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Summary

The World Wide Web Foundation was carrying out an exploratory project to better understand the role of standards to achieve a citizen-centered data revolution.

The project aims were to:

 Improve and deepen the methods to measure quality, use, and, ultimately, impact of Open Data policy commitments such as those in the G8 Charter, the International Open Data Data Charter, the OGP action plans, the UN Data Revolution and similar policy instruments;

- Identify common technical and policy issues across Open Data standards which require community coordination and input and develop initial recommendations on the way forward; and
- Identify the processes that ensure users needs are being incorporated into the design and construction of open data standards to address actual societal issues:

The following outlines work completed and the steps necessary to ensure these efforts benefit new and ongoing efforts of International Open Data Charter as well as the Joined-up Data Alliance as part of broader Open Data for Development (OD4D) programme of work.

These two initiatives mentioned above represent a clear complimentary focus to the work activities described in this grant and as such it is proposed that the remaining resources be placed to strengthen these initiatives, in particular the International Open Data Charters' accountability mechanisms, revision of the Charter principles, and orchestration of the technical working group.

Work Completed

The following sections outline the work completed.

Open Data Principles and Policies for Enhanced Impact Assessment

For the sample selection the first research was conducted in order to analyse the different widely adopted reference Open Data Practices and Policies, with a mix of OGP country member as well as other potential supporters of the new International Open Data Charter. The preliminary research with references to all the documentation analysed can be found in the accompanying spreadsheet¹.

The different good practices and policies selected during the previous phase were evaluated and compared in order to detect main commonalities and differences. Eventually a reference harmonized model was established after on the basis of convergence with the International Open Data Charter.

https://docs.google.com/a/webfoundation.org/spreadsheets/d/1-IPDTvf7JaysZeLDcHpvx1HIrZgowSKWg9VGRGWdOhw/edit?usp=sharing

Open Data Barometer analysis

The Barometer and its accompanying guide² was restructured to include elements of the International Open Data Charter principles to tweak the supporting infrastructure for the production process of its 3rd edition. This entailed some changes to both the systems and the research methods used to date.

The time period under study was the 12-month period from July 2014 to June 2015 (both included) and the questions make reference exclusively to the national (or federal) government. A lead country researcher performed desk research and consults with key informants to score the indicators for each of the 92 countries included in the analysis on the basis of the qualitative responses, justifications and sources provided. Those initial scores were then reviewed by a peer reviewer and contrasted with the self-assessments when available. The Web Foundation project management and coordination team performed also a final review and quality assurance process on the results. More details on the research process are available at the Research Handbook³.

<u>Methodology</u>

Two new questions were specifically introduced this new edition of the Barometer to analyse the status of open data policies around the world according to the Open Data Charter principles⁴, namely:

C2) To what extent is there a well-defined open data policy and/or strategy in the country? [Ref: ODB.2015.C.POLI]

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

C3) To what extent is there a consistent (open) data management and publication approach? [Ref: ODB.2015.C.MANAG]

For this question governments were asked to describe their data management approach, including links to any relevant documents and the description of other existing key elements such as metadata and technical standards, data models, codelists and identifiers, data user's guides and supporting documentation, data inventories, public data consultations and feedback management, the data release and

² https://docs.google.com/document/d/1t3MuJ4lctlbVY4a7U52MxqLA6toDdaULdtY4PjwL81E/edit#heading=h.8ni96e5592ie

³ https://docs.google.com/document/d/1t3MuJ4lctlbVY4a7U52MxgLA6toDdaULdtY4PjwL81E/edit?usp=sharing

⁴ As per the June draft when the Barometer process started.

update processes or quality controls.

A detailed and incremental scoring guidance with comprehensive criteria and scoring thresholds to guide the researcher and improve consistency of the results was also prepared. More details on the methodology used by the researchers, the scoring process and thresholds applied as well as sources guidance are available at the Research Handbook⁵. The scoring thresholds that were applied and the complete results for the Barometer questions related to open data policies are available in the annex for quantitative results⁶.

Self-assessment process

A new government self-assessment consultation process was performed as a complement of the Open Data Barometer and based on the above research, which included a measurement of current open government data policies according to the draft charter principles. After putting together an informal database of governmental open data points of contacts⁷ using our own contacts and other public sources, all governments in the Barometer study were asked to complete a self-assessment questionnaire⁸ based on a simplified version of the research methodology.

At the end of the process 55 governments in total completed the self assessment process⁹, six more failed to fulfill the deadlines (extended twice) and additional one refused to participate, and the rest of them never responded to our request (sometimes the mails were not delivered, others the point of contact may not be the ideal and in a few cases there were just no response or feedback at all after multiple attempts with different points of contacts).

Those completing the process included: Austria, Bangladesh, Belgium, Benin, Brazil, Cameroon, Canada, Colombia, Czech Republic, Ecuador, Egypt, Estonia, Ethiopia, Finland, France, Georgia, Germany, Ghana, Greece, Iceland, India, Indonesia, Ireland, Italy, Japan, Kazakhstan, Kenya, Korea, Macedonia, Malawi, Malaysia, Mauritius, Mexico, Moldova, Morocco, Netherlands, New Zealand, Norway, Paraguay, Philippines, Poland, Portugal, Saint Lucia, Saudi Arabia, Singapore, Slovak Republic, Spain, Sweden, Switzerland, Tanzania, Thailand, Tunisia, United Kingdom, United States of America and Uruguay.

The complete results for the specific questions related to open data policies (C2 and

⁵ https://docs.google.com/document/d/1t3MuJ4lctlbVY4a7U52MxgLA6toDdaULdtY4PjwL81E/edit?usp=sharing

⁶ https://docs.google.com/document/d/1XO5XxRrr6HG6mxYvMbU1-SvaifXPw5YMzEoz-unL3H0/edit?usp=sharing

⁷ https://docs.google.com/spreadsheets/d/1CO2gvzc02IOIsqqcRlyaS7vAqFeTmD2XLXFucV1JK7M/edit?usp=sharing

⁸ https://drive.google.com/file/d/0BwIOB9Zf2WCdcGNCNI9wZWxxODQ/view?usp=sharing

⁹ https://drive.google.com/drive/u/1/folders/0BwIOB9Zf2WCdfm5hcFBOU09Pa0h5UGs5NXhuN3FoSnh0Y2IHTlhGams4MVZ6M0s3NUJ6eTg

C3) are available in the annex for qualitative results¹⁰.

Preliminary results

After preliminary analysis of the results for the new questions on policies (C2 and C3 in the methodology) we can conclude that these are usually in the same order of magnitude than the one measuring the strength of the country initiative (C1 in the methodology), with an apparent strong correlation between both of them. Still there are some exceptions where we could find relatively strong initiatives with quite weak policies or even no policies in place. This unusual scenario normally correspond to not very mature initiatives starting they first steps in the open data arena in a purely practical way and without any strategy in place yet. We didn't find any use case of the opposite scenario i.e. initiatives with a strong and relevant strategy and/or policy in place before any practical implementation.

We can also observe how general policies and strategies (measured at C2) come always first and specific data management approaches (measured at C3) after, given that the scores for data management approaches are generally slightly lower than the policies ones in almost all cases.

Some other more specific findings in relation to open data policies and strategies are:

- Capacity constrained initiatives usually just rely on some government documents or guidelines referencing very general global open data practices with no formal open data policy or strategy yet in place.
- A significant group of emerging countries develop their first open data strategies
 or plans as part of a more general open government and transparency agenda
 or, to a lesser extent, as a component of more general information management
 programme. In these cases it is quite frequent that a clear open data definition
 may not exist yet.
- When available, policies usually promote and encourage the key open data principles, including machine readability or adoption of data standards, but are weak on specifying more detailed guidelines and standards for data publication (e.g. specific datasets to be published, formats to be used, etc.)
- Clear processes, responsibilities, timelines and resources are usually missing more than just a mention to the national institution or authority who is or will be in charge of the strategy execution.

 $^{^{10} \ \}text{https://docs.google.com/document/d/1ZsHleJkDeTiJFG0gbl5u33k9q5voi2yz6wlq6Hk2MZo/edit?usp=sharing} \\$

- It is not frequent to find long term open data strategies (defined for periods of at least 2 years) neither the establishment of a general right to reuse by means of an explicit open by default statement in the policies.
- The promotion of standard licenses or terms of use to be adopted by the public sector bodies without any restrictions more than attribution and *share-alike* is increasingly frequent, although those are still not being widely applied in practice.
- Specific open data training programmes for civil servants are starting to be available in order to develop their data skills.
- Still, data release is not frequently considered as part of the regular government performance indicators yet, making more difficult to track progress and adjust policies accordingly.

More findings in relation to data management are:

- In a huge majority (although not all) of the cases where there is already any
 initiative in place at least some minimal description of the datasets through
 metadata is available. Nevertheless, the differences in quality and extension of
 the metadata provided are huge and in a big number of cases it is not normalised
 and used in a quite inconsistent way.
- Public consultations on the user's data needs and preferences are frequently conducted in some form (through online systems, social media, workshops, etc.) although not in a regularly way neither really actively promoted. Moreover, in very few cases requests are being publicly addressed and responded.
- Standardized release process for the publication and update of data sets are not so frequent and rarely properly documented. Both, machine readable metadata and multiple different format alternatives are still scarce.
- Very few initiatives provide or reference detailed technical standards for the publication of open data (e.g. metadata, data models, codelists or identifiers).
- Just a few data catalogues or inventories include information on non published data. More detailed user's guides and supporting descriptive documentation for reference data are very unusual at the present time.
- Almost no quality control processes for the data provided through the catalog before publication have been documented.

In the following table we could find the average scores of the new questions on policies for each of the global regions available in the Open Data survey. As indicated by the data one can find the strongest policies in North America and Europe, where the strongest open data initiatives are also located.

Alos, and with the exception of Sub-Saharan Africa countries, policies scores are usually lower than data management ones. This could be explained by the fact that data management policies in that region are usually driven by other initiatives instead open data ones (generally by National Statistics Agencies)

Region	ODB.2015.C2	ODB.2015.C3
North America	8.00	7.00
Europe and Central Asia	5.14	4.10
East Asia and Pacific	4.42	3.42
Latin America and the Caribbean	2.92	2.08
South Asia	2.25	1.50
Middle East and North Africa	2.20	0.70
Sub-Saharan Africa	1.09	2.14
World Average	3.38	2.84

As a final conclusion it is important to highlight that average scores on policies questions are in general significantly lower than for any other context questions in the survey, showing that there is still a big room for improvement on this area where initiatives such as the International Open Data Charter could play a very important role towards global advance. This could be explained because in the origins several open data initiatives were launched as experimental and innovative projects without any strategical plans in place given the novelty of the area.

More detailed analysis and interactive visualisations of the results are planned and will be included as part of the global report for 3rd Open Data Barometer to be published in the first quarter of 2016 at opendatabarometer.org

Open Standards Study

A landscape scan was conducted of existing Open Data Standards initiatives as they relate to international development and a preliminary process and criteria for evaluating those standards for potential application and adoption by the Charter Secretariat was proposed in a report.

Alignment with International Open Data Charter

A different approach was taken for a substantial part of the grant with the objective of strengthening the connection with the OD4D Charter efforts and specifically to set out two clear pieces of work related to standards and policy.

The principles in the International Open Data Charter provide governments with a common foundation upon which to realise the full potential of open data. For governments that have already established open data initiatives, the Charter provides continuing guidance for maximizing the release of data. For countries that are just getting started with their open data activities, the Charter can serve as a statement of commitment and the means to pursue political support for the fundamental principles of openness.

As the last part of this project was coinciding with the rolling launch of the Open Data Charter principles in the fall of 2015 with close linkages to its ongoing efforts the remainder of the time since them was mostly oriented to bootstrapping preliminary efforts of the working groups related to the accountability mechanism (policy) and technical working group (standards) as well as the continuous revision of the principles.

More specifically, there are two key components of the International Open Data Charter that complement the work of this grant and are described in the following sections:

Accountability mechanism for the Charter

The design of an accountability mechanism for the Charter to improve and deepen the research methods to measure quality, use, impact, and, ultimately, accountability of Open Data policy commitments in the Charter through tools such as the Open Data Barometer. As such an Accountability working group promoted and chaired by the Web Foundation has been established to further explore and build upon the preliminary research carried out above.

As stated by the draft terms of reference¹¹ prepared by the Web Foundation team, the group objectives include:

¹¹ https://docs.google.com/document/d/1TLr_CVcJ8Btj38Vs_hD9HXQB5QsJrehkEa83W9xKO-c/edit?usp=sharing

- Development of common methods for the efficient measurement and assessment of Open Data initiatives in pursuing the principles of the International Open Data Charter.
- 2. Definition of the minimum set of features and requirements that should form the basis of an effective accountability framework for the International Open Data Charter.

And the main objectives will be:

- 1. To obtain a wide view of the state of open data policies and practices around the world:
- 2. To inform the International Open Data charter about the implementation state of its principles;
- 3. To inform countries about their general open data capacity;
- 4. To identify global areas of strength and those that still require more attention;
- 5. To track progress, incentivize compliance and communicate on future priorities in order to increase ambition and improve implementation;
- 6. To contribute to improve government open data capabilities using effective feedback loops and enabling incentives.

Some of the first task accomplished by the Web Foundation to date in its role as group chairs included:

- Organisation and dynamisation of the first face to face meeting of the group on the sides of the OGP global summit in Mexico to discuss the general objectives and an initial draft of the Measurement and Accountability Framework¹².
- Development of a regional open data champions study¹³ to guide the Lead Stewards group in the process of incorporating new open data champions with a regional balance in order to fulfill the objective of 50 adopters by the end of 2016.
- Coordination with the Subnational Government WG¹⁴ to develop the indicators that are going to be used to survey and measure the implementation of the Charter at subnational level. A first round of comments on the basis of the initial Inter-American Development Indicators¹⁵ is available and further development is expected during Q1 2016 with the feedback of the WG.

¹² https://docs.google.com/document/d/1FIWJC6Si8uNM83Wcsw2WUTKcXOaFMWgT_vfwJQO_ghk/edit?usp=sharing

 $^{^{13}\} https://docs.google.com/a/webfoundation.org/document/d/10D1JHwdh-tDGVOSnca0sHnG2f70WQFBq1CQIDbZ5Cro/edit?usp=sharing$

¹⁴ https://docs.google.com/document/d/1gH1Jf4R90Wvd2M4hTfvnfQ0XLusol3AWHUcNAKFgWrc/edit?usp=sharing

¹⁵ https://docs.google.com/document/d/1hOpvJHS4WCg4tP5AnKXZVZE5uC8etizdlk2qlcq8YA4/edit?usp=sharing

 Contribution to map subnational government's open data initiatives from around the world, making use of the Open Data Barometer knowledge base that includes multiple references to the different local initiatives in the countries that are part of the survey.

Ongoing Charter efforts: working groups, and interim secretariat support

Ongoing efforts continued to support the creation of charter working groups, revision of the charter principles and the launching of the initiative as well as technical support for the interim secretariat. was seeking to answer the question: how can we ensure that different open data standards are connected, inter-operable and not siloed (e.g. open contracting data standard, extractives data standard, budget data technical specification etc.). - a key focus is on ensuring the interoperability of these open data policy and technical standards.