Dear participant,

Success factors for open data publication and use can boost open data development. In prior research we developed a comprehensive list of factors which appear to be important for open data publication and use. We are now conducting case studies to find out to which extent these factors are **critical** for the publication and use of open data in practice.

We would very much appreciate your help in assessing the criticallity of factors which might be important for the publication and use of open data. This surveys consists of three parts, namely parts where you are asked to:

- 1) Indicate to which extent the identified factors have been critical to open data <u>publication</u> in your open data initiative;
- 2) Indicate to which extent the identified factors have been critical to open data <u>use</u> in your open data initiative,
- *3) If necessary, add factors that have been critical to open data <u>publication and use</u> in your open data initiative and are not covered in this survey.*

We hope that you are willing to complete this survey, and we want to thank you in advance for your cooperation. Your help in this study is much appreciated.

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1 Factors critical for open data publication To which extent were the following factors **critical** to the <u>publication</u> of open data in your open data initiative? *Please mark only one* box per row.

Categories	Factors	Very uncritical	Uncritical	Not uncritical, not critical	Critical	Very critical
1 Legislation, regulation and	Having in place a (national) legal framework for open data publication					
licenses	Enforce publishing and curating of data on administrations (maybe even through penalties)					
	Provide information about data protection and privacy legislation and how open data can be published in compliance with this legislation					
	Develop a (national) guide on legal Intellectual Property Right (IPR) issues allowing organizations to pick the correct licensing form					
2 Strategy and political	Develop a strategy for open data publication at an (inter)national level					
support	Ensure that (top) management within governmental agencies supports publishing data					
	Generate support of policy-makers for data publication					
	Organize focus groups with heads of departments and open data policy implementers to give both proponents and opponents of open data an auditorium					
	Introduce incentives schemes for public servants (e.g. explain why a data provider would release data, explain what kind of value is created for the data provider)					
	Create consensus between open data publication and the organizational framework for publishing data					

Categories	Factors	Very uncritical	Uncritical	Not uncritical, not critical	Critical	Very critical
3 Management	Define clear process steps for publishing data					
support and publication processes within	Determine which type of data is important to address societal issues and focus on the publication of these data					
within governmental agencies	Start with the publication of data which is interesting for users so that the users see the benefit of open data					
	Determine which data and metadata will and will not be published					
	Determine which standards and vocabularies will be used for data publication					
	Determine which personnel has the key responsibilities for publishing open data					
	Determine where datasets will be published					
	Release only data which is of high quality					
4 Training of and support for civil	Create a virtual competence center which assists in answering questions and helping out with administrative data publication processes					
servants	Provide training on open data publication within governmental agencies (e.g. training on how datasets can be anonymized)					
	Develop information campaigns in which questions about open data publication are discussed					
	Develop information campaigns in which success stories of internal and external open data use are discussed					
5 Evaluation of the open data	Develop metrics and success indicators for data publication by government departments					
initiative	Evaluate the realization of metrics and success indicators as an integral part of the open data initiative					

Categories	Factors	Very uncritical	Uncritical	Not uncritical, not critical	Critical	Very critical
6 Sustainability	Identify the need for data					
of the open data initiative	Create a strategy for maintaining published datasets					
	Ensure data provision continuity, including timely and automatic updates of data					
	Be transparent towards open data users about the conditions under which data publication takes place					
7 Collaboration	Arrange meetings with open data users to find out what their needs are and how the data from the governmental agency are used					
	Organize internal meetings to discuss the data publication processes and to evaluate them					
	Organize inter-organizational collaboration about and management of open data initiatives					
	Ensure agile and open cooperation with various other organizations (administration, universities, CSO, Open Knowledge Foundation)					
	Organize inter-organizational collaboration (e.g. network meetings) to learn from the open data initiatives of other governmental agencies					
8 Open data platforms, tools and	Integrate the open data platform into existing Content Management Systems (CMS) to kick- start the progress					
services	Have one central portal which combines data from many different governmental organizations (federal level)					
	Implement advanced data search functionalities					
	Use complementary toolsets for performing additional curation tasks (cleaning, linking, visualizing, analyzing)					

Categories	Factors	Very uncritical	Uncritical	Not uncritical, not critical	Critical	Very critical
8 Open data platforms, tools and	Use a "web 2.0" approach for open data, allowing citizens to post, rate, work with datasets and web services					
services (continued)	Integrate frameworks for assessing data quality and usability of data and platform, providing continuous feedback to developers and administrations					
	Provide a forum to discuss what can be learned from open data use					
	Develop a clear User Interface (logical symbols, clear setup of the web page, simple design)					
9 Accessibility, interoperability	Use standards for data, metadata, licenses, URIs and exchange protocols					
and standards	Use cloud infrastructures able to gather, manage and publish open data, interoperable with other sources within the country or region					
	Integrate metadata schemas and federated controlled vocabularies for properly categorizing information					
	Provide various types of metadata, in line with metadata standards (e.g. CERIF, CKAN, DC, EGMS, DCAT)					
	Provide Application Programming Interfaces (API's) for open data provision in the form of service feeds (from open data to open services)					
	Enable multilinguality of metadata and data, allowing for the reuse and integration of data from different countries/languages					

2 Factors critical for open data use

To which extent were the following factors **critical** to the <u>use</u> of open data in your open data initiative? *Please mark only one box per row.*

Categories	Factors	Very uncritical	Uncritical	Not uncritical, not critical	Critical	Very critical
10 Legislation, regulation and	Provide information on the meanings and implications of licenses					
licenses	Provide information about privacy legislation and how open data can be used in compliance with this legislation					
11 Success stories	Provide readily available examples of open data use (e.g. apps) to non-experts					
	Develop stories of successful open data use					
	Involve community key players to propagate success stories					
12 Incentives for open data	Provide incentive schemes to engage citizens in open data usage					
use	Stimulate the development of specialized, open-data driven startup incubators					
	Stimulate the development of business models to allow enterprises to develop add-on services on top of open data platforms, at a cost					
	Support issue-oriented community building through participatory events					
	Align events, competitions and hackathons with, for example, university curricula, awards, festivals and "direct marketing"					
13 Training of and support for open data	Ensure agile, dynamic, and professional support services and training for potential open data users					
users	Organize events and ensure community building where the potential benefits of open data are communicated to users (e.g. by building scenarios for usage)					

Categories	Factors	Very uncritical	Uncritical	Not uncritical, not critical	Critical	Very critical
14 Feedback and	Provide mechanisms for governmental agencies to know how their data have been reused					
sustainability	Provide mechanisms for governmental agencies to know what can be learned from the reuse of their data					
	Provide mechanisms for governmental agencies to know how the publication of their data can be improved based on feedback that they received from open data users					
15 Research and education	Develop university and continuous education curricula on open data					
	Develop and maintain research areas roadmaps on open data, in order to consolidate research efforts and address open issues					

3 Additional factors critical for the publication and use of open data

Which category (categories) of factors are most important for the **publication** of open data in your open data initiative? (*Categories are found in the leftmost column of the first table*).

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Are there any additional critical success factors for the **publication** of open data in your open data initiative?

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Which category (categories) of factors are most important for the **use** of open data in your open data initiative? (*Categories are found in the leftmost column of the second table*).

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Are there any additional critical success factors for the **use** of open data in your open data initiative?