principles for information protection, liability and compliance.

+ The owner of an information resource is responsible for taking measures for protection and information security, which includes monitoring the compliance which such rules.

0 Responsibility for data security is decentralized, meaning the owner determines rules and procedures, with several agencies such as the State Registry Service (SRS) stating they have their own policies in this regard, or are governed by specific regulations pertaining to them.

0 Standardization is voluntary, and currently no technical regulations concerning security of networking and databases in the form of laws or decrees exist.

+ Development of standard regulations, instructions and procedures are however part of the Action Plan for the implementation of the Kyrgyz Republic Government Program for e-governance (e-government) in executive government agencies and local self-governing authorities in 2014-2017. This is an opportunity to add open data related aspects.

2.4. What is the policy on the ownership and licensing of government data? (Importance: Very High)

+   Article 33 of the Constitution states the right "to freely seek, receive, store, use such information, and disseminate it orally, in writing or otherwise" which would indicate that use, re-use and redistribution of public government information are allowed to citizens by default. This is however not explicitly referenced in the Access to Information Law in terms of allowing re-use.

0   The law "On copyright and related rights" does not specifically make any reference to which copyrights government has, and is presumed to apply to government as an author like any other author as there are also no provisions that actively put government work in the public domain for instance.

Official documents (laws, decrees, regulations, decisions etc.) and their official translations, as well as daily regular news releases however are not copyrighted, nor are official symbols and signs (such as flags, national emblems, anthems, medals, currency symbols, etc.).

0   The National Statistics Committee stated it has its own ownership established by the law covering their office, to ensure that requirements concerning confidentiality and privacy protection can be fulfilled.

0   Upon asking various agencies and ministries indicate the ownership rights to the data they hold is with 'the government itself', and not specifically with their agency or department.

-   Other agencies and departments such as the Ministry of Finance (see budget.okmot.kg) and the SRS (see data.srs.kg) explicitly claim 'all rights reserved' on their websites and without specifying usage conditions (although in the case of SRS the citizen's right to information and the ability to download is mentioned on the 'About' page). The SRS in an interview stated that the ownership of their data is 'with the state, we just collect and maintain', in contradiction with the website's copyright statement.

+   According to CIIP an effort is underway to formulate Creative Commons type licenses under Kyrgyz law to be added to government information published under the access to information law. (This however would indicate there is an established government copyright, given Creative Commons is based on upfront allowing specific types of use of copyrighted materials: you would first have to have copyright in order to release those rights in an open license) Also note that Creative Commons itself has moved away from transposing the license into national law, opting for a general international license instead.

0/+ The law "On informatization" in article 8 places ownership and rights with the government of information resources they created or procured. Yet the passing of ownership can be done by sales-, supply- and other agreements. It is unclear if in practice such agreements stipulate the ownership resides with government or the third party. In the case of mandated sub-mission of information by individuals or legal entities to the government, the ownership is shared.

0   No information was found yet on how commercial re-use of government data is regulated or not.

2.5.   To what extent is government data sold by agencies? (Importance: High)

0   There is an annually updated Single Register of government services, provided by the executive government agencies and their subdivisions and subordinate organizations, part of which are paid. The government adopted the regulation "On the methods for setting the fees (prices) for paid services (works)", which stipulates that fees (prices) for paid services (works) are determined by the costs incurred by an agency providing the services rounding up to the nearest som.

0   The SRS charges based on having services listed in the Single Register. Revenue from for instance the cadaster and vehicle registry is allocated to infrastructure improvements.

+   The National Statistics Committee is mandated, based on the Single Register, to charge marginal costs at most, meaning their paper based reports are provided against a fee, and their online publications are free.

+   In general forpay information services are regarded as not expensive as they are regulated by the aforementioned Single Register, and the price is agreed with an antitrust agency and confirmed by the government. The fee that is being set or changed should therefore be fully justified.

-   The sale of maps is the most often cited example of where charges for data are an active hindrance,

both by private parties as well as government bodies (like Tourism). The sale of these maps is apparently not based on the Single Register but on the regulation on the "Provision of topographical, geodesic, surveying and cartographic works", applied to the State Geology Agency. Private parties have created (and are selling) their own map versions in response.

- Several agencies report anecdotally that conditions under which data are requested to be exchanged between government bodies are often an intense discussion.

O Non-anonymized personal information such as vehicle ownership and cadastral data is being made available on record-by-record and for-pay basis to specific groups such as notaries and banks, by the SRS.

2.6. What other policies/laws exist that may have significant impact on Open Data? (Importance: High)

+ In principle Law "On protecting the state secrets" clearly defines what counts as secret, in three categories: defense secrets, state secrets, and internal use secrecy.

- The level of secrecy of information is determined based on the List of core information composing state secrets, and List of information subject to secrecy.

- The law "On protecting the state secrets" is rather old (passed in 1994) and predates the laws "On access to information under the jurisdiction of government agencies and local self-governance authorities" and "On personal information", which leads to difficulties in enforcing these laws.

- The Lists that determine the level of secrecy are classified themselves as internal secrets, and not available to the public. In practice this leaves decisions on information requests opaque, and without a way for redress.

- There is no way for a requester to check if a refusal of providing information based on internal use secrecy is justified or consistent with the regulations and evaluation criteria that apply. Even though according to the law, a requestor cannot be denied access to the decision which limits the access to information, in practice, such decisions are also secret.

- There is no way for a requester to check if a refusal of providing information based on internal use secrecy is consistent with the regulations and evaluation criteria that apply.

- Citizens and organizations do not experience uniformity in decisions on the provision of government information, and regard decisions as often arbitrary with the internal use secrecy being used as deflection shield. Government agencies also express frustration at being regularly refused inter-agency information on the grounds of 'internal use' state secret provisions, and see it as an attempt to resist transparency. The city development plans of the city of Bishkek for instance were first classified as internal information and therefore secret. After the intervention of the courts and a public outcry, the Office of the President signed amendments to the law "On urban planning and architecture in the Kyrgyz Republic". According to this law, approved development plans should be published on official websites of local self-governance authorities and in publicly accessible parts of their premises. As a result, Bishkek's city development plan was no longer classified as state secret and the information ultimately became available.

By both government bodies and non-government actors the state secret act is consistently mentioned as a source of inconsistency and obstacle for increased government transparency and open data.

+ Anecdotally government agencies have the ability to override secrecy concerns when it pertains to internal information, in favor of disclosure (based on the case of the Bishkek city development plans), given enough public attention.

+ As for the access to statistical information, provided by the National Statistics Committee, according to the law "On government statistics", government agencies and local self-governance authorities, legal entities and individuals can freely access aggregated statistical information. They are guaranteed the use, distribution and storage of this information for carrying out their goals and functions. Free provision of statistical information to government agencies and local self-governance authorities is provided for in the Program of statistical efforts and is based on the list of free users of statistical information, approved by the Government of the Kyrgyz Republic. Legal entities and individuals not included in the list can receive the information for a fee. Procedures for setting a fee and covering the costs incurred in re-sponse to a request are determined by the Government of the Kyrgyz Republic. National Statistics Committee ensures access and openness of statistical information, confidentiality of primary statistical data, free access to aggregated statistical information

0 No exclusive arrangements were referred to in the interviews held.

0 No information was collected on the existence of separate digital data archiving and digital preservation regulations. The is a law pertaining to the national archive and standard records guidelines (with each agency having their own procedures), however these show a gap for digital material.

0 Laws on copyright and intellectual property create third party rights and confidentiality aspects in non-personal government data. The law on procurement does not contain provisions about mandatory transfer of rights to government or retention of third party rights, with regard to information resources.

Assessment

QUESTION AREA	IMPORTANCE	ASSESSMENT RATING	COMMENTARY
Privacy protection framework	Very High	Green	Privacy protection is regulated but lacks redress mechanisms. In the context of open data this is of less immediate concern.
Access to information framework	Very High	Yellow	Access to information is established in the Constitution and in a mature law. However consistency in application and absence of clear redress mechanisms may form an obstacle. Especially the non-alignment with the State Secret act is an issue.
Data security framework	High	Yellow	Data management is decentralized, current e-governance policy action plan contains tangible steps.
Ownership & licensing framework	Very High	Yellow	Constitution appears to allow redistribution and re-use. Gov copyright and ownership not explicitly formulated, although sometimes claimed. Explicit clarification/guidance helpful.
Revenue based on data	High	Yellow	Paid information services exist, but mainly map data sales is a concern. Assessing real revenue useful, and possible reorientation on authoritative information provision
Other relevant policy frameworks	High	Yellow	Secrecy law, esp. concerning internal use secrecy is not aligned with Access to Information and applied with unclear criteria. Impediment to open data.
Overall	Very High	Yellow	No show stoppers but central guidance and clarification on applying existing frameworks strongly needed.

3 INSTITUTIONAL STRUCTURES, RESPONSIBILITIES AND CAPABILITIES WITHIN GOVERNMENT

Importance   High

Context: As well as political and senior leadership, middle management level skills and leadership are important to success: creating an Open Data Program requires agencies to manage their data assets with a transparent, organized process for data gathering, security, quality control and release. To effectively carry out these responsibilities, agencies need to have (or develop) clear business processes for data management as well as staff with adequate ICT skills and technical understanding of data (e.g., formats, metadata, APIs, databases). Engagement among agencies and at all levels of government to set common standards and remove impediments to data interoperability and exchange is also vital, and requires mechanisms for inter-agency collaboration.

In addition to handling the "supply side" of creating an Open Data Program, agencies need the structures and capabilities to engage with communities that re-use Open Data – including developers, companies, non-governmental organizations, other agencies and individual citizens.

3.1. Which agency or agencies have relevant capabilities, mandates, project management experience and technical skills to be a suitable lead institution in the planning and implementation of an Open Data Program? (Importance: Very High)

+   The Ministry of Economy, backed by the National ICT Council has the mandate to implement Open Data as part of the e-Governance policy implementation. An e-Governance center, formally responsible for the implementation of open data policy components, as inter-ministerial coordinating element is to be activated, and an inter-ministerial open data working group chaired by the state secretary of the ministry of economy has already been formed and held a meeting.

+   The Open Data Working Group brings together large data holders (e.g. Central Treasure, SRS, NSC, Healthcare, Education, Justice, Emergency Situation)

+   Several State Owned Enterprises (SOE) exist with technical expertise (e.g. "Infocom" and "Infosystema") that create and maintain IT projects for government agencies.

+   Several agencies, such as Ministry of Emergency Situation have ICT and GIS capabilities internally

-   Several agencies, such as NSC, indicated they can't keep skilled IT staff on board because of the large difference with private sector salaries.

0   External parties, including donor organizations provide expertise, resources and manpower for some IT projects.

-   There is little coordination between the State Owned Enterprises (SOE's).

-   Some agencies would not want the responsibility for a national data portal out of concern of having to coordinate between many agencies and foreseeing difficulties doing that.

3.2. Which any agencies have a CIO, CTO or permanent official positions dedicated to data management? (Importance: Medium High)

+ Some ministries and agencies, particularly where data has been digitized have data management roles or data center teams (such as SRS, Min of Health, Emergency Situation). Some ministries (such as Agriculture) are in the process of forming a data center, or have roles like the Director of ICT.

- The National Statistics Committee has an information center, that has 112 people. About only 30% of those have technical skills however, with their ideal being that 100% would have technical skills.

0 The creation of these roles runs parallel with the ongoing roll-out of ICT in government processes.

3.3. What inter-agency mechanisms coordinate ICT issues (such as for technical matters)? (Importance: Medium High)

+ The National ICT Council is a coordinating body on policy level.

+ The "single window" effort is aimed at integrating ICT services from multiple agencies.

+ The e-governance policy plans for an IT infrastructure and interoperability framework: a general 'bus' for data and services exchange / integration across government.

+ The e-governance calls for a state center on e-governance to take on coordinating responsibility of the implementation of e.g. the open government and open data elements in that policy.

- There is no discernible central coordinating mechanism for technical ICT issues

3.4. What process is currently used to measure agency performance or quality of service delivery? (Importance: Medium)

+ The Access to information law mandates the at least yearly publication of performance of service delivery. Various departments (Central Treasury, Min of Health, Tax inspection) mention performance measurement, or the intention to do so, in conversation as part of normal operations.

+ The e-governance policy, as part of its open government and open data provisions, plans for the development of a method to measure effectiveness of service delivery.

0 Performance management and reporting, where it was encountered, is done on an agency-by-agency basis.

0 No information was gathered concerning the specific performance measurement of ICT.

3.5 Which agency or ministry is primarily responsible for data or statistics? (Importance: Medium)

0 There is no centralized general responsibility for data placed with a specific agency or department.

+ The National Statistics Committee is responsible for all official statistics. National statistics are routinely published online (free, in pdf form) and on paper (against marginal cost)

- The National Statistics Committee has tried twice to also publish their data with PC-Axis, a family of tools to present statistical information on the web, but have failed for lack of people with the right skills.

3.6. Which agencies or ministries appear most concerned about the release of data, and what is the basis of their concern? How can they be handled procedurally, and how can their concerns be addressed? (Importance: High)

+ Most agencies and departments indicate willingness to publish what is possible, some already see potential or demand (e.g. Central Treasury, Emergency Situation, Healthcare). Several (Transport, Finance, SRS) requested the presentation slides from the ODWG group to further disseminate internally.

+ Agencies such as the Social Fund, Ministry of Healthcare / Medical Insurance service, SRS and National Statistics Committee have voiced valid privacy concerns as a relevant delimiter of their wish for more available open data. This can be addressed by applying aggregation methods that address privacy concerns yet keep the granularity of the data where possible.

0 Several agencies and departments can't really imagine there would be external interest in their data. Showing existing examples of open data usage elsewhere helps to establish interest.

0 There is a financial concern, as stated by Ministry of Finance, that any spending needs to be motivated, so if open data can be demonstrated to lead to more efficiency, effectiveness or value creation in specific cases that would be important.

0 A concern was voiced during the roundtable with businesses and civil society warning against spending large sums of money on yet another IT project. Open Data is not primarily an IT effort. It is important to position any open data effort as integral part of a separately funded and motivated project, and choose steps in such a way that they require the least amount of resources and funding to be realized.

- Across agencies there is a general concern as to what may or may not be published, due to uncertainty concerning the legal framework that applies (this goes from checking with security services if the creation of a database is allowed at all, to hoping a decision will be made at the top)

- Several agencies and departments aim to monetize their web services as a way to make their IT efforts more sustainable. This would counteract open data potential.

- At least one agency stated that if there was external interest in using their data differently for a new service, they would be building that service themselves.

3.7 How strong is the government's overall ICT skill base among senior government leaders and civil servants? (Importance: High)

- Awareness of what open data, is very low, and often conflated with e-service provision or digitization processes. This is true for both senior level officials as well as below.

- Several agencies state they lack ICT skills, because they cannot keep skilled people in and loose them to the private sector.

+ The e-governance policy addresses ICT capacity development, focused on increasing the number of IT staff (currently 1-2%), IT staff retention (i.e. by improving salaries, currently at 20-35% of private sector level) and IT training (also for management to better use ICT as a policy tool).

+ Some training is going on for government officials, concerning ICT and analytics, at Ministry of the Emergency Situation

+ State owned enterprises such as "Infocom", "Transcom" and "Infosystema" have ICT skills which are provided to ministries through IT projects.

3.8. What is the government's presence on the Web? (Importance: Medium)

+ The Kyrgyz government has a strong web presence, with a wide variety of agencies and departments maintaining portals and web sites. These sites are regularly updated, and information actualized. (E.g. okmot.kg, grs.gov.kg or stat.kg). This is the result of both ongoing e-government efforts, as well as the mandate to pro-actively publish certain categories of information under the Access to Information Law. Existing websites are good distribution channels for open data as well. The SRS already has created a separate data section on their site (data.srs.kg), where open data can be published.

- Measuring traffic and analytics of web traffic are mostly absent.

Assessment

QUESTION AREA	IMPORTANCE	ASSESSMENT RATING	COMMENTARY
Suitable lead institution	Very High	Green	State center for e-governance and ODWG established. Ministry for of Economy in the lead.
Data management capabilities	Medium High	Yellow	Data management currently insular and decentralized, growing in parallel with digitization processes.
Interagency ICT coordination	Medium High	Yellow	Strong policy push towards integrated ICT coordination, but currently weak on tech aspects.
Agency performance measurement	Medium	Yellow	Access to information law mandates performance reporting and e-Gov policy aims for more and more coordinated effort.
Agency responsible for statistics	Medium	Green	NSC role clearly defined and regulated
Concerns towards data release	High	Yellow	Encountered concerns addressable. Risk of agencies acting on their own concerning monetization and to avoid co-creation.
ICT skillbase	High	Yellow	Pockets of strong ICT skills exist, but hard to retain skilled IT staff in strong enough numbers.
Government web presence	Medium	Green	Strong web presences, with efforts to further extend its role in public engagement.
Overall	Medium High	Yellow	Increasing ICT capabilities and coordination is of recognized key government concern

4 GOVERNMENT DATA MANAGEMENT POLICES AND PROCEDURES

Importance   High

Context: Open Data Programs can build on established digital data sources and information management procedures within government where they already exist. Where data is only available in paper form it will be hard to release as Open Data and in reusable format quickly and cheaply. Conversely, good existing information management practices within government can make it much easier to find data and associated metadata and documentation, identify business ownership, assess what needs to be done to release it as Open Data and put processes in place that make the release of data a sustainable, business-as-usual, downstream process as part of day-to-day information management.

4.1. What are the policies and practices on the management of government information?   (Importance: High)

- No specific information to establish existence of overall government processes for information and data security

- No specific information to establish existence of government wide standards for data quality, including provenance, accuracy, timeliness and completeness.

0 Agencies have a generally good understanding of the data quality, including provenance, accuracy, timeliness and completeness of their own data holdings.

+ In web presences Kyrgyz and Russian are normally both used by default, various government websites also provide some English language information

4.2. To what extent does the government have a coherent view of its data holdings? (Importance: Medium)

0 Only a limited view on data holdings exists, although individual agencies usually know what they have. Database holders should register (including non-government) databases they have that hold personal information, based on the privacy law, and that register should be publicly available. In practice this does not seem to happen, according to interviewees.

- No overall metadata standards exist.

+ Some datasets are more widely used across government, such as those of the SRS, Ministry of Justice and Social Fund. Each of those exchanges is by way of special bilateral agreement.

- In the case of the Ministry of Justice database on laws and regulations, other departments and ministries often use a commercially available service from market parties who have built their own database from ministerial documents. So the government database is not being used inside government, for want of better search functionality etc.

4.3. How and where is government data held? (Importance: High)

+ Digitization processes are taking place across the whole of government, where databases are being created. (See 4A for specifics)

+   The SRS holds several core reference databases (on persons and identities e.g.)

-   A lot of data, especially legacy data, is still in analog form.

O   As far as currently established no specific technological formats and standards are prescribed. Interoperability is mostly done on bilateral basis.

O   Single window policies and the e-governance policies make steps towards interoperability.

4.4. What is the extent of intra- and inter-government actual demand and latent demand for data? (Importance: High)

+   Data is regularly shared between different agencies at the national level.

+   Ministries, such as Emergency Situation, Agriculture, as are others are actively building their databases, to satisfy their own data demands.

+   The SRS holds several core reference databases (on persons and identities e.g.) which are also used by Ministry for the Interior, Social fund, Central Election Commission, Civil Service agency, Customs, Tax, all under bilateral agreements.

+   Ministry of Education and Ministry of Healthcare both collect and share data from/with the local level. Often this is analog data, which is aggregated and then digitized at the national level.

-   Several agencies indicate receiving unwelcome requests for data sharing from other agencies, or seeing their own requests denied.

+   Latent demand for data from other government agencies also found with the Tourism Department (maps) and those that use an external database for regulations over the database available from the Ministry of Justice.

+   The government has demand for data from donor organizations concerning funding and projects.

4.5. What data is already made available outside government - either free or for a fee – and on what conditions? (Importance: High)

O   O The SRS makes several data sets available on a record-by-record basis, for a fee: Cadastral data, and Vehicle registration. This generates some 500k KGS on a total budget of 13M KGS for the SRS (~4%) (~8.000 USD and 200.000 USD respectively).

+   The SRS publishes the address database that is currently being built in HTML.

+   The NSC publishes statistics as PDF, and would like to offer better formats (using PC-Axis, a toolkit for the web publication of statistics)

+   Maps are sold by the Ministry of Emergency Situation and seen as very expensive both within and outside government.

+   The Ministry of Justice provides access to the Company Register, and the database of laws and regulations. They also plan provide an app for the latter later this year (with UNDP support), which may mean an API to the database of laws will be created.

+   Budget, spending and procurement data is available, in HTML.

-   Conditions for re-use of these publications are unclear because unspecified.

-   No open data is currently being published (i.e. machine readable formats, and with clear open license)

O   Annex C provides a more detailed overview of the current availability of a range of potential data sets.

4.6.   What practical experience does the government have in anonymizing personal data? (Importance: High)

+   The National Statistics Committee operates in line with all international standards concerning anonymizing personal data.

+   The Ministry of Healthcare indicated aggregating data as part of the digitization process.

+   The SRS aggregates statistics of the transactions on their 'life events' database (register of births, marriages, deaths) and passport data base.

O   The Social Fund handles large volumes of personalized data, and willing to create/provide anonymized aggregations and statistics.

O   The Tax Inspection also anonymizes data to provide services around VAT numbers, excise info, and checking the validity of invoice numbers and business patents.

4.7.   Which agencies with established capabilities in data management (e.g. the NSO) could give leadership to a wider program? (Importance: Medium)

+   The SRS, NSC, Ministry of Emergency Situation, Ministry of Healthcare / Medical Insurance Fund, Ministry of Finance / Central Treasury, all have data capabilities and knowledge, in conjunction with the state owned enterprises they work with. They, specifically the SRS, are willing to help lead a wider program, and/or make their expertise available to other agencies.

Assessment

QUESTION AREA	IMPORTANCE	ASSESSMENT RATING	COMMENTARY
Information management	High	Yellow	No gov-wide coordination processes, but agencies have good understanding of own data quality.
Data holdings	Medium	Yellow	No coherent overview kept, though agencies know what they have.
Data form and location	High	Yellow	Legacy data usually non-digital. Increasing amount of digital data. Local levels weakest. Interoperability of policy concern looking forward.
Government data demand	High	Green	Strong internal data demand, also for outside data.
Public data availability	High	Yellow	Several datasets publicly available, if not always free or machine readable. (see Annex)
Experience in anonymization of data	High	Green	At least 3 agencies have anonymization expertise.
Agencies that can take leadership roles	High	Green	Multiple agencies with capabilities are willing to move forward and lead by example.
Overall	High	Yellow	Enough data holders well positioned to quickly move open data forward, though cross-government overview and consistency lacking.

5 DEMAND FOR OPEN DATA

Importance   Very High

Context: The value of data is in its use. A strong demand-side "pull" of data is important not only in creating and maintaining pressure on government to release data but also in ensuring that the wider Open Data Ecosystem develops and that Open Data is turned into economically or socially valuable services for citizens. The "pull" can come from civil society, the private sector, international organizations, donors and individual citizens.

5.1. What is the level and nature of actual demand and latent demand for data from Civil Society, Development Partners and the media? (Importance: High)

+ Civil society (such as CIIP) is vocal and voices demands for data concerning laws and regulations, courts, maps, disaster risks, legal entities, finances, statistics and etc.

+ The CSO DEAC has shown interest in having access to (aggregated) healthcare data concerning diabetes and also interested in other data such as HIV has been expressed.

+ Donor organizations are actively contributing to the creation of digital government data-bases.

+ Donor organizations, such as UNDP, USAID, WB, are willing to contribute their own data on Kyrgyzstan. The government has indicated a strong demand for data concerning funding and projects by donor organizations.

+ Donor organizations are interested in data related to their project portfolio, including transport, road maintenance, agriculture, gender issues, and rule of law as topics.

+ Journalists, e.g. AKI Press, are actively using government information on budgets, spending and procurement in their publications. They are worried access to these types of data may actually be limited, not strengthened and have a demand for more detailed data.

+ The CSO round table in November 2014 has surfaced a range of CSOs interested in using data more / at all. Focus groups planned for April 2015 will likely help highlight concrete needs for data.

+ CIIP has a track record on training and promotion of both free and open source software, and information security, with a sensibility to privacy and personal data protection. They worked with both government (such as Ministry of Healthcare) and media companies on these topics.

0 There may be limited capability amongst CSO to create applications or novel web based services, but this may be mitigated by re-using open source projects from around the world, and connecting CSOs to the thriving developer communities around those projects, as well as creating stronger connections with the existing developer community in Kyrgyzstan.

- In general open data awareness is low, conflating it with online publication in general.

+ During the CSO roundtable in November 2014 and following conversations there was demand for support in raising awareness and provide documented success stories from else-where.

5.2. What is the level and nature of actual demand and latent demand for data from business/the private sector? (Importance: High)

+ Businesses have a strong demand for data (as well as improvement in the smooth delivery of e-services) that can reduce the cost of doing business. This includes data concerning import/export tariffs, customs and excise, laws and regulations, court decisions, legal entities, government procurement, address register, etc.

+ Businesses and government bodies alike indicate a demand for good open maps and geographic data.

+ IT companies are working with e.g. the SRS on the address register.

+ The association of IT companies has volunteered to help create an open source (CKAN based) national data portal to host both government and non-government data.

+ Apps like 'esal' exist that are aimed to provide touristic information but are currently based on what the tourism sector posts online, and would be strengthened by the ability to include geographic data, points of interest data and transport data.

+ The Namba Taxi company is interested in government data but also getting ready to publish data they collect themselves that can be of use to the government. This concerns data with regard to traffic density and waiting times in the city of Bishkek.

+ There is an active developer community, which uses several communications online, such as Google group Bishkek, Google Programmes group, and the Diesel IT forum. When a developer meet-up was organized in November 2014 around open data some 70 people showed up.

O The planned focus groups in April will likely surface more specific data demands and wishes from the business community.

5.3. How do public agencies listen to demands for data and respond? (Importance: Medium)

+ A good number of agencies and departments have indicated they will to open up more data, and are receptive of demands in the sense that they want to explore opening up.

O It has not been established how many requests for data, as opposed to information, are brought forward under the Access to Information law, or what those requests mostly ask for.

- Some of the interviewed agencies can hardly imagine external demand for data and see that as reason to not make efforts to publish.

- Some of the interviewed agencies think selling data is always the most profitable way for society (as it improves the state's financial position).

- There does not seem to be an established process to bring data requests forward by non-government stakeholders.

5.4. How do external stakeholders view public agencies' willingness to listen to demands for data and respond? (Importance: Medium)

+ CSO and businesses work together with specific agencies and departments and look at those relatively positively, but less so on government responsiveness in general.

- CSO and business indicate, as do government agencies, that there is no uniformity in decisions on making data and information available upon request, and arbitrarily requests are denied on the basis of internal use secrecy.

Assessment

QUESTION AREA	IMPORTANCE	ASSESSMENT RATING	COMMENTARY
Demand in civil society and media	High	Green	Strong demand, though signs of low awareness and maybe limited capability.
Demand in business society	High	Green	Strong demand, and willingness to engage.
Willingness to respond to demand	Medium	Yellow	A range of agencies receptive to opening up, others cannot imagine demand or seek monetization.
Perceived responsiveness	Medium	Yellow	Lack of uniformity in decision making on making data public perceived by both non-government and government stakeholders.
Overall	Very High	Green (with concern)	Strong demand present, a range of agencies willing to engage. Central guidance on keeping decisions on publication uniform/predictable and how to request data needed.

6 DEMAND FOR OPEN DATA

Importance   High

6.1. Which potential infomediaries (such as data journalists) are able to help translate Open Data into meaningful information for the public? What actions are needed to develop or enhance these parts of the Open Data Ecosystem (Importance: High)

+ Journalists such as at AKI Press are already using public financial information, and are asking for more detailed data. They have some capabilities, and one journalist indicated they are looking to organize a data visualization training session (with openspending.org material) in the near future.

+ The role of the press has strengthened again since 2010 according to international observers, and has variety and online presence.

6.2. What activities has the government engaged in to promote reuse of government-held data (e.g., in developing apps or organizing co-creation events)? How could such promotion be developed or enhanced? (Importance: High)

+ Several agencies are making apps on their own: such as Ministry of Emergency Situation (app so people can report incidents with photo/video, and trigger response teams, March 2015), Ministry of Justice (mobile app to access the law and regulations database Q3/Q4 2015), SRS (mobile apps and services like carfax.kg on top of their data, testing now)

0 Co-creation examples have not been found, though the SRS do have memorandum of understanding with the Hi Tech Park to work together on applications.

+ The NSC has indicated they would like help with improving the way statistics are made available online, for which they lack both funding and capabilities.

+ A range of agencies, Ministry of Healthcare, Ministry of Education, Ministry of Emergency Situation, to name a few, have indicated they would like to see their data used more, and volunteered to be part of a pilot project working together with civil society and the business and developers community.

+ The e-governance policy action plan for open government and open data explicitly states the role of civil society in guiding and enabling the implementation of actions.

6.3. What is the extent of engagement with government through social media and other digital channels? (Importance: Medium)

+ The e-governance policy contains a range of measures to be fully implemented by 2017 con-cerning public engagement: discussion fora on ministerial websites, guidelines on using ICT for citizen engagement, online consultation, in the decision making process and during law making processes, guidelines for civil servants to use social media.

+ Government agencies have feedback and contact information and forms online. Tax inspection says their form is not being used a lot or at all.

+   SRS has an online check for people to see if their address is in the formal system, and a form to submit corrections.

+   Emergency Situation uses SMS to send out warnings.

+   Citizens use various platforms for interaction around specific topics (Diesel forum, Google Plus, Facebook), anecdotally mostly from the cities.

-   CSO's indicate that engaging with government around any planned laws is hard: the status of laws and regulations under discussion is usually opaque, even to MPs, they say.

0   The level of engagement could be increased as both citizens and government agencies signal the will for it.

+   The availability of more data would be conducive to more engagement, from businesses as well as civil society, given the data demands voiced and the eagerness of non-government parties to be involved.

6.4. To what extent is there an existing Apps Economy? (Importance: Medium High)

-   There currently is no 'apps economy'

+   There is a developer community, and apps are being created (such as a tourism app just re-leased this month, and apps on finding lawyers, ATMs or gas stations).

-   The applications encountered built by non-government parties (tourism app, service to ac-cess laws/regulations, maps) do not use government data.

+   It is likely that with increased open data availability the number of apps will rise. There is an active IT / coder community, and will was expressed at the coder meet-up in November 2014 as part of the ODRA. Also at least one IT developer has a separate department aimed at creating civic services in the form of apps.

+   A hackathon is planned by the Soros Foundation in June, with the aim to deliver 2 mature applica-tions by September.

6.5. To what extent is there an academic or research community, which trains people with technical skills or has capabilities in data analysis? (Importance: Medium)

+   Fifteen institutes for higher education have programs for computer science and/or informatics, one offers an advanced statistics program.

+   Some 46.000 students were 2013/2014 enrolled in higher education for Computer Science and En-gineering (2663) and Engineering (43784), with a total of 7700 graduates (332 computer science, 7362 engineering). The numbers of graduates for 2014 are: computer science / engineering 581, Information Systems 355, Applied informatics 287. Secondary vocational education has another 945 graduated in computer science and engineering.

+   An undergraduate program 'Information Technology in State and Municipal Governance' exists with the Academy of Management at the National Information Technology Center.

+   The National Information Technology Center (2004) focuses on educational efforts concerning ICT. It offers professional training courses to IT and software industry, public sector IT specialists, as well as to various service sectors (banking, telecoms). It also provides (re-) training to students and graduates, as well as unemployed, to bring them into the field of IT.

+ Since 2012 ICT skills are seen as part of basic competencies. A basic course of informatics and ICT provides mandatory minimum training based on state educational standards. It is provided to students in grade 7 to 9, in secondary schools with computer equipment rooms.

- Anecdotally computer equipment rooms are not always used as primary and secondary school teachers lack skills and avoid using existing facilities in order not to damage them.

+ One secondary school opened a center for certification of computer literacy, providing international certificates. The School of Professional and Continuing Education Aga Khan likewise provides internationally recognized computer literacy training and certificates.

Assessment

QUESTION AREA	IMPORTANCE	ASSESSMENT RATING	COMMENTARY
Potential Infomediaries	High	Yellow	Some data journalism exists with a look towards doing more.
Re-use promotion	High	Yellow	A number of agencies want to see their data used more and ask help in making that happen. Co-creation not yet happening, though some gov apps planned.
Government engagement	Medium	Yellow	Both government and society aim for stronger engagement. Some engagement already exists, though offer and demand not always matched.
Apps economy	Medium High	Yellow	No real apps economy but active developer community and some apps do exist. Hackathon planned.
Academic community	Medium	Yellow	Educational and academic resources exist, but may be leveraged more.
Overall	High	Yellow	Government push towards more engagement and data usage. Infomediaries and app builders ready to engage.

7 FUNDING AN OPEN DATA PROGRAM

Importance: Medium High

Context: Funding with respect to both the "supply side" and "demand side" of Open Data is important to ensure that the objectives of an Open Data Program are met.

7.1. How could resources be identified to fund an initial phase of an Open Data Program? Who would need to take what action to do so? (Importance: Very High)

+ The e-governance policy comes with an estimated investment of over 20 million USD, mostly from donors initially, but with an increasing percentage coming from the state budget over time (10% in 2014 to 70% in 2017). This includes spending for the listed open government and open data actions. It is not clear to the author if there is an estimate for specific funding of open government/open data actions.

+ The open data actions under the e-governance policy are expected to also be supported by civil society and the business community, self-financing their involvement.

+ Donor International organizations such as UNDP, WB and USAID have indicated support towards an open data program, such as for the creation of an open data portal, or through using open data as tool within their existing project portfolio and stimulate open data provision and value creation that way

7.2. What if any resources exist or have any been identified to fund development of initial apps and e-Services that will use Open Data? (Importance: High)

O Some agencies are building their own apps as part of their e-service delivery, usually funded by donor organizations and development banks. Open data might be positioned as the building fundament for this.

+ The Ministry of Justice is looking to build an application with UNDP funding in the fall of 2015 on access to laws and regulations. This means that an API will be created, which is an opportunity to also provide open data access.

7.3. What funding is available to support the necessary ICT infrastructure and ensure enough staff have the skills needed to manage an Open Data Program? (Importance: Medium High)

+ The existing online provision of mandated types of information likely can easily be extended to include open data for that information.

+ The e-governance policy comes with an estimated investment of over 20 million USD, mostly from donors initially, but with an increasing percentage coming from the state budget over time (10% in 2014 to 70% in 2017). This includes spending for both the interoperability of infrastructure and increasing skills and capabilities.

+ The ongoing work on 'single window' policies can likely be leveraged to also provide some open data.

+ Existing efforts concerning the creation of data expertise centers within agencies can likely be a way of also introducing open data as another way of distributing data.

7.4. What funding mechanisms does the government have for innovation? (Importance: Medium High)

0 Most ICT related projects mentioned by agencies and departments show that change and innovation is usually funded from donor organizations.

- Agencies and departments do not usually have their own funds to create change or innovation in their processes. Maintenance is usually funded from the state budget. E.g. the NSC wants to improve their online data provision but lacks both the funds and expertise to do so.

+ Fiscal instruments exist to stimulate investment in ICT / technology by businesses, which are not specifically aimed at innovation.

Assessment

QUESTION AREA	IMPORTANCE	ASSESSMENT RATING	COMMENTARY
Initial phase resources	Very High	Yellow	Initial funding need should be limited. E-governance policy and donors may provide funding opportunity.
Initial app funding	High	Yellow	Several agencies in process of app development with funding. Open data might be added to this.
ICT infrastructure and skill funding	Medium High	Yellow	E-governance policy contains strong push on skills and infrastructure. Open data requirements and awareness may be added here.
Innovation funding	Medium High	Yellow	Change and innovation usually funded through donors.
Overall	Medium High	Yellow	Especially if funding needs are kept limited by latching onto other ongoing efforts, funding is not an essential concern External willingness exists.

8 NATIONAL TECHNOLOGY AND SKILLS INFRASTRUCTURE

Importance   High

Context: In very practical ways, Open Data Programs normally rely for their success at least in part on the national technology infrastructure, in terms of technology and communications services and the ICT skills among officials, infomediaries and the general public.

8.1. What is the local ICT "ecosystem"? Which technologies reach what proportion of citizens? (Importance: High)

+   According to ITU, Kyrgyzstan has implemented full competition across the entire telecommunications sector.

+   Mobile penetration is above 125%.

-   Fixed line penetration seems to have stalled in favor of mobile at 9%.

+   Kyrgyzstan under the National Strategy "ICT for the development of the Kyrgyz Republic" is pursuing fiber-optical communication lines into neighboring countries to increase transit capacity and integration into the global information network.

+   Digital TV coverage was planned to reach 90% of the population by the end of 2014.

+   The e-governance policy program is aimed at providing e-services in all spheres of public life. A range of e-services already exists.

8.2. What is the level and cost of internet access, both by broadband and by mobile technologies? (Importance: High)

0   Internet penetration is around 25%, with fixed line internet penetration much lower (<5%), as many users use internet through public access in public venues.

+ Mobile broadband is at around 25%, some 1.3 million subscribers early 2014.

0 About a third of enterprises have fixed-broadband access (2012, ITU).

- About 10% of schools have fixed internet access (2014, ITU).

0 Urban areas have better coverage than rural areas.

0 Kyrgyzstan ranks 108th in the ICT Development Index (by ITU) in 2013 (published November 2014). This is comprised of rank 114 on access, 114 in use and rank 64 in skills.

8.3. How readily available is compute and store infrastructure? (Importance: Medium High)

-   PCs are largely unaffordable to the majority of the population.

+   Some 30 secure internet servers are available (WB data).

+ Some 10 hosting companies are active in Kyrgyzstan that has their servers and infrastructure in Kyrgyzstan (source hosting101.ru/catalog/kg).

+ At least 2 providers of virtual private server services that have their infrastructure in Kyrgyzstan exist (Borneo.kg, Prohost.kg).

- Anecdotally hosting on servers outside Kyrgyzstan is generally cheaper than inside Kyrgyzstan.

O Anecdotally cloud services used are international.

8.4. How strong are the IT industry, developer community and overall digital literacy? (Importance: High)

+ Ministries and agencies outsource IT functions and services regularly to both state owned enterprises and private sector companies.

+ The "High Technology Park in the Kyrgyz Republic" regulation was adopted to attract investment in modern ICT and software design.

+ Enterprises are stimulated to invest in technological equipment through tax instruments (EECA-ICT. eu 2014).

+ Around 20% of service exports are ICT service exports.

+ There is an association of IT companies that is vocal and active.

+ There is an active developer community.

O Some 11.000 people were employed as ICT specialists in 2013 (source: NSC), a reduction of 2.000 from its peak in 2010. Over half are located in Bishkek and neighboring Chui oblast. This represents some 2% of employees of ICT using companies.

Assessment

QUESTION AREA	IMPORTANCE	ASSESSMENT RATING	COMMENTARY
ICT penetration	High	Yellow	Low fixed line penetration, very strong mobile penetration. Growing number of government e-services.
Level of internet services	High	Yellow	Relatively low but growing internet penetration, especially mobile. Many use public access points.
Compute and storage availability	Medium High	Yellow	Local hosting and virtual server services exist. Cloud computing and hosting often sourced outside country. Computers largely too costly for population.
IT sector, developer community, digital literacy	High	Yellow	Vocal and active IT sector, that is a significant service exporter, though as sector relatively small in size. Concentrated around Bishkek.
Overall	High	Yellow	Given limited information infrastructure CSOs and businesses will need to function as strong infomediaries, to push info services out to their stakeholders and target groups. Means of delivery could be non-digital.

Conclusions

Overview of the assessment per dimension:

QUESTION AREA	IMPORTANCE	ASSESSMENT RATING	COMMENTARY
Senior leadership	Very High	Green (with concern)	Strong leadership established. As key concern does remain that Open Data, while being promoted, is not yet widely understood.
Legal and policy framework	Very High	Yellow	No showstoppers, but central guidance and clarification on applying existing frameworks strongly needed.
Institutional structures, responsibilities, capabilities	Medium High	Yellow	Increasing ICT capabilities and coordination is of recognized key government concern
Government data management policies	High	Yellow	Enough data holders well positioned to quickly move open data forward, though cross-government overview and consistency lacking.
Societal demand for open data	Very High	Green (with concern)	Strong demand present, a range of agencies willing to engage. Central guidance on keeping decisions on publication uniform/predictable and how to request data needed.
Civi cengagement and capibilities for open data	High	Yellow	Government push towards more engagement and data usage. Infomediaries and app builders ready to engage.
Funding open data program	Medium High	Yellow	Especially if funding needs are kept limited by latching onto other ongoing efforts, funding is not an essential concern. External willingness exists.
National tech and skills infrastructure	High	Yellow	Given limited information infrastructure CSOs, and businesses will need to function as strong infomediaries, to push info services out to their stakeholders and target groups. Means of delivery could be non-digital.

From the assessment the following conclusions can be drawn, indicating that Kyrgyzstan is in a position to move forward quickly with an open data program:

- The e-governance policy plan is an excellent base and starting point for an open data program. The suggested actions in this assessment report can be used to prioritize and specify the plans in component 6 of the e-governance policy on open government and open data. Likely the current policy plan in combination with the action plan divided up in yearly plans can also serve as the basis for entering the Open Government Partnership if the Kyrgyz Government so chooses.

- The e-governance policy plan is anchored with strong political leadership, fulfilling one of the most important prerequisites for a successful open data program

- The legal and policy framework is mature and strong as to underpin the open data program, but more central guidance and regulatory clarification is needed to ensure uniform application and reduce uncertainty about the possibility of open data re-use both within and outside government

- There is a strong societal demand for open data from both civil society and the business and developer communities

- A successful open data program requires much stronger open data awareness. Awareness of what open data is, both within and outside government is still limited, and often conflated with e-services and digitization or web publishing, but when shown examples potential is easily recognized by both data holders and potential re-users. There is strong demand for such examples.

- Fostering a stronger collaborative attitude between government agencies, civil society and the business and developer communities will allow a speedy and successful open data program.

- An open data program can be a good way for government to also gain insight from open data from donors and societal stakeholders.

- Existing online publication of a number of mandated information categories, including budget, procurement and expenditure transparency, can easily have open data publication of the same information added to them.

- In a successful open data program top-down initiatives, bottom-up activities and middle-out measures are intricately combined. The established Open Data Working Group (ODWG) is in prime position to ensure the connections between those three levels of implementation: by promoting pilot projects of government and non-government actors, capabilities to publish open data and use it as a policy tool for sectoral ministries will be created (to be copied by others), and the need for policy and legal clarification or amendments will emerge. Similarly the ODWG will be in a position to provide guidance to ministries and agencies, address general concerns, and suggest and propose policy and legal aspects to be addressed.

- A number of government data holders have already volunteered to be involved in pilot projects with non-governmental stakeholders. This allows a speedy start.

- The first focus should be on releasing a few data sets as open data as soon as possible, in the context of the pilot projects and likely in line with information already published proactively online. This is the clearest possible signal to society that they are invited to engage.

- The national data portal foreseen in the e-governance policy plan's action, list can be provided by the volunteer efforts of the Kyrgyzstan ICT sector, using free and open source components. This would also make it possible for non-government actors, such as donors and businesses (e.g. like Namba) to publish open data that are of interest to both the Kyrgyz Government and the general public.

- For some pilots and other areas of interest free open source software and example projects exist elsewhere in the world that could be readily copied to the Kyrgyzstan context, reducing the time, resources and capabilities needed to create societal value with open data.

- The proposed action list is designed to strike a balance between actions at the top, middle and bottom. This means that deciding to not take an action should result in re-examining that balance and potentially add or alter actions at other levels.

- The costs of an Open Data Initiative anchored in engagement with society need not be substantial. Open data is not so much an IT-project, even if it builds on digital technology at its core, but a means for engagement and a means to make room for innovation, resulting in a more resilient populace and more socioeconomic value generation. The key to keeping costs down is attaching open data actions to ongoing digitization and policy efforts opportunistically.

ANNEXES

A. Glossary

Open Data

Data in machine-readable format that is publicly available under an "open" license that ensures it can be freely used/reused/redistributed by anyone for any legal purpose.

Open Data Program

A set of actions designed to introduce and manage Open Data by a government, agency, organization or company. The Assessment focuses on Open Data Programs developed by governments or individual public sector agencies.

Open Data Ecosystem

An approach to Open Data that focuses not only on data but on the larger environment for Open Data – its "ecosystem" – including other key dimensions like leadership, policy/legal framework, institutions, infrastructure and the state of user communities (like developers, universities, private sector).

Open Data Portal

A platform (usually accessed as a website) that at a minimum acts as a catalogue providing a single point of access for the public to search and access Open Data available from a government, agency or organization.

Open Government

A philosophy or principles for government that focus on changing how government works to make it more transparent, accountable, participatory (with greater citizen engagement) and collaborative.

Open Government Partner-ship

A global partnership of governments dedicated to implementing domestic reforms that make government more open, accountable, and responsive to citizens. Launched in 2011, the OGP now has over 60 member countries.

Open Standards

Technical standards that are publicly available, non-proprietary and can be implemented on a royalty-free basis. Often open standards are also developed in an "open" transparent process that enables a larger group of people to contribuwte to their development.

Archiving

The storing of records, documents, or other materials of historical interest (or a collection of them) in a defined place or repository.

Data Management

The development, execution and supervision of plans, policies, programs and practices that control, protect, deliver and enhance the value of data and information assets.

Metadata

Metadata is "data about data" – meaning data that describes basic aspects of a dataset, for example when the dataset was created, which agency is responsible for the dataset, the format of the data, etc.

Infomediary

A person or entity that helps make data/information more easily understandable to a broader audience such as the general public. For example, the media are important infomediaries for sharing information with the public in a more understandable way.

B. List of meetings and interviews conducted

This is a list of all meetings and interviews conducted in November 2014 and March 2015, from which the information presented in this document was gathered and synthesized. In addition to individual meetings listed below, the team drew on the results of roundtables for NGOs and businesses conducted during the November visit.

Government

1. Temir Sariev, Prime Minister

2. Jyldyzbek Isakulov, Deputy Head of Prime Minister Office, Director of State E-Governance Center

3. Elvira Sarieva, Minister of Education and Science

4. Talantbek Batyraliev, Minister of Healthcare

5. Kubanychbek Kulmatov, Mayor of Bishkek

6. Aidai Kurmanova, State Secretary, Ministry of Economy

7. Nuradil Nurdinov, Deputy Minister, Ministry of Emergency Situations; Azamat Mambetov, Head of Crisis Situations Department, Ministry of Emergency Situations

8. Ernis Mamyrkanov, Deputy Minister of Ministry of Transportation and Communications

9. Nurbek Elebaev, Head of State Agency on Fuel and Energy Regulation

10. Bahtiyar Abdiev, Secretary of State, State Agency on Environment Protection and Forestry

11. Almaz Sazbakov, Director of Agency on Investment Promotion, Ministry of Economy

12. Tynchtybek Kudabaev, Director of State Enterprise - Center "Single Window" , Ministry of Economy

13. Akylbek Osmonaliev, Chairman of National Statistical Committee; Tekeeva Luksina, Deputy Chairman of National Statistic Committee

14. Alina Shaikova, Chairman of State Registration Service; Dastan Dogoev, Deputy Chairman of State Registration Service

15. Aibek Dzhunushaliev, Secretary of State, Ministry of Migration and Youth; Dmitriy Miheev, ICT Consultant, Ministry of Migration and Youth

16. Nukesh Kozhobergenov, Deputy of Director, Central Treasury; Ruslan Tokochev, Director of SOE "InfoSystema"; Nazgul Duishembieva, Head of IT Department, Ministry of Finance

17. Ulugbek Japarov, Head of the Antimonopoly Policy; Nikolai Novickyi, Head of the Department of Regulation of Public Services, Ministry of Economy

18. Azik Rakhmatov, Leading Specialist at the Ministry of Education and Science; Ayat Djamansariev, Project Coordinator of the PIU at the Ministry of Education and Science

19. Meder Zarlykov, Business Analytic (Procurement Portal), Ministry of Finance

20. Nurgul Salieva, Head of Department on Implementation ICT programs of Tax Inspection

21. Mairambek Alymkulov , IT consultant of Ministry of Healthcare; Larisa Murzakaromova, Head of Medical Information Center under the Ministry of Healthcare

22. Ulanbek Asanaliev, Head of Department of Legal Information and ICT, Ministry of Justice

23. Sergey Semenov, Director of State Information &Marketing Center "Ayilmaalymat", Ministry of Agriculture

24. Bekzhan Murzakmatov, Deputy Head of IT, Information System"Single Window" (Tulpar Infosystem), Ministry of Economy

25. Sayimbekov Ulugbek , Head of IT Security Department, Social Fund

26. Abykeev Almaz, Project Coordinator in ARIS;

27. Kotelnikov Konstantin, Senior IT specialist in ARIS,

28. Chinara Esengul, Deputy Head, National Institute for Strategic Studies

29. Almaz Baketayev, Deputy Minister of Finance, Director of Central Treasury

World Bank

1. Dinara Djoldosheva, Senior Country Officer

2. Gulmira Sultanova, Education Specialist

3. Asel Sargaldakova, Health Specialist

4. Tolkun Jukusheva, Disaster Risk Prevention/Water and Climate

5. Talaibek Koshmatov, Rural Development Specialist

6. Irina Goncharova, Procurement Specialist

7. Nurlan Tynaev, Private Sector specialist

8. Zamir Chargynov, Energy Sector specialist

9. Andrew Michael Mitchell, Forestry Specialist

10. Mairam Yusupova, Financial Sector Specialist

11. Aidai Balyaeva, Transport Sector Specialist

12. Irina Novikova, Transport Sector Specialist

13. Zhanybek Ybraiym Uulu, Public Sector Specialist

Donors

1. Alexander Avanessov, UN Resident Coordinator/UNDP Resident Representative; Pradeep Sharma, UNDP Deputy Resident Representative;

2. Richard W. Haselwood, Development Transition Specialist, Good Governance & Public Administration Strengthening Program, USAID

3. Lira Samykbaeva, Freedom of information Program Manager, Soros-Foundation Kyrgyzstan

4. Ahmet Shamiev, Prosperity Officer, DFID

5. Rasul Momunaliev, GIZ "Health Care in Central Asia"

6. Kumar Kylychev, Head of Environment Protection dimension, UNDP; Vladimir Grebnev, Coordinator of the Program «Environmental Protection for Sustainable Development», UNDP

NGOs

1. Tattu Mambetalieva, Director of CIIP Public Foundation ; Irina Baikulova, Lawyer; Artem Goryainov, IT Coordinator; CIIP Public Foundation

2. Aziz Abakirov, Chairman of Kyrgyz Software Developers Associations; Tagai Ismailov, Executive Director of Kyrgyz Software Developers Associations

3. Ahmat Madeyuev, Head of Center of Public Policy

4. Asel Omarhanova, Head of NGO «Education and Training in Kyrgyzstan»

5. Nazgul Omurakunova, Head of Diabetes Association

6. Chinara Bakirova, Head of the Association of AIDS service NGOs KR «Anti-AIDS»

7. Chingiz Beksultanov, Jyldyz Turalieva, Public Association "Rezultat"

8. Kamilya Gareeva, Head of Creative Association "Salt"

9. Inga Sikorskaya, Head of School of Peacemaking and Media Technology

10. Saida Abdrazakova, WFP

11. Rita Karasartova, Director, Institute for Public Analysis

12. Nurbek Toktakunov, Director, "Precedent"

13. Begaim Usenova, Director, Media Policy Institute

Business

1. Viktor Albrekht, Director of Hi-Tech Park; Alexander Yuriev, Member of Experts Council, Hi-Tech Park

2. Maxim Kosyakov, IT Attractor

3. Alexander Vishnyakov, Gennadiyi Karev, Namba.kg

4. Ryspek Arunov, Kyrgyzgaz OJSC

5. Timur Karimov, CEO of RT Group

6. Talantbek Sakishev, Director of ECA

7. Olga Niyazalieva, CEO of SpalMalo

8. Aziz Soltobaev, Co-founder of Kyrgyz Startup Business Incubator

9. Tatiana Grekova, Ecopartner

10. Aibek Bakanov, Executive Director, Association of Telecom Operators

11. Ruslan Karabukaev, Founder, "Namba-Taxi"

12. Akyn Mambetaliyev, Deputy Director, Infocom

13. Emil Umetaliev, President, Kyrgyz Concept

14. Asylbek Razhiev, Executive Director, Community-Based Tourism Association

Media

1. Bermet Malikova, Observer, Vechernyi Bishkek newspaper

2. Gulmira Baigerekova, AKIpress

C.   Overview of (key) data sets

Below is a list of data sets, and the form in which they currently exist. Data that is already available online in HTML are a prime candidate to quickly also release in machine readable formats as open data.

Availability of key data sets in the Kyrgyz Republic

DATA SET	RESPONSIBLE AGENCIES	IS IT IN DIGITAL/ REUSABLE FORM?	WHICH FILE FORMATS	IS IT AC-CESSIBLE ONLINE?	IS IT PAID OR FREE?	IS IT AVAIL-ABLE AS COMPLETE DATA SET OR AS INDIVIDI-AL QUERIES?	REMARKS
Budget and its drafts	Ministry of Finance	Yes	Various	Yes	Free	Queries	
Financial plans and execution reports of the national budget	Ministry of Finance	Yes	Xls	Yes	Free	Queries	
Budget income and expenditure data (national and province level)	Ministry of Finance	Yes	Html	Yes	Free	Aggregate	
Investment project / grant data	Ministry of Finance	Partially	Html	Partially	Free	Aggregate	
National statistics	National Statistics Committee	Partially	Various (mostly xls)	Yes	Free (except for microdata)	Queries (except for selected databases)	Recently imple-mented open data formats
Census data	National Statistics Committee	Partially	Pdf	Yes	Free	Queries	
Parliamentary data	Jogorku Kenesh	Yes	Various	Yes	Free	Queries	Multiple databases
Laws and regula-tions data	Ministry of Justice	Yes	Database	Yes	Free	Queries	Recently imple-mented open data formats
Company/Business register	Ministry of Justice	Yes	Database	Yes	Free	Queries	Full data set of lawyers/notary
Procurement and Tender Data	Procurement De-partment of Ministry of Finance	Yes	Html	Yes	Free	Queries	
Weather Data	Agency of Hy-drometeorology under Ministry of Emergency	Yes	Html	Partially	Paid (except for recent forecast)	Queries	
Address Register	State Registry Service	Yes	API	Yes	Free	Full	Recently imple-mented open data formats
Crime Data	Ministry of Internal Affairs	No	n/a	No	n/a	n/a	Only summary data is available
Cadastral data	Department of Cadastre and Real Estate registration under State Regis-tration Service	Yes	Database	Yes	Paid	n/a	
Elections Data	Central Commission on Elections and Referendums	Yes	Database	Yes	Free	Aggregate	

Maps	Map service under State Agency on Geology and Mineral Resources	No	n/a	No	Paid	n/a	
Transport data	Ministry of Transportation and Communication	No	n/a	No	n/a	na	
Scientific disserta-tions	National Attestation Commission	Yes	Database	Yes	Free	Queries	
Intellectual Property Data	State Agency of Intellectual Property and Innovation	Yes	Database	Yes	Free	Full	
Local courts and Judicial Decisions	Supreme Court Of Kyrgyzstan	Yes	Database	Yes	Free	Queries	
Financial Markets Regulation	State Service of Regulation and Control of Financial Markets	Partially	Various	Partially	Free	Queries	
Register of public services	Office of Govern-ment, Ministry of Finance	Yes	Html	Yes	Free	Full	
Directory of govern-ment offices	Office of Govern-ment, Ministry of Finance	Yes	Html	Yes	Free	Queries	
Registers of public property	Fund of Public Prop-erty Management	Yes	Database	Yes	Free	Full	
Public officials income declarations	State Personnel Service	Yes	Xls	Yes	Free	Queries	
Social services providers	Ministry of Social Development	Yes	Doc, html…	Yes	Free	Queries	
Register of educa-tional institutes	"Ministry of Educa-tion and Science Kyrgyz Republic with media and NGOs"	Yes	Database	Partially	Free	Queries	
Register of medical facilities	Ministry of health-care	Yes	Xls	Yes	Free	Full	
Registry of pharma-ceuticals	Ministry of health-care	Yes	Database	Yes	Free	Queries	
Emergency situa-tions reports	Ministry of Emer-gency Situations	Partially	Html, doc	Partially	Free	n/a	GIS data partially available in open data format
Mineral resources	State Agency on Geology and Mineral Resources	Yes	Doc, html, maps	Yes	Partially	Queries	
Water resources	Department of Water Resources and Irrigation under Ministry of Agriculture	Partially	Html	Partially	Free	Aggregated	
Environmental Data	State Agency on Environment and Forests	Partially	Various	Partially	Free	Queries	
National Standards	Ministry of Econ-omy, Center of Standardization and Metrology	Partially	Html	Partially	Free	Queries	

D. Action planning

Open data starts from the top down, from the middle out and from the bottom up

For a successful open data program actions need to be taken at different levels simultaneously and in coordination with each other. Tim Berners-Lee, initiator of the UK Open Data Institute summarizes it as 'open data starts from the top down, from the middle out and from the bottom up'.

- The top level in this context is the legal framework and the overall government policy frame-work. It is where the overall circumstances for enabling open data are set and decided.

- The middle level is formed by the sectoral ministries and agencies and the data sets they hold. It is where the translation into everyday processes and practical interpretation takes place.

- The bottom up level is where the first pilots for publishing and using open data take place as a col-laborative exploration of both government agencies and civil society and business stake-holders.

Small pilots where government data holders and external stake holders together explore how to do open data well, are key bottom-up initiatives to show where actions need to be taken inside agencies or on a regulatory level. Likewise changes in regulation that are important will allow new bottom-up initiatives to emerge. Sectoral ministries and agencies by adopting specific steps give practical interpretation of existing legal and policy frame-work and create the space for external stakeholders to create impact with open data. Implementing an open data program is very much a 'learning-by-doing' process, and it is therefore key that actions are not planned or viewed on their own, but always in the context of corresponding or interconnected steps at the other levels.

Open Data Working Group of key importance

The Open Data Working Group (ODWG) is a crucial element in the implementation of an open data program. Due to its high level and interagency composition, as well as the presence of external business and CSO stakeholders, it is the only connecting element between the three different levels and various activities. The ODWG is uniquely positioned to a) suggest alterations to existing legal and policy frameworks, b) provide guidance to ministries and agencies both on the practicalities of open data as well as the interpretation of legal and policy frameworks, thus ensuring consistency across government, and c) provide recognition to ongoing pilot projects and use their experiences to inform a) and b)

This makes the ODWG the owner and moderator of the action plan.

The image below depicts the role of the ODWG in coordinating between the different levels of implementing an
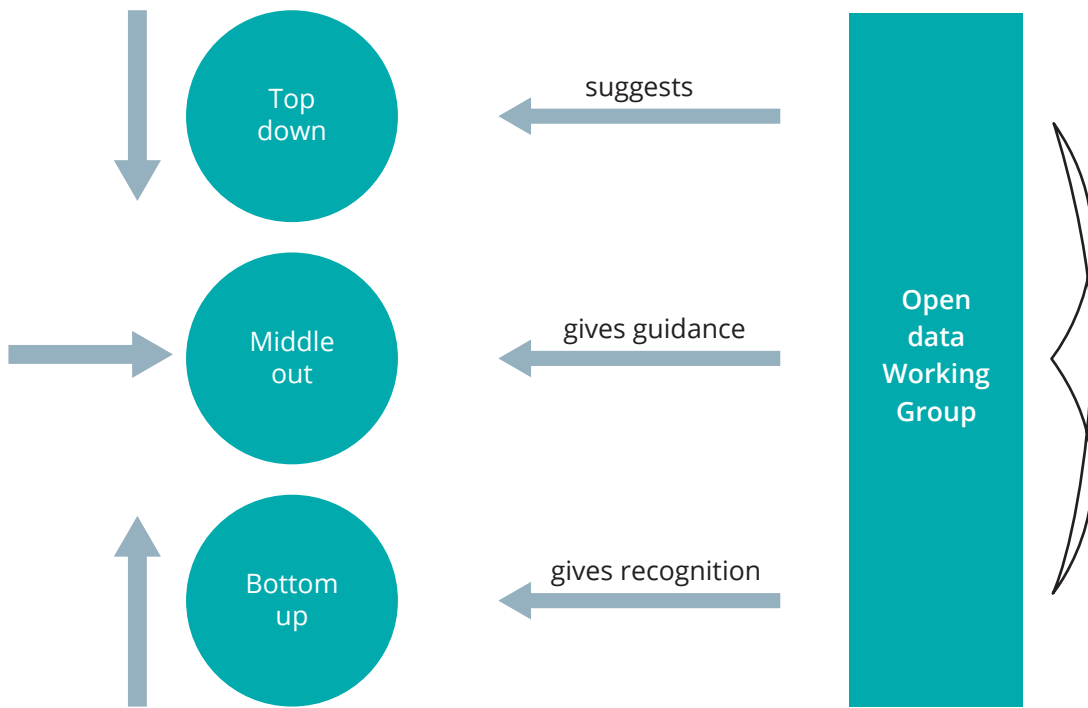
open data action plan.

Action plan

The action plan takes the central role of the ODWG as a prerequisite, and suggests actions on the three levels of legal/policy frameworks, sectoral ministries and agencies and the data they hold, and pilots of open data usage (top, middle, bottom). The plan shows how the actions are connected to each other and the e-governance policy, and their relevance for the different dimensions presented in this open data readiness assessment. It also gives an indication of the projected timeline and proposes the responsible action owner. The action plan is designed to strike a balance between actions at the top, middle and bottom. This means that deciding to not take an action should result in re-examining that balance and potentially add or alter actions at other levels.

This list is not a limiting one, but needs to be seen as a living document that will likely grow under review, as well as be adapted and changed during the implementation phase.

The list is provided as a separate file.

The action plan puts a first focus on releasing a few data sets as open data as soon as possible, in the context of the pilot projects and likely in line with information already published pro-actively online. This is the clearest possible signal to society that they are invited to engage.