





## **GEodata Openness Initiative for Development and Economic** Advancement in Romania

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# Report on Barriers and Drivers for Open Data Policy

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#### ABSTRACT:

The "Report on Barriers and Drivers for Open Data Policy" aims to offer first an overview on the actual and perceived factors that slow down or prevent the process of releasing public data and second on the catalysers that keep this cumbersome initiative moving forward.

Considering the complex nature of barriers, we have decided to conduct our analysis with respect to three types of obstacles: legal, technical, and socio-economic. For symmetry reasons, we used the same division on open data drivers.

In order to better understand the concepts of barrier and driver as perceived by individuals that have been involved with open data, we have put together a survey of 28 questions, divided in three categories: barriers blocking the release of open government data; barriers experienced by potential individuals and groups in using open data; and drivers for open data.

Following the analysis on barriers and drivers in open data, we describe open data actions and initiatives lead by the civil society or by the Romanian Government through projects, codefests, data portals and eventually the coagulation of an open data community in Romania.

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## **TABLE OF CONTENTS**

1.	INTRO	DDUCTION	1
	1.1 P	urpose of the document	1
	1.2 A	bbreviations	1
2.	IDEN	TIFYING BARRIERS FOR OPEN DATA IN THE ROMANIAN CONTEXT	2
	2.1 Le	egal barriers	3
	2.2 T	echnical barriers	5
	2.3 S	ocio-economic barriers	7
	2.3.:	1 Mentality barriers	7
	2.3.2	2 Economic barriers	9
3.	IDEN'	TIFYING DRIVERS FOR OPEN DATA POLICY	11
	3.1 To	echnical drivers: technological advancements	11
	3.2 Le	egal drivers: legislation and policy	14
	3.3 S	ocio-economic drivers	15
	3.3.	1 Mentality drivers	15
	3.3.	2 Economic drivers	16
4.	TACK	LING BARRIERS	18
	4.1.	Data.gov.ro – The Romanian open data portal	18
	4.1.	2 Civil society actions	20
	4.1.3	3 Implemented projects	21
5.	SURV	EY RESULTS AND ANALYSIS	23
	5.1 P	art I and II: barriers perception	24
	5.2 P	art III: drivers perception	28
6.	DISC	JSSIONS AND CONCLUSIONS	29



	Report on Barriers and	d Drivers for Open Data Policy	Date:	15.09.2014
7.	REFERENCES			32
AN	INEX 1: OPEN DATA SURVEY			33

Issue / Revision 1/0



Report on Barriers and Drivers for Open Data Policy

Issue / Revision 1 / 0 Date: 15.09..2014

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#### 1. INTRODUCTION

## 1.1 Purpose of the document

The main objective of the GEOIDEA.RO project proposal is to improve the scientific basis for open geodata model adoption in Romania. It is our belief that publishing governmental geodata in Romania over the Internet, under an open license and in a reusable format can strengthen citizen engagement and yield new innovative businesses, bringing substantial social and economic gains.

The purpose of the "Report on Barriers and Drivers for Open Data Policy" is to draw a picture of the main obstacles and catalysts that emerged with the open data initiative in the Romanian context. We analyse legal, technical and socio-economic barriers and drivers as experienced by the public administration and by potential users of open data. The analysis is based on the review of previous projects and initiatives in the area of opening public data as well as on a survey conducted in Romania about the perceived barriers and drivers for open data.

#### 1.2 Abbreviations

API Application Programming Interface

CTIC Center for the Development of Information and Communication Technologies in Asturias,

Spain

Share-PSI Share Public Section Information (in Europe)
DSOD Department for Online Services and Design

eEurope An European Commission political initiative launched in 1999, an ambitious programme

aimed at making information technologies as widespread as possible.

EC European Commission

epsiPlatform European Public Sector Information Platform

EU European Union

FOSS4G-CEE Free and Open Source Conference for Geospatial – Central and Eastern Europe

EGDI E-Government Development Index
IPP Institute for Public Policy (IPP)
CJI Centre for Independent Journalism

CEG Centre for Electronic Governance of Republic of Moldova

NAS National Anticorruption Strategy (Romania)

OGP Open Government Partnership
OKF Open Knowledge Foundation



#### 2. IDENTIFYING BARRIERS FOR OPEN DATA IN THE ROMANIAN CONTEXT

The notion of barrier is defined in the Oxford Dictionaries as "a fence or other obstacle that prevents movement or access". Barriers can be of many shapes and there is no exception to that for the open data movement. As the field of open data is quite new there are no clear-cut methodologies, licenses or well-established technologies to implement. This situation gives raise to a complex set of barriers. It has been acknowledged that the confinement of data affects the public as well as the administration at every level. Thus, we will identify and define barriers, as they are perceived by the civil society and the private companies, as well as by the local and national administration.

A categorization of barriers has been made by the epsiPlatform (2012) into feared and real barriers. The feared barriers are the ones that emerge in the first step of the process, before any attempt. They include, among others, general questions that imply difficulties related to technical, licensing, and economic problems. A possible way of dealing with such situations lies in a potential downscaling. Instead of speaking on general terms, the questions could be addressed for the particular institution or agency, even for a particular dataset. Diluting feared barriers plays a crucial role, because they are strong obstacles and preconceptions and thus portray the releasing of public information as a cumbersome process. The real barriers are considered to be the ones that are actually experienced when open data projects are implemented. At the Share-PSI.eu workshop in 2011, José Manuel Alonso (Head of eGovernment at CTIC and collaborator at eGovernment Lead at W3C) presented a list with all the barriers he experienced in leading the Open Data Initiative in Spain, in his speech (José Manuel Alonso, 2011):

- Loss of licensing revenue and loss of control over the released information
- Numerous legal challenges and unwelcomed exposure;
- Needs for procedural changes
- Potential impacts on privacy or from national security;
- High complexity;
- Needs for heavy investment and capacity building;
- Sub-standard quality of information;
- Difficulty to ensure authenticity and quality of information when subsequently reused;
- Potential lead to corruption and falsification of data;
- Needs for the setup and maintenance of a customer service.

Nevertheless, despite the complex issues raised, the CTIC successfully implemented two projects for local governments and four for regional governments.

<sup>&</sup>lt;sup>1</sup> Online at http://www.oxforddictionaries.com/definition/english/barrier?q=barrier. Accessed 20.11.2013



In the context of the report, two general categories for open data policy barriers were defined. The first category is drawn with respect to whom it applies, on one hand to **public authorities** that experience barriers in releasing public sector information, on the other hand to **potential users** of open data. It is important to mention that, even though during all phases of opening public data, the drivers remain the same, the barriers tend to shift from the administration side to the potential users' side (Anne Fleur van Veenstra and Tijs A. van den Broek, 2013). The second distinction has been made with respect to the type of obstacles. Three main categories of barriers were defined: legal, technical and socio-economic.

Most of the time, barriers are a mixture of the three categories mentioned above. Although all types share a significant amount of importance varying from administration to administration, it has been noticed that the reluctant attitude towards the open data movement of civil servants is one of the most perilous and difficult to surpass obstacles in achieving public sector information.

## 2.1 Legal barriers

Questions regarding which data are public and thus should be made open and which not, copyright, competition law, database rights, and licensing represent a significant part of the debate and solutions are not always visible at first sight.

In the Open Data Handbook published by Open Knowledge Foundation in 2012, it is stipulated that:

"Even in places where the existence of rights is uncertain, it is important to apply a license simply for the sake of clarity. Thus, **if you are planning to make your data available you should put a license on it** – and if you want your data to be open this is even more important."

The main difference between open data and transparency lies in the license used. Unfortunately, the matter of licensing is far from being simple. There are numerous open licenses in use today, a situation that leads to legal interoperability problems. Lack of harmonisations can even lead to an impossibility of cross-sectorial or cross-border reuse of information. As a solution for this matter, legislative initiatives at national, regional or sectorial level are being developed (Janssen, 2011). For sectorial legal interoperability, we can indicate OneGeology.org or the INSPIRE Directive. OneGeology.org is a project initiated in 2007 aiming to create dynamic digital geological map data for the world. The initiative is international and it represents a collaboration of the geological surveys of the world. This, of course, raises the matter of data policy and ownership. The initiators have addressed that matter from the very beginning:



"Participants recognise that map data distributed as part of OneGeology will remain in the ownership of the originating Geological Survey or Organisation, and ideally be available at no cost. " (OneGeology, The Birghton Accord, 2007<sup>2</sup>).

In 2009, the report "OneGeology Intellectual Property Rights (IPR) and Data Use Policy" was published. The document kept the ownership statement but added, among other stipulations, that:

"Foreground rights (i.e. systems and data that OneGeology creates as a result of its work) reside with the participants in OneGeology and will be made freely available in the public domain."

Considering national level initiatives of license interoperability, on the Romanian open data portal data.gov.ro the default license is the OGL-ROU-1.0, written by the Romanian Government. Nevertheless, in order to encourage public bodies to open more and more datasets, the possibility of releasing data under a different license is possible. Even so, the number of institutions choosing an "atypical license" is significantly low. Atypical license stands for the license that is written by the data owner and it usually states some restriction in using the data. From 89 published datasets, only 5 are under such a license.<sup>4</sup>.

A crucial aspect of releasing public (geo)data resides in the matter of responsibility. Who or what department is responsible for the possible errors in the datasets? Is it the management or the technical department that produced or collected the information? What happens when the datasets are produced and validated by a former administration or a former technical department? Furthermore, whenever Government changes in Romania, there is a chance that the national structures that produce and collect information, such as institutes and agencies, go under changes more or less substantial that can lead to modifications in procedures, in the process of data creation and collection, data manipulation, and storage. This situation can generate data loss, redundancy or even inconsistency, in which case the responsibility cannot be easily attributed. In the "Report of Self Evaluation" regarding the implementation status of the commitments of the National Action Plan, it is clearly stated that:

<sup>&</sup>lt;sup>4</sup> Records available online at http://data.gov.ro/dataset . Last accessed 01.02.2014



<sup>&</sup>lt;sup>2</sup> Available online at <a href="http://www.onegeology.org/docs/brighton">http://www.onegeology.org/docs/brighton</a> workshop/accord/Accord English.pdf . Last accessed 01.02.2014

<sup>&</sup>lt;sup>3</sup> Available online at <a href="http://www.onegeology.org/docs/Intellectual Property Rights Report-English.pdf">http://www.onegeology.org/docs/Intellectual Property Rights Report-English.pdf</a> . Last accessed 01.02.2014

"The felling of personal responsibility of administration's employees that have a duty of delivering data that is going to be released is among the causes that stand at the fundament of this situation [situation of not full OGP commitments implemented]."

#### 2.2 Technical barriers

Technical barriers are mostly located on the side of the administration. They usually reside in the insufficient number of technical specialists that have the ability to fulfil the requirements to open the data that the institution gathers. In the "Report of Self Evaluation" regarding the implementation status of the commitments of the National Action Plan for 2012, in chapter IV Problems identified in the implementations of the National Action Plan, the first problem is identified as the "the lack of staff, especially technical staff". Furthermore, the lack of procedures and standards within public administrations in the creation, collection and manipulation of data makes it increasingly difficult to open public data. In the same report, after the public consultation, new technical issues have been underlined. The situation within ministers is uneven. Some institutions work with IT companies; some have employees with IT tasks; but some, that lack specialised staff, use civil servants with other kind of attributions within the institution. Even though this situation appears at local level, there are identical situations in the central administration too. Another technical problem that has been identified and described in the report is the lack of sustainable and on-going process of collecting or producing data and/or the inexistence of a central storage point, which lead to inconsistency or/and data redundancy. Thus, when the need to publish data arises, the efforts of building a seamless, consistent database becomes significant.

In the efforts for tackling the technical barriers, the Department for Online Services and Design (DSOD) has underlined the intent of developing a guideline for the procedures and standards for open data release in the Romanian context.

According to the United Nations, Member states are ranked in accordance with the E-Government Development Index (EGDI), a composite indicator measuring the willingness and capacity of national administrations to use information and communication technologies to deliver public services. The EGDI is a weighted average of three normalized scores on the most important dimensions of e-government: scope and quality of online services, development status of telecommunication infrastructure, and inherent human capital (UN, 2012).

Regarding the technical openness and the implementation capacity concerning open data, an analysis can be performed on the indicators of Romania given by the United Nations through the 2012 E-Government Survey<sup>5</sup>. Unfortunately, Romania does not score very high in the different charts regarding the E-Government Development Index (EGDI) (see Table 1 and Table 2)

Online at http://unpan3.un.org/egovkb/datacenter/CountryView.aspx . Accessed 27.02.2014



Grant Agreement Nr. IZERZO-142129

Table 1: UN E-Government Survey 2012, Eastern Europe chart of the E-Government Development Index

Country	E-Gov Score (2012)	Rank 2012	Rank 2010	Rank Change
Russian Federation	0.7345	27	59	+32
Hungary	0.7201	31	27	-4
Czech Republic	0.6491	46	33	-13
Poland	0.6441	47	45	-2
Slovakia	0.6292	53	43	-10
Bulgaria	0.6132	60	44	-16
Belarus	0.609	61	64	+3
Romania	0.606	62	47	-15
Ukraine	0.5653	68	54	-14
Republic of Moldova	0.5626	69	80	+11

Romania scored an overall of 0.606 in 2012, ranking 62 worldwide and losing 15 places compared to 2010. The highest scores are reached by the Republic of Korea (0.9283), the Netherlands (0.9125) and the United Kingdom (0.8960); the lowest by Somalia (0.0640), Chad (0.1092) and Niger (0.1119), with Syria, Guinea and the Central African Republic having no score in 2012.

In Eastern Europe, Romania occupies a low position, just above Ukraine and Republic of Moldova. Along with an assessment of the website development patterns in a country, the E-Government Development index incorporates the access characteristics, such as the infrastructure and educational levels, to reflect how a country is using information technologies to promote access to information and to include the people. The measurement of e-government is an assessment first of a state's use of Internet and the World Wide Web (WWW) for the provision of information, products and services and second of the level of telecommunication and human capital infrastructure development in a country.

The E-Government Development Index is a composite index comprising the Web measure index (Online services), the Telecommunication Infrastructure index and the Human Capital index.

Table 1 presents the indexes calculated for Romania at all UN surveys since 2003.

Table 1: Romanian scores for all the composite indexes of the UN E-Government survey

Year	E-Government RANK	E-Government Index	E-Participation Index	Online Service Index	Human Capital Index	Telecommunication	Online Service Rank
							not
2012	62	0.606	0.0789	0.5163	0.8783	0.4232	calculated
2010	47	0.5479	0.1857	0.4159	0.9226	0.3092	42
2008	51	0.5383	0.0455	0.4147	0.9047	0.2992	73
2005	44	0.5704	0.3175	0.6423	0.88	0.1889	28
2004	38	0.5504	0.2131	0.6062	0.88	0.1649	26
2003	50	0.483	0.052	0.419	0.88	0.149	null

The E-Government Index is on an ascending path, but the pace is slow. The value of 0.606 puts Romania on the 62<sup>nd</sup> place among 194 countries, which is the lowest position Romania reached since the index has been calculated. The lowest index is the E-participation index. This shows both reduced engaging activities from the administration's part and reduced participation from the society in the processes of participatory decision-making and e-consultation. Nevertheless, the human capital index is high. This means that the general population is well enough educated to receive and to understand the public information through e-government.

The results of the 2012 survey are fortified by the answers of the responsible of the OGP implementation in Romania, Head of the Online Services and Design Department - Prime Minister's Chancellery. In a 2014 interview given for the DigitalDiplomacy.ro, the State Secretary admits that the public administration is not used to communicate online but it is being worked on<sup>6</sup>. He also points out that there is a need of change in the very nature of the dialog on the side of both the administration and the civil society.

<sup>&</sup>lt;sup>6</sup> Online at <a href="http://digitaldiplomacy.ro/administratia-publica-nu-este-obisnuita-sa-comunice-online/">http://digitaldiplomacy.ro/administratia-publica-nu-este-obisnuita-sa-comunice-online/</a> Accessed 05.02.2014 [Only Romanian]



Grant Agreement Nr. IZERZ0-142129

#### 2.3 Socio-economic barriers

#### 2.3.1 Mentality barriers

In the context of the present report, we understand the notion of ,mentality' as a state of the mind, as a rooted perspective that is not questioned, that is considered as is.

The mentality issues related to releasing public data as open data are sensitive and difficult to quantify. These are usually objectively considered as affecting both the civil servants and the potential open data user. Furthermore, with respect to the civil servants, these kind of barriers are the most difficult to overcome because it takes time and firm will to change a paradigm that is strongly rooted in the administration processes. Resistance to change can be seen as a natural reaction to modifications introduced in the process, no matter the benefits those could bring. The open data movement represents first and foremost a major shift in the mentality of the entire community and administration.

For the administration, a reaction of rejection could come from a future and sometimes not clearly stated promise of additional work. If the restructuration that the entire administration has gone through due to the economic crisis is taken into account, the change is even more difficult to incorporate. Furthermore, in the administration, the processes are highly bureaucratic and therefore, the lack of well-established procedures is a serious drawback for the open data movement. With the absence of legal procedures for releasing information, the problem of responsibility remains opened. No one wants to be held accountable for mistakes that have been done by someone else.

At a decisional level, a barrier caused by attitude can arise from the suspicions of what are going to be the short-term positive feedbacks, especially economic, once work, time and money have been invested. Furthermore, an insecurity related to the complete loss of control over the information once it is open and the way that it might be used can constitute a reason for a held back attitude on opening public data.

However, we cannot and we should not blame the difficulty of releasing public data only on the lack of procedures and the absence of straightforward legislation with sanctions. It is generally acknowledged that the administration operates with a strong "silo mentality" and that the paradigm shift from closed to open must come from the administration. The civil servants teed to understand the international shift that has already started just as well as the proven economic advantages that the open data movement brings to the entire society.

Nevertheless, changes in mentality are the most difficult ones to accomplish, but the most important ones too. As Mr. Nigel Shadbolt, an information advisor to help transform public access to

<sup>&</sup>lt;sup>7</sup> A silo mentality refers to an insular management system incapable of reciprocal operation with other, related information systems. Online at http://en.wikipedia.org/wiki/Silo\_mentality . Last accessed 01.02.2014



government information in the United Kingdom, pointed out in a 2012 interview "The government needs to move to a "presume to publish" mentality to keep its much touted open data strategy alive"<sup>8</sup>.

When it comes to mental barriers associated with open data potential users, the most notable stands within distrust in the system's ability to provide highly qualitative data in a sustainably way. Nor the administration, nor the civil society has a mentality indicating that the accepted paradigm of public data is open. A good example of the impossibility to sustain the availability of open data is the shutdown of the American government in September- October 2013 that lasted for 16 days. This clearly shown that open data applications, that are dependable on the Government's Application Programming Interface (API), are not perfectly impervious. Nevertheless, solutions can be found. The Sunlight Foundation posted an article that highlighted that APIs are not enough and, that copying the data is still a viable solution, even if not the most confortable one. "It's just so much easier to copy data when it's directly downloadable in bulk. APIs can be extremely useful, but they also centralize control and form a single point of failure. Ultimately, APIs are optional — data is a necessity." (Mill, 2013).

A cross-governmental study in the United Kingdom, called "Transparency Implementation" written by the National Audit Office (NAO) of the UK, shows that traffic figures on data.gov.uk are not as impressive as expected: "None of the departments reported significant spontaneous public demand for the standard dataset releases". After the publication of the report, the Guardian published an article on DataBlog that documented a worrying lack of interest from the civil society's side:

"We were interested in that 47 million figure for the crime maps site and tested it using Nielsen data. There is no guidance on what exactly constitutes 'visits' - is it page views or unique users? Our figures show that while the site did get a lot of visitors when it was initially launched in February last year - and had a brief peak during the England riots last year (ironically, the data on the site is all historical, so visitors looking for riot offences would have been disappointed), in December it appeared to only have 47,000 viewers, looking at 364,000 pages. "

The conclusions clearly indicate that the mentality barriers lie within the entire society, not only within the administration. The civil society and the administration must adapt to a world where *open access to information* could be easier achieved.

#### 2.3.2 Economic barriers

Most changes that occur in the policies of a national institute or agency involve financial spending. In a period of financial difficulty, investing a percentage of the capital in an action that is not yet fully

<sup>&</sup>lt;sup>8</sup> Online at <a href="http://www.openforumeurope.org/data/latest-news-on-open-data/open-data-tsar-calls-for-change-in-government-mentality">http://www.openforumeurope.org/data/latest-news-on-open-data/open-data-tsar-calls-for-change-in-government-mentality</a>. Last accessed 01.02.2014



Grant Agreement Nr. IZERZO-142129

established on a legal, procedural and business-model level, as well as in an action that involves making freely available datasets that otherwise could have been contained in a profit schema is unlikely to be achieved. The current amount of financial capital invested in releasing public data varies greatly from institution to institution and it depends in a large proportion on the additional work that needs to be carried on. In order to release public data, there are some conditions that need to be fulfilled, such as the need of an open format or of metadata for each dataset. In conclusion, costs are crucial in the process of opening public data.

In April 2012, the NAO published its cross government review "Transparency Implementation". The report presented worrying facts regarding one of the most important open data leaders in the world, the United Kingdom (National Audit Office UK, 2012). The report points out that the UK Cabinet Office, together with the departments, have accomplished most of their commitments, have published an impressive number of data sets (over 10.000 datasets), but it also points out that the strategy has not been thought through completely. Within chapter Elements needed to assess value for money, the report is pointing out three main issues that need to be taken into account: the real costs of opening up data have not been monitored, there is no global strategy of monitoring if the releasing open data is truly a success of transparency and the possible risks that the departments are opening themselves to. Related to the costs that UK spent on the open data movement, the estimations are impressive: it annually represents between £53.000 and £500.000 by department for pre-existing data. When there was additional work involved in the data release, such as in the case of the police crime map, costs were significantly higher. In the mentioned case, for the crime map development there was £300.000 invested as well as an additional £150.000/year for running costs. Related to the risks that the departments are opening themselves to, the study identifies three: fraud risks, risks to privacy, and other potential unintended consequences. The fraud risks are related to the increasing transparency around contract and payment details. The report points out that any of these potential risks have not been addressed properly.

The main conclusion of the "Transparency Implementation" report is that even though the plan is strong and has been successfully fulfilled, the inconsistent measuring of the usage and benefits of the open data released hinder the assessment and mitigation process for achieving best value for money.

Nevertheless, in a research project about openness of public data in EU local administration conducted by Marco Fioretti for the Laboratory of Economics and Management of Scuola Superiore Sant'Anna, Pisa, the author considers in the his report LinkedGov that not opening public data becomes more and more expensive (Fioretti, 2011). It is stated that:

"As the costs of disseminating and accessing information have declined, the transactions costs associated with charging for access to information, and controlling subsequent redistribution have come to constitute a major barrier to access in



themselves. As a result, the case for free (gratis) provision of Public Sector Information is stronger than has already been recognized.  $^{\prime\prime}$   $^9$ 

<sup>&</sup>lt;sup>9</sup> Online at <a href="https://bmark.us/bmark/readable/3080b089b3536e">https://bmark.us/bmark/readable/3080b089b3536e</a> Accessed 05.02.2014



Grant Agreement Nr. IZERZO-142129

#### 3. IDENTIFYING DRIVERS FOR OPEN DATA POLICY

## 3.1 Technical drivers: technological advancements

One significant catalyst of the open data movement is the constant advancement of information technologies. This reality has been acknowledged as one of the main drivers since the early stages, as it has been stated in the 1989 document, 'Guidelines for improving the synergy between the public and private sectors in the information market' (Geoidea 2013, a). One clear condition that data needs to fulfil to be considered open is:

"The work shall be available as a whole and at no more than a reasonable reproduction cost, **preferably downloading via the Internet** without charge. The work must also be available in a **convenient and modifiable form**. " (OKF, 2012).

This fundamental characteristic stands proof of the inseparable link between technology and transparency, and re-use of public data. The more technology advances, the more we gain access and insight in public information. If, in 1989, the enabling factors were the new perspective of storing, managing and querying information, starting with 2008 the enabling factors turned into the perspective of 'making sense' of all available information online, or, in other words, the Semantic Web.

A pertinent example is the slow but sure metamorphosis of the way in which the cultural heritage of a region or a country is being preserved and shared over time and space. The concept of museum has been developed and rooted starting with the ancient Greeks for whom the word "mouseion" meant, "seat of Muses, and described a place of contemplation<sup>10</sup>. As early museums were personal collections of wealthy citizens, in the 15<sup>th</sup> century the word "museum" was used to describe the private collections of Lorenzo de' Medici, where the reference was focused on the actual objects than on the building itself. By the end of 18<sup>th</sup> century, with the funding of the British National Museum, the word described an institution with the scope of persevering and display works of art to the public. As the societies evolved, museums diversified and developed more functions, such as interpretation of the material displayed. In our increasingly digital era, the preservation, display and interpretation of cultural heritage is changing as well. The traditional museum model is transforming. With the technologic and informational continuous developments, the paradigm is turning towards transformation into digital content and moreover, building virtual collections. Following is a list with the first 5 online museums:

- 1. Museum of Computer Art (MOCA) 1993
- 2. Web Museum, Paris 1994



<sup>&</sup>lt;sup>10</sup> Online at <a href="http://en.wikipedia.org/wiki/Mouseion">http://en.wikipedia.org/wiki/Mouseion</a> Accessed 24.03.2014

- 3. The Lin Hsin Hsin Art Museum 1994
- 4. The Museum of the History of Science in Oxford founded in 1683, online 21 August 1995
- 5. Ljubljana: Open-Air Museum founded in 1993, online in 1996

The first virtual museum every registered was the Museum of Computer Art (MOCA)<sup>11</sup>. The museum was founded in 1993 by computer artists Don Archer and Bob Dodson to promote digital art in its various forms and manifestations, including 3-D rendered art, fractals, enhanced photography, animation, mixed media, computer-painted and -drawn art, etc.

The Web Museum was launched in 1994, as a volunteer and collaborative project developed by Nicolas Pioch and was awarded in the same year with the Best Use of Multiple Media Award in the Internet Best of Web '94. <sup>12</sup>

A clarifying example of the expanding of the museums' paradigm is the example of the Museum of the History of Science in Oxford<sup>13</sup> that was founded in early 1683 and published online on the 21 August 1995. Although the museum is an active one, organising public lectures, family-friendly events, gallery tours, taught sessions for schools and other such events, it has a strong online component as well. Except the collections database that contain over 19000 records and the online library catalogue with 20588 records, the museum offers online exhibits of 43 collections that vary from Natural Magic to Wireless World.

Event though the aspect of a better preserving and sharing technique is crucial, the openness that the digital era is bringing to the national collections, archives and libraries is substantial. Considering the advancement in technology, putting collections online is no longer the state of the art. A good illustration of that is the LODLAM — Linked Open Data in Libraries Archives and Museums. LODLAM.net is an informal, borderless network of enthusiasts, technicians, professionals and other people who are interested in or working with Linked Open Data pertaining to galleries, libraries, archives, and museums.<sup>14</sup>

<sup>&</sup>lt;sup>14</sup> Online at <a href="http://lodlam.net/">http://lodlam.net/</a>. Accessed 05.02.2014



Grant Agreement Nr. IZERZO-142129

<sup>&</sup>lt;sup>11</sup> Online at <a href="http://moca.virtual.museum/">http://moca.virtual.museum/</a>. Accessed 2/6/2014

<sup>&</sup>lt;sup>12</sup> Online at <a href="http://www.ibiblio.org/wm/about/">http://www.ibiblio.org/wm/about/</a> . Accessed 2/6/2014

<sup>&</sup>lt;sup>13</sup> Online at <a href="http://www.mhs.ox.ac.uk/">http://www.mhs.ox.ac.uk/</a> . Accessed 2/6/2014

Semantic Web is a term coined by the inventor of World Wide Web and it is defined as providing " a common framework that allows data to be shared and reused across application, enterprise, and community boundaries"<sup>15</sup>, in other words, a web of data. The connection with open data is implied. Open data sits at the very foundation of Semantic Web, which is seen as the future of informational technology, an evolution of the World Wide Web. According to Sir Tim Berners Lee<sup>16</sup>:

"...a lot of excitement and interest in getting developing countries governments to be open, transparent, by putting data about what's happening in those countries on to the web, because that will make each country which is more transparent, becomes more trustworthy, more credible, easier to do business with, easy to invest in."

The constant development of the semantic web offers new perspectives on creating, collection and sharing and understanding data. The most common example of Linked Data is the DBPedia<sup>17</sup>. This is a web of Wikipedia data linked with other datasets on the Web, such as Geonames. This connection with other resources holds the key to better and more powerful applications and a better use of information available online. On the Data.gov.uk, there are a few examples of linked open data and more underway. For instance the Ordnance Survey offers OS Linked Data<sup>18</sup> linking together the following datasets: Boundary-Line™, Code-Point Open and the 1:50 000 Scale Gazetteer. The US has developed a dedicated and extensive research for linking open data: the Linking Open Government Data (LOGD)<sup>19</sup>. The LOGD is translating government-related datasets into RDF, linking them to the Web of Data and providing demos and tutorials on mashing up and consuming linked government data.

Important to mention that there are initiatives lead by other actors than the administrations that use open data with Semantic Web technologies.

Bordering the technical advancement, we are now witnessing a paradigm shift in the way that people connect and communicate. In May 2011, Laurence Millar, Editor at FutureGov Magazine wrote that "the Arab Spring has demonstrated the potency of technology to reflect citizens' views of government systems that are not transparent."<sup>20</sup> On the other side, world's governments shift towards a different

<sup>&</sup>lt;sup>20</sup> Online at http://www.iitp.org.nz/newsletter/article/126 . Accessed 05.02.2014



<sup>&</sup>lt;sup>15</sup> W3C Semantic Web Activity, 2011. Accessed 9/12/2013

<sup>&</sup>lt;sup>16</sup> Sir Tim Berners Lee is the invernter of the World Wide Web and the director of the World Wide Web Consortium (W3C)

<sup>&</sup>lt;sup>17</sup> Online at http://dbpedia.org/About Accessed 05.02.2014

<sup>&</sup>lt;sup>18</sup> Online at <a href="http://data.gov.uk/dataset/os-linked-data">http://data.gov.uk/dataset/os-linked-data</a> Accessed 05.02.2014

<sup>&</sup>lt;sup>19</sup> Online at <a href="http://logd.tw.rpi.edu/home">http://logd.tw.rpi.edu/home</a> Accessed 05.02.2014

way of engaging with citizens, via the Internet. The eGovernment concept is significantly increasing in importance. eGovernment stands for electronic government and it represents the two-way digital interactions that a government has with the public sector, business sector and employee sector. Its strategies rely completely on the usage of the Internet and of the world-wide-web for delivering government information and services to the citizens. The United Nations E-Government Survey 2012 and the report "E-Government for the People" published in March 2012 highlighted "The increasing role of e-government in promoting inclusive and participatory development has gone hand-in-hand with the growing demands for transparency and accountability in all regions of the world ".

## 3.2 Legal drivers: legislation and policy

The most important driver in the open data movement will remain the legislative aspect. In the "Report on existing open data strategies"<sup>21</sup>, the necessity of legal coercion was highlighted from the early stages of the movement. Nevertheless, the PUBLAW2 study sponsored by the European Commission showed that the problem with the Synergy Guidelines was its inefficiency given by the absence of legislation. The very first legislative initiative was taken in 1990 and it regarded the freedom of access to information related to the environment (Directive 90/313/EEC of 23 June 1990) (Geoidea, 2013, a). Two aspects are responsible for this situation. The first one regards the general structure on which public administration run. Bureaucracy is the sum of all the cumbersome procedures and processes, completely unavoidable ways within the institutions that requests of all kinds, including the ones under law 109/2007, must follow. In such a system the need for legal procedures for releasing public data in a sustainable manner is essential. Furthermore, defining adequate procedures places the responsibility of the public data on the agency or institution and not on the management or the technical department that actually released it. Even though these workflows are built within each institution, the impulse comes from the higher authority, the national legislation.

The most important legislative drivers for open data are the **Law 109/2007**, which is the transposition of the **Directive 2003/98/EC** on the re-use of public sector information (PSI Directive) in Romanian legislation and the Open Government Partnership. Both have been extensively covered by the previous reports.

Except the national legislation mentioned above, none of the six selected institutions have in their internal regulations any statements regarding the release of public data over the Internet, under an open license (Geoidea, 2013, b).

<sup>&</sup>lt;sup>21</sup> Online at <a href="http://geoidea.ethz.ch/en/en results.html">http://geoidea.ethz.ch/en/en results.html</a> . Accessed 27.02.2014



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#### 3.3 Socio-economic drivers

#### 3.3.1 Mentality drivers

By using the syntax 'mentality drivers' we express the social and personal considerations that stand behind the actions of the actively and non-actively involved people in the open data movement in Romania. As in the situation of mentality barriers, the mentality drivers are difficult to quantify. We consider that they are triggered by the level of understanding and awareness of each individual regarding the advantages and disadvantages of realising public data over the Internet and under an open license.

Raising awareness is achieved through events organised by the civil society - open data and government transparency and accountability activists - such as conferences, talks, codefests, and by public authorities, namely the OGP club<sup>22</sup>. In Romania, there is an active and growing community of open data enthusiasts, coagulated into non-profit organizations, foundations, interested civilians communicating through mailing lists and forums. A significant aspect is given by the connections established with communities, foundations and organizations from other countries. These connections are translated into participation of Open Data movement leaders to Romanian events. A good example in this direction was the 'Moving forward. Open Data Discussions for an Open Romania', where presentations were held by representatives from Open Government Partnership and Open Knowledge. These incentives given by such meetings and formal and more often, informal talks, catalyse the need for action in the direction of releasing public data through seeing examples in other regions of the world and understanding the benefits that emerge through this initiative. The existence and the constant development of the Romanian open data community prove a high level of support and commitment. Furthermore, understanding the importance that an aggregated group has, a group of five organizations (Foundation for an Open Society, Association for Technology and Internet, Ceata Foundation, Median Research Center Foundation and geo-spatial.org) have formed and launched in May 2014 the Coalition for Open Data<sup>23</sup>. Its main purpose is to strengthen collaboration between organizations that promote open data in Romania, to increase the impact of their advocacy and maintain open data subject the media agenda and the public agenda, which supports and promotes the use of open government data. With respect to the mentality divers matter, it is important to mention that a significant number of the members of these organizations are volunteers, acting according to their principles and beliefs of a better and more accountable society.

In February 2013, a new department was created under the Prime Minister Chancellery, the Department for Online Services and Design (DSOD), which main responsibility was to assist and



<sup>&</sup>lt;sup>22</sup> http://ogp.gov.ro/club-ogp/ last accessed 08.09.2014

<sup>&</sup>lt;sup>23</sup> http://ogp.gov.ro/noutati/lansarea-coalitiei-pentru-date-deschise/ last access 04.09.2014

monitor the OGP implementation and the national e-government programs. Considering the later development of the open data policy in Romania (Geoidea, 2013, b), the DSOD formation was a milestone. In September — October 2013, DSOD organized work meetings at different ministries, institutions and government agencies to raise awareness regarding the commitments that Romania made through OGP and to establish datasets available and deadlines for publishing on the Government open data geoportal. At all meetings, representatives of civil society were invited to discussions. Important to mention is that most representatives present were on their voluntary time, indicating the mentality driver that the open data initiative is a powerful and important action that should be maintained and constantly developed.

Mentality drivers are also generated through the power of example. Projects that offer services based on open data stand proof of some of the possibilities that this movement can yield. Still, the open data movement in Romania is at the beginning of its development and even though significant breakthroughs are emerging, such an example is the data.gov.ro portal. Nevertheless, private initiatives are still scarce.

#### 3.3.2 Economic drivers

At this time, the GEOIDEA team has no knowledge of an economic report regarding the open data movement in Romania. We, therefore, must consider the economic trend and reports results commissioned by the European Union or, as an example, reports conducted for other European countries.

Besides the powerful idea of making the society more responsible, more inquiring and better informed, the Open Data initiative has had from the start a financial strong motivation. With the Open Data Strategy launched in 2011 by the Digital Agenda articulating that the expected results are a boost of 40 billion EUR to the EU's economy every year. That was concluded after the results of the *Review of recent studies on PSI re-use and related market developments* by economist Graham Vicker, that estimated the direct impact of Open Data on the EU27 economy to 32 billion EURO in 2010 and predicted a growth per year of 7%. Furthermore, related to the geospatial sector, the same study shows that removing barriers and improving the access infrastructure could be translated in significant gains. It has been calculated that the benefits could increase by some 10 – 40% by 'improving access, data standards and building skills and knowledge'.

In Romanian context, as immediate economic drivers we could consider the significant improvements that a clear, intuitive and fast access infrastructure and data standardisation together with metadata, would yield. The direct economic gain would reside in the work time reclaimed from civil servants. Even more, once the system would be running the amount off knowledge necessary to comply with Law 544/2001 requests would be considerably reduced.



From the civil society point of view, the economic driver is considerably important. As by the definition of public data - data collected or produced with fully/partially public funding - buy the data from public authorities is considered by the open data movement supporters unjust. The situation becomes even more unjust, as the cost of the database/data set is extremely high. An example in that direction is the initiative initiated by geo-spatial.org and the geospatial community in Romania related to the administrative territorial units, UAT<sup>24</sup>. Before March 2014, the limits of the smallest administrative territorial units (UAT) were available only at a specific cost. In January 2012, the geo-spatial.org community addressed an open letter<sup>25</sup> to obtain the UAT boundaries in vector format, under an open license to place on geo-spatial.org geoportal. This letter was written under more considerations. The UAT boundaries were present in the Romanian INSPIRE geoportal<sup>26</sup> and they could be downloaded in DFW<sup>27</sup> format from the ANCPI site<sup>28</sup>. Nevertheless, this dataset could not be used in a spatial analysis or for visualisation on thematic maps, in a desktop GIS or web-GIS system. Furthermore, there was no license attached, no metadata related to dataset, a possible generator of multiple legal problems. 184 people from the Romanian geospatial community signed the letter. The answer<sup>29</sup> came about two months later, refusing to release the data and offering the price calculating method used by ANCPI. After a simple calculation, in order to obtain the official vector basic administrative units of Romania, one would have to pay at that time around 800.000 EUR. Since March 2014, the UAT vector dataset is available in the data.gov.ro portal under the Romanian open government license OGL-ROU-1.0<sup>30</sup>.

<sup>&</sup>lt;sup>30</sup> http://data.gov.ro/base/images/logoinst/OGL-ROU-1.0.pdf Accesed 08.09.2014 (Only in Romanian)



<sup>&</sup>lt;sup>24</sup> UAT stands for ,unitate administrativ teritorială' which is the smallest administrative division in Romania

<sup>&</sup>lt;sup>25</sup> http://earth.unibuc.ro/articole/scrisoare-ancpi-uat Link to the article regarding the open letter . Accessed 09.08.2014 (Only in Romanian)

<sup>&</sup>lt;sup>26</sup> Romania INSPIRE geoportal http://geoportal.ancpi.ro/geoportal/viewer/index.html accessed 08/09/2014

<sup>&</sup>lt;sup>27</sup> DWF stands for Design Web Format which is is a secure <u>file format</u> developed by <u>Autodesk</u> for the efficient distribution and communication of rich design data to anyone who needs to view, review, or print design files.

<sup>&</sup>lt;sup>28</sup> http://www.ancpi.ro/dwf/INDEX 1 2.dwf

<sup>&</sup>lt;sup>29</sup> http://earth.unibuc.ro/file\_download/27854/2012-03-26+%282%29.pdf The original ANCPI answer to the open letter of the geospatial community. (Only in Romanian)

#### 4. TACKLING BARRIERS

This chapter reviews several examples of initiatives and projects made in Romania in the area of the open data movement. It shows concrete cases of collaboration between the administration and the civil society.

#### 4.1.1 Data.gov.ro – The Romanian open data portal

In 2011, Romania accepted the invitation to sign the Open Government Partnership (OGP). In April 2012 Romania presented its National Action Plan, which aims at releasing public data that is highly demanded by the civil society and to develop some new services of electronic government (eGovernment). The first steps were made in the beginning of 2012, with a meeting on 10<sup>th</sup> January between the responsible at that time of OGP, Mr. Cornel Calinescu representative of the Ministry of Justice and representatives of the civil society: Centre for Independent Journalism (IPP), Centre for Independent Journalism (CJI), ActiveWatch, Soros Foundation and geo-spatial.org. The official representative from the Romanian Government belonged to the Ministry of Justice because the OGP implementation was integrated to the National Anticorruption Strategy (NAS). Following the discussions, a teleconference was organised with the Centre for Electronic Governance of Republic of Moldova, in the presence of Romanian civil society representatives and Moldavian civil society representatives with the motivation to learn from the experiences of the CEG. After the teleconference, a new meeting with only the participation of the civil society was held on 31st January. A week later, on 6<sup>th</sup> February, an official invitation came from the Ministry of Justice for a new meeting to discuss the Open Government Partnership. The next meeting was on 2<sup>nd</sup> March and had a tangible result. Indeed, it resulted in a clear collaboration between the civil society and the Ministry of Justice in writing the National Action Plan. On 21st March, representatives of ApTi, Soros Foundation and geo-spatial.org sent the first draft of the Romanian's OGP commitments.<sup>31</sup>

The last meeting held before concluding the National Action Plan was held on 27<sup>th</sup> March with representatives from both public administration and civil society.

Civil society participants:

- Soros Foundation
- Expert Forum
- Geo-spatial.org
- EPAS Association
- Institute for Public Policy
- Centre for Independent Journalism
- APTI (Association for Technology and Internet)

<sup>&</sup>lt;sup>31</sup> Online at <a href="https://docs.google.com/document/d/1Bc-qTTAQVzFKqbV047feDQ--YJTtCs5oarz3U-v4mKU/edit">https://docs.google.com/document/d/1Bc-qTTAQVzFKqbV047feDQ--YJTtCs5oarz3U-v4mKU/edit</a> Accessed 05.02.2014 [Only Romanian]



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- Centre for Independent Journalism
- Centre for Legal Resources
- Romanian Centre for Investigative Journalism

Public Administration participants (3 Ministries):

- Ministry of Justice
- Ministry of Foreign Affairs
- Ministry of Finances

At the discussions, the representatives of the public administration showed openness and expressed concerns regarding the technical capacity of the institutions to release public data and to fully understand the issue of privacy and licensing.

The result of these meetings was the National Action Plan that Romania presented at the OGP meeting in Brazil in April 2012.

After an unsuccessful year 2012 (Geoidea 2013, a), the Department for Online Services and Design (DSOD) in the Chancellery of the Prime Minister with the purpose of implementing OGP was established. This step was a significant one in the open data movement in Romania, and as stated in the "Report on Contradictory, Overlapping or Inefficient Geodata Related Legislation" (Geoidea, 2013, b), OGP and actions related to OGP was more influential on open data in Romania than any other European Directive.

One of the key accomplishments of the DSOD is the launching of the Romanian open data portal, data.gov.ro in November 2013. This happened after an intense round of meetings between representative from ministries, the DSOD and representative of the civil society. The 17 meetings sprawled over a period of one month, September. The main reason of these meetings was to raise awareness within the public administration regarding the concept of open data, the related legislation and how this movement could benefit the institution and the society. The meetings were open to the public. Anyone interested could freely participate. The tangible result of each meeting was a list of datasets that could be released as open data on the data.gov.ro portal. All the meetings minutes are available on the official Romanian site of OGP ogp.gov.ro.

Data.gov.ro is built on CKAN, an open source data portal built and maintained by the Open Knowledge Foundation and in February 2014 it contained 100 open data sets from 20 administration entities in different formats, such as .kmz, .ods, .csv, .xml, .xls and so on. The most used license is the Romanian open data license ROU-OGL<sup>33</sup>. This license is compatible with the Creative Commons Attribution and Open Data Attribution.

<sup>&</sup>lt;sup>33</sup>Online at http://data.gov.ro/base/images/logoinst/OGL-ROU-1.0.pdf [only Romanian]



<sup>&</sup>lt;sup>32</sup> Online at <a href="http://geoidea.ethz.ch/en/en results.html">http://geoidea.ethz.ch/en/en results.html</a> . Accessed 27.02.2014

#### 4.1.2 Civil society actions

The civil society acts according to its needs. It is known that there are many organizations, foundations, communities and groups at national, regional and international level that lead a thorough, powerful and influential activity in order to increase openness at all levels. Their actions take many faces: conferences, codefests, collaborative projects, guidelines and so on, usually on a voluntary basis. In Annex no. 2 of the "Report on Existing Open Data Strategies", it was given a substantial list of all the US organisations that tackle the difficult task of moving forward the open data movement, this standing proves the importance that is given to the matter.

Open data is considered a pillar of open government by the pioneers of open data initiative; it is the basis of regaining the faith of people in their leaders. Showing exactly where tax contributions are going will improve the perception of public spending and thus shaping a better society.

At the European level, there are many organisations that lead the open data movement. However, the Open Knowledge Foundation, a non-profit organization founded in 2004 and dedicated to promoting open data and open content in all their forms (including government data, publicly funded research and public domain cultural content), plays a significant role.

Within the Romanian context, there are a significant number of organizations that support and demand of the public bodies to respect their attributions regarding open data. Some of these organizations and communities, such as geo-spatial.org, the Association for Technology and Internet, Soros Foundations and others have been implicated in the process from the beginning.

The activity of the civil society is crucial in moving forward the open data initiative in Romania, just as in any other country. The entire movement is based on opening the government and the public data they hold for the benefit of the entire society. Therefore, it is only natural that the civil society comes forward with their requests to guide the administration throw the process. Nevertheless, as presented in section 2, barriers apply not only to the public bodies, but to the potential open data users too. Therefore, the civil society activists have a double role: to demand the releasing of public data as open data and to inform and educate the society into the new mentality that "presumes that it's going to be open". These roles are accomplished through conferences, codefests and through the implementation of projects.



#### 4.1.3 Implemented projects

Below we provide a list with on-going projects that prove the involvement, support and continuing efforts for the open data movement in Romania. It is important to mention that some of these projects have build strong communities around open data principles, be may regarding Open Access<sup>34</sup>, open geodata or such.

#### NuVaSuparati.info

It's based on a similar structure with AskTheEU.org or WhatDoTheyKNow.com. The project was launched in July 2013 by a voluntary group of passionate believers in the effects of transparency and open data in improving the every day life.

#### Hartapoliticii.ro

The project intends to become a reference point for reliable, accurate and official information about each political person in Romania.

#### BaniPierduti.ro (lost money)

The project was launched in 2011 with a 3 fold mission: (1) to monitor public spending by indexing on-going contracts, budgets divided by fields and institutions., (2) to inform citizens of the importance of a more efficient financial country and to promote the necessary legislation, (3) investigation related to the manner in which public money is spent.

#### Politicalcolours.ro

The project was launched in September 2011 within the OpenMedia Challenge hackathon<sup>35</sup>. The aim of this project was to build a web mapping application that would allow visualisation, querying, download and creation of one's own thematic maps for open datasets, including spatial data correlated with election datasets, for the Romanian territory.

#### Geo-spatial.org

geo-spatial.org is an online portal containing articles, tutorials and open data regarding digital cartography, historical cartography, neogeography, 3D terrain modelling, remote sensing, GIS and GPS. The site was launched in 2007 and has grown into a community ever since. Geo-spatial.org militates and promotes free access to geospatial data and Open Source Geospatial Software.

#### Kosson.ro

Kosson is a Romanian information science community based on voluntary contribution, serving as a dedicated channel for accessing services and news concerning knowledge and information



<sup>&</sup>lt;sup>34</sup> Open Access is a term that defines unrestriced online access to peer-reviewd scholary research

<sup>35</sup> Online at http://omc.thesponge.eu/ Accessed 05.02.4014

management, library and information science, eGovernment and eLearning (information management field), and scholarly communication.

#### **ApTI**

ApTI (Association for Technology and Internet) is a non-governmental organization whose aim is to support and promote a free and open Internet where human rights may be observed and protected.

#### **Summary**

The examples above are only a few from an ever-growing list of projects. The interest of the civil society in open data and transparent government is increasing. Nevertheless, the barriers we are facing are significant and therefore the need of an educated critical mass is imperatively needed. The civil society's actions are crucial in continuing the open data initiative, especially because most of those examples are niche projects. Geo-spaial.org is focused on open geodata; Kosson is focused on research data and so on. Collaboration between these groups of people is therefore important in moving forward the initiative and obtaining good results. An example of such collaboration is the Sponge. This is a media innovation lab, developing evolutionary solutions and technologies, to harvest data, and make it easy accessible, transparent and relevant. The lab is formed by: ApTI, geo-spatial.org, Fundatia Ceata, rosEdu, ActiveWatch, CRJI and the Faculty of Political Science.



#### 5. SURVEY RESULTS AND ANALYSIS

In order to capture the regulation and practices, as perceived by the civil society, we created a survey that was delivered mainly to active participants and data users that tackled at least one official or unofficial request for public sector information. The entire survey is listed in Annex 1. The respondents have different backgrounds, such as: good governance, public participation good governance Law/ Good governance IT - web development programming, cultural policy, cultural governance, independent culture, PhD Researcher information architecture Software Architect & Trainer media development and are part of one of the following listed organizations: Politehnica University of Timisoara<sup>36</sup>, Soros Foundation<sup>37</sup>, Romania CityProjects<sup>38</sup> & Open Data Timisoara, Center for Independent journalism<sup>39</sup>, Kosson<sup>40</sup>, Wikipedia, CubicMetre - resources for culture<sup>41</sup>, Association EPAS<sup>42</sup>, Funky Citizens<sup>43</sup> and Eau de Web<sup>44</sup>.

The questions were tailored mainly for the civil society, but a broader perspective has been considered because any citizen, who is a civil servant, is firstly part of the civil society. As presented in the introduction of this report, barriers can be categorised in many ways. We considered relevant for the scope of this report to divide the survey into (1) barriers for civil workers; (2) barriers for potential users; and (3) drivers for open data.

The survey was divided into three main sections:

- 1. Barriers blocking the release of open government data
- 2. Barriers experienced by potential individuals and user groups in using open data
- 3. Drivers for open data

Each section contains questions related to one of the four types of barriers presented in the first part of the chapter.



<sup>&</sup>lt;sup>36</sup> Online at <a href="http://www.upt.ro/en/">http://www.upt.ro/en/</a>

<sup>&</sup>lt;sup>37</sup> Online at http://www.soros.ro/en/

<sup>&</sup>lt;sup>38</sup> Online at <a href="http://cityprojects.ro/">http://cityprojects.ro/</a>

<sup>&</sup>lt;sup>39</sup> Online at http://www.cji.ro/

<sup>&</sup>lt;sup>40</sup> Online at <a href="http://kosson.ro/index.php?lang=ro">http://kosson.ro/index.php?lang=ro</a>

<sup>&</sup>lt;sup>41</sup> Online at http://m3culture.ro/author/raluca-pop/?lang=en

<sup>&</sup>lt;sup>42</sup> Online at <a href="http://www.piatadespaga.ro/asociatia.epas">http://www.piatadespaga.ro/asociatia.epas</a>

<sup>&</sup>lt;sup>43</sup> Online at <a href="http://www.funkycitizens.org/">http://www.funkycitizens.org/</a>

<sup>&</sup>lt;sup>44</sup> Online at http://www.eaudeweb.ro/#index

## 5.1 Part I and II: barriers perception

The first part of the survey was composed of 14 questions related to barriers that impede the process of opening data on the government side (Figure 5.1, table 5.1). Through the questions, we tried to address legal aspects, mentality patterns, technical and economic issues, as they are perceived. Considering legal issues, we have formulated two questions, one to tackle privacy issues and one to test if the responders take into consideration the legal aspect as a real obstacle in releasing the public data. Among the participants, 45% strongly believe that there is a problem with privacy rights, but when it comes to acknowledging that there are legal barriers in releasing open data 55% disagree.

The mentality of the administration employees is strongly considered to be an obstacle. Indeed, 64% strongly agree that the change in a mentality suitable for the existing of open data is very much needed, but it's not easily embraced. 27% of responders agree with this statement. Regarding the statement related to the fear of misuse of data that the administration have, responders inclined to agree, but for 36% it was neutral.

With regard to the data that public bodies hold and to the way that it is managed, the responders views show little trust in the administration: 64% consider that, because of the huge amounts of data owned that is not well catalogued, the open data movement turns into a very cumbersome process. We formulated a question to identify if the administration workers consider that the quality of data influences the process: 45% gave a neutral response, 36% agree, 18% disagree.

When considering the confidence in the technical capabilities of national agencies and institutions needed to release public data, the respondents didn't express high expectations. Over 80% consider that the technical staff lacks the necessary expertise. However, 36% consider that the IT costs to release data are not high, 45% are neutral and 18% think they are. When it comes to the expertise necessary and the funds for open data release projects, over 70% agree that they are insufficient.

Within this section of questioning, we have addressed the economic issues as well. First, we tackled the matter of the business model that implies selling the data for base funding. We asked a question to see if the responders consider that the non-commercialization of data might lead an income loss: 27% strongly disagreed, 27% agreed and 45% gave a neutral answer thus showing that they mainly believe that the actual profit gained from data selling is not substantial. This could be the consequence of one of the following situations: (1) the data is too expensive so nobody can really afford to buy, (2) the data is extremely niched therefore the buyers are limited, (3) it could prove cheaper to collect the data yourself for a smaller region than to buy form the national agency or institute. A last question in the first section proposed as a barrier to open data the issues of using the data as a bargaining tool with other organizations. Unfortunately, 45% agreed to this being an obstacle, only 27% disagreeing.



Through the last question addressed to the respondents, we tried to find out if they had knowledge of any other types of barriers blocking the release of open data. Most of the answers concentrate on the responsibility issues, lack of legislation with clear sanctions and poor IT departments. Furthermore, considering the responsibility related to the data collected, produced and maintained by national bodies, an important barrier has been highlighted. It refers to the liability that comes with discrepancies in similar datasets managed by different institutions, and the loss of control over the "administrative truth" once all data becomes available, which makes it impossible to continue to exercise discretionary power. Another important aspect pointed out is the lack of understanding of what open data actually is as well as what kind of specifications it must comply with. This misunderstanding is usually considered to be at all levels, including top management.

The second part of the survey has been shaped to comply with barriers that could be experienced by potential users of open data (Figure 5.2, table 5.2). The ten questions asked could be enclosed in the categories of technical and mentality issues. Related to technical issues, at the statement whether potential users do not know what to ask for, 18% disagreed, 27% agreed, 27% strong agreed and 27% gave a neutral response. These answers underline the situation presented in the "Implementing Transparency" study (NAO, 2012), which raised the matter of the low level of interest of the civil society with regard to the data released. Related to whether potential users have the ability of manipulating and understanding the information, the opinions were divided: 27% strongly disagreed, 27% agreed, 18% strongly agreed and 27% gave a neutral answer.

Considering the mentality obstacle, we shaped 3 questions. The first one addressed the matter of sustainability in the open data process. 45% strongly indicated distrust related to the reliability of the public data release. Regarding the statement that the data quality is low, 36% gave a neutral response, 27 % disagreed, 9% strongly disagreed, 18% agreed and 9% strongly agreed. In the case of trustworthiness of public data, the reaction tended towards a negative response, 36% agreed, 9% strongly agreed, 27% were neutral and 27% disagreed. Over 90% respondents consider that the efforts invested in promoting the existing released public data are inexistent.

Regarding other barriers for potential users, the participants mentioned:

- the lack of open collaboration and communication between the civil society and the public bodies;
- the lack of understanding of the various licenses under which data can be release;
- the lack of models and good practice examples on how open data can best used for their specific purposes and even "data published in scanned PDFs with a stamp".

At the end of the second section of the survey, we asked the respondents to give suggestions on how the barriers that potential users experience should be tackled. Answers were divided between better collaboration between the user-groups, more legislative pressure and promoting the re-use through clear examples.



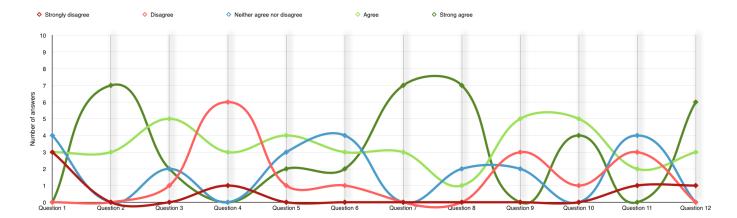


Figure 5.1. Chart representing the answers given to questions related to the related to barriers that impede the process of opening data on the government side

Question 1	The business model adopted by most public institutions is based on selling the data, thus releasing the data will result in income lose
Question 2	Releasing data implies a change in the mentality of employees of public institutions, change that is not easily embraced
Question 3	Public institutions face challenges balancing privacy concerns with the public interest when opening up data
Question 4	Public institutions face legal obstacles in releasing their data
Question 5	Individuals or groups of individuals in public institutions show concern regarding the misuse of data
Question 6	Individuals and groups within public institutions consider that many existing datasets are of poor quality and unsuitable for releasing
Question 7	Public institutions own large amounts of data, and so face capacity challenges when reviewing, releasing and maintaining open data
Question 8	Public institutions do not have complete and up to date data inventories, therefore they face problems in identifying the data they could make open
Question 9	By releasing their data, public institutions will lose the possibility of using them as a bargaining tool with other organisations
Question 10	Public institutions lack the expertise and/or the technology needed to deliver the data
Question 11	In public institutions, the IT costs for releasing data are high
Question 12	In public institutions, there is a lack in funding projections regarding open data

Table 5.1. The 12 questions of the survey represented in the chart in figure 5.1



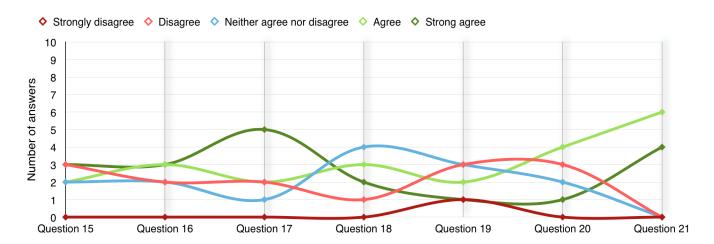


Figure 5.2. Chart representing the answers given to questions related to barriers that could be experienced by potential users of open data

Question 15	Potential open data users lack the specialist knowledge required to interpret the data
Question 16	Potential open data users do not know what to ask for
Question 17	Potential open data users fear the lack of continuity and stability of open data
Question 18	Interfaces used to access the data are unfriendly
Question 19	The open data made available by public institutions is low value
Question 20	The open data made available by public institutions is not trustworthy
Question 21	Public institutions do not promote the existence of their released data

Table 5.2. The 7 questions of the survey represented in the chart in figure 5.2

#### 5.2 Part III: drivers perception

The third section of the survey aimed at better understanding the perception on barriers and drivers for the open data initiative is Drivers for open data. This section consists of five questions directing at the importance of the legislation according to the respondents and at the significance of the civil society role in shaping the open data initiative. The first two questions addressed the Directive 2003/98/EC on the re-use of public sector information and the Open Government Partnership. The majority of responders did not consider the PSI Directive as a real driver for open data (Annex 2). The main reasons mentioned were its inappropriate implementation into the Romanian legislation, the absence of sanctions in Law 109/2007 and the fact that nor the administration nor the civil society is aware of this Directive.

When addressing the OGP, most respondents considered it a real open data driver. The motivations of the answer were multiple. Some participants highlighted the extra pressure on the public administration, some others focused on the success stories it provides. Nevertheless, there are respondents that consider that the biggest driver is "the enthusiasm of a handful of activists, some of whom do occupy governmental positions at the moment".

Regarding the matter of influence of the civil society on open data initiatives, a large majority of respondents consider that the influence is considerable. The activity of the civil society is a major catalyst in formulating questions and interacting with the public bodies. Another question was related to practical cases of releasing data after the pressure of the civil society. A popular example was the example of two communities in Timisoara, CityProjects and OpenData Timisoara that organized a workshop with the local authorities to promote the matter of open data in October 2013. The workshop was successful and now results are expected in the near future. <sup>45</sup>

The last question of the survey asked what could be considered motivational enough as for the public workers to become drivers of open data. The most common answer was education in the spirit of understanding what the benefits could be, the need to turn the activities related to open data into a daily task and not something additional, the change needs to start at the top, and for the workers to act accordingly.

<sup>&</sup>lt;sup>45</sup> Online at <a href="http://ogp.gov.ro/noutati/open-data-in-timisoara-de-ce-nu-si-in-toata-tara/">http://ogp.gov.ro/noutati/open-data-in-timisoara-de-ce-nu-si-in-toata-tara/</a> Accessed 05.02.2014



Grant Agreement Nr. IZERZO-142129

Page 29

#### 6. DISCUSSIONS AND CONCLUSIONS

The purpose of this report is to highlight the barriers and drivers that emerged in the context of the open data initiative in Romania. The report is divided in two main categories: analyses of barriers and analysis of drivers. Considering the complexity of the matter, we have treated the two elements by categorising them by type into: legislative, economic, technical and of mentality.

The report clearly shows that obstacles in the process of releasing public data as open data are found on the side of both data providers (governmental institutions and departments) and data users. In the early stages of the process, it is common to see issues related to the public bodies due to legislative, economic, technical or of attitude reasons. But later on, issues arise also on the side of the civil society and the private sector. The legal barriers identified concern copyright, licensing, and competition law and database rights. Even if these hindrances are significant, the most considerable legal barrier resides in the attribution of responsibility. Another significant issue is the matter of license interoperability that is not always guaranteed. A possible solution resides in writing a corresponding license at the national level, such as what was done on the Romanian open data portal, data.gov.ro with the OGL-ROU-01 license.

Mentality barriers reside on the sides of both the public administration and the potential users.

On one hand civil servants need to be informed on the international shift from closed to open data that is happening in order to apply this paradigm shift to their every-day work. A major obstacle in that area is the perceived risks, rightly or not, which accompany this shift. Those include fraud risks, misuse of the release data, more accurately extracting biased information from it, through incomplete analysis. On another hand, there exist also mental barriers among the user community. Indeed, there is a significant mistrust in the administration capability to create sustainable and high-quality open public data. Moreover, the availability of data is a first step, but the difficulty of and skills required of extracting meaningful data from low quality dataset must not be underestimated.

The economic barriers lie in a difficult financial situation at national level, a situation that does not leave room for significant changes in the fundamental paradigm. The Transparency Implementation Report conducted by National Audit Office of Great Britain in 2012, underlined the strong necessity of a complete strategy, including complete costs estimations for the best value for money.

The technical barriers, which are usually faced by administrations, are related to the shortage of technical staff. In the Report of Self Evaluation regarding the status of implementation of commitments of the Romanian National Action Plan for 2012, it is underlined as first problem "the lack of staff, especially technical staff". Moreover, the lack of procedures and standards for releasing public data is an additional obstacle when considering that in public administrations all actions follow clear and defined procedures. Open data is intrinsically connected to the Internet and therefore with



the eGovernment strategy. When it comes to the openness that the Romanian Government has towards online activity, we are at the beginning of the road. As the Head of the Online Services and Design Department - Prime Minister's Chancellery, responsible with the OGP implementation in Romania stated, it is an on going work. The premises are good considering the significant steps that the Romanian Government made under OGP guidance.

The report is enriched with a written survey of 29 questions that would capture the perceptions of the civil society regarding the open data initiative. The survey was delivered mainly to active participants/users that tackled at least one official or unofficial request for public sector information.

The responders come from different environments: academia, private companies, and activists, with various backgrounds, such as researchers, IT people, law, and government. The three parts of the survey, barriers blocking the release of open government data, barriers experienced by potential individuals/user groups in using open data, drivers for open data revealed various amounts of distrust within the public administration capacity of releasing public data as open data, due to different reasons, such as lack of staff, lack of suitable management of owned databases, lack of funding. Regarding the barriers that potential open data users experience, the responses showed that there is a general understanding and acceptance of limitations within the civil society and that obstacles do not emerge only from the public administration side. Nevertheless, the general attitude is a positive one, as all respondents believed that all barriers could be conquered.

In the second part of the report, we analysed drivers for the open data initiative in the Romanian context. To preserve symmetry, we divided drivers into categories by type and we preserved three of the main ones: technological, legislative and socio-economic drivers. The technological constant development has been a strong enabler from the beginning of the open data initiative in 1989. The link between open data and technology has always been very solid, but starting with 2008 technology, a new and powerful boost in linking, analysing and presenting data is giving. The perspective is slowly but surely turning towards the notion of "making sense of data" through Semantic Web. Connections with other resources, possible through Semantic Web technology, holds the key to better and more powerful applications, a better use of information available online. Furthermore, technology has changed the way people connect and communicate, related and understand data and extract information. Nevertheless, the most important driver remains the legislation. There are two crucial acts that drive open data forward: the PSI directive and the OGP agreement. Romania has made significant advancements in the last months regarding releasing public data under an open license. At the beginning of 2013, the Department of Online Services and Design has been formed and has as one of the main responsibility to implement the Romanian OGP commitments. As a palpable and intermediate result of their work, the open data Romanian portal has been launched on 17 October 2013. With respect to this progress, we consider that by this time,



the OGP has had a stronger impact in Romania in releasing public data as open data that the PSI directive had.

The third powerful driver of open data consists in the actions of the civil society. Organizations, foundations, non-profit organizations, groups, communities demanding for an open and transparent administration and for access to public data as open data. Projects and applications developed and implemented stand proof of the benefits that emerge from releasing open data. We have listed some of the successfully implemented projects, communities and organizations in Romania: NuVaSuparati.info, Hartapoliticii.ro, Politicalcolours.ro, Kosson.ro, geo-spatial.org.

We cannot say that the barriers and drivers encountered in the Romanian context in releasing public data are unexpected or of different nature from those of other regions of the world. The open data movement has been initiated and regardless of the obstacles faced, the progressive trend is a positive one. Legislation and civil society actions are becoming more powerful and open data inclined. Furthermore, the examples set by more and more countries all around the world are slowly but surely sifting the paradigm from close to open.



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#### **ANNEX 1: OPEN DATA SURVEY**

The purpose of this survey is to identify barriers and drivers for the open data movement, from the perspective of the civil society. The work is part of a Geodata Openness Initiative for Development and Economic Advancement in Romania (GEOIDEA.RO) project, collaboration between the Swiss Federal Institute of Technology Zurich and the Technical University of Civil Engineering Bucharest. The main objective of the project is to improve the scientific basis for open geodata model adoption in Romania.

\*Required

Organisation \*

Field of expertise \*

Does your daily work involve creating, delivering or promoting open data? \*

Yes / No

If yes, please give a short description.

Does your work involve using open data? \*

Yes / No

If yes, please give a short description.

#### Barriers blocking the release of open government data

Please consider the following statements and choose from 1 (strong disagreement) to 5 (strong agreement) with respect to your experience

1. The business model adopted by most public institutions is based on selling the data, thus releasing the data will result in income lose \*

1	2	3	4	5
Strong disagreement				Strong agreement



2. Releasing data implied not easily embraced *	es a change in th	ne mentality of emplo	oyees of public ins	titutions, change th
1 Strong disagreement	2	3	4	5 Strong agreement
orions disagreement				or one agreement
3. Public institutions fac opening up data *	ce challenges ba	llancing privacy conc	erns with the publ	ic interest when
1	2	3	4	5
Strong disagreement				Strong agreement
4. Public institutions fa	ce legal obstacle	es in releasing their d	ata *	5
Strong disagreement				Strong agreement
5. Individuals or groups data *				
1	2	3	4	5
Strong disagreement				Strong agreement
6. Individuals and grou quality and unsuitable		institutions consider	that many existin	g datasets are of po
1	2	3	4	5
Strong disagreement				Strong agreement



7. Public institutions own large amounts of data,	, and so face capacity challenges when	reviewing,
releasing and maintaining open data *		

1	2	3	4	5
Strong disagreement				Strong agreement

8. Public institutions do not have complete and up to date data inventories, therefore they face problems in identifying the data they could make open \*

1	2	3	4	5
Strong disagreement				Strong agreement

9. By releasing their data, public institutions will lose the possibility of using them as a bargaining tool with other organisations \*

1	2	3	4	5
Strong disagreement				Strong agreement

10. Public institutions lack the expertise and/or the technology needed to deliver the data \*

1	2	3	4	5
Strong disagreement				Strong agreement

11. In public institutions, the IT costs for releasing data are high \*

1	2	3	4	5
Strong disagreement				Strong agreement

12. In public institutions, there is a lack in funding projections regarding open data\*

1	2	3	4	5
Strong disagreement				Strong agreement

- 13. Please list any other types of barriers you have encountered in your requests for accessing public data
- 14. Do you think these barriers can be overcome? If yes, how?

Yes / No

# Barriers experienced by potential individuals/groups in using open data

Please consider the following statements and choose from 1 (strong disagreement) to 5 (strong agreement) with respect to your experience

15. Potential open data users lack the specialist knowledge required to interpret the data \*

1	2	3	4	5
Strong disagreement				Strong agreement

16. Potential open data users do not know what to ask for \*

1	2	3	4	5
Strong disagreement				Strong agreement



17. Potential open data users fear the lack of continuity a	and stability of open data *
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1	2	3	4	5
Strong disagreement				Strong agreement

#### 19. The open data made available by public institutions is low value \*

1	2	3	4	5
Strong disagreement				Strong agreement

## 20. The open data made available by public institutions is not trustworthy \*

1	2	3	4	5
Strong disagreement				Strong agreement

#### 21. Public institutions do not promote the existence of their released data \*

1	2	3	4	5
Strong disagreement				Strong agreement

#### 22. Please list any other types of barriers experienced by potential users

23. Do you think these barriers can be overcome? \*

Yes / No

24. If yes, how?

# **Drivers for open data**

25. Do you consider corresponding legislation, such as Directive 2003/98/EC on the re-use of public sector information a real driver for open data? \*

Yes / No

Please, justify your answer.

26. Do you consider corresponding international, national or regional agreements, such as Open Government Partnership a real driver for open data? \*

Yes / No

Please, justify your answer.

- 27. How important do you consider to be the requests forwarded by the civil society in the open data movement? \*
- 28. Are you aware of any example when the pressure of civil society determined the release of datasets as open data? \*
- 29. In what conditions do you think individuals/groups within public institutions can act as open data drivers? \*



Grant Agreement Nr. IZERZO-142129

## **ANNEX 2: OPEN DATA SURVEY - RESULTS**

Table Annex 2.1 Table with results of the survey than could not be charted

Section	Questions	Answer
Barriers blocking the release of open government data	13. Please list any other types of barriers you have encountered in your requests for accessing public data	Motivation, Understanding of the concept Rules to follow which should be given by central authorities Public servants are afraid to release data because: - most of the times it has a poor quality and they do not want to take the blame for this; - crucial data sits on individual computers and it is not even shared within the same institution; - they are underpaid so they do not want to make an extra effort that clearly will have followups - the IT departments don't really exist or are of low quality in many public institutions (there are notable exceptions); - last, but most important, the upper levels in these institutions do not care about opening the data, do not take the time to really understand the concept, do not have incentives for working towards these goals, and do not allocate any resources for opening the data. lack of knowledge about what is open data and the suitable file formats lack of will to do additional work from employees Public institutions don't know what data sets they own I think you covered them quite nicely in the above questions. The lack of legislation related directly to open data. Even though Romania is part of the Open Government Partnership, the public administration does not feel that releasing open data is something that should happen if a law does not provide it explicitly. suggesting that they have a business model is just too strong—my guess is that some people in public institutions "sell" the info under the counter the primary barrier is that institutions fear a—the liability that comes with discrepancies in similar datasets managed by different institutions (and that's why they oppose the argument of the legal obstacles), and b—the loss of control over the "administrative truth," once all data becomes available, and they can no longer exercise discretionary power i'd introduce a moratorium on liability for 1 full year, incentivizing institutions to iron out all discrepancies with fear of penalties, and that would take care of barrier a; for barrier b, i can't think of a s
Barriers experienced by potential individuals/groups in using open data	22. Please list any other types of barriers experienced by potential users	litigation. data published in scanned PDFs with a stamp in some cases (e.g. environment, where I have expertise) the data is very poor and already extra-aggregated; we, the public, would need the underlining data, that usually comes from local level (counties, cities).



Potential users don't have a clear understanding of the various licenses that exist for data

Lack of models and good practice examples on how open data can be used for their specific purposes.

a barrier for users is the lack of consistent/coordinated metadata across all platforms, such that datasets from different institutions could be merged without additional user intervention--I think the Albanian portal managed to fix that, so it could become a model to follow

Please give a description of how these barriers for accessing public data can be overcame?

Involved in the development of Reportnet, the European platform for environmental reporting

(http://cdr.eionet.europa.eu/), in which we gather data from Pan European countries, and convert, assess and disseminate it as open data. At Romanian level, I try to be actively involved in convincing public institutions to put their data public in machine readable formats.

Promoting Open Data daily

Working with local authorities in order to identify and make available to Romanian citizens. We have weekly meetings. Almost daily discussions with other persons involved in Open Data activities.

Building a map encompassing all libraries in Romania including their location and their main services opened to the public.

Not quite daily, but I attend weekly events where I promote the concept of open data (meetings with local public institutions, technical communities etc).

CubicMetre has been part of the discussion of the OGP with the Ministry of Education and the Ministry of Culture. unfortunately, in spite of an initial openness from their part to offer some specific open data, the follow-up of the meetings proves a total reluctance to offer any sort of data. Moreover, we part of the negotiations for the programming of the future structural funds for culture 2014-2020. As coordinators of one of the working groups, we asked for several sets of data, which were transmitted in pdf formats, even, and only after other discussion some of the data was delivered as xcl.

Our organization is best known for www.banipierduti.ro, a project involving the use of budgetary data for education, participation, and analysing public spending. In this regard, we are very vocal advocates of open data, especially in budgetary matters.

not daily, but we do support the promotion of open data, any time we have a chance

Since December 2011 I have been involved in advocacy campaigns promoting open government data. Soros Foundation Romania has organized events with the purpose of raising awareness around open data, we enhanced the dialogue between communities of activists, programmers and government officials on the subject. Furthermore we are starting a project in order to build capacity for NGOs advocating for open data, for journalists using the data, but



Issue / Revision 1/0 Date: 15.09.2014 also for public officials responsible with opening up the data. No. I don't know the content of this Directive. 25. Do you consider corresponding legislation, such as Directive No, It is not binding, and people are not aware of it. 2003/98/EC on the re-use of public sector information a real driver for Yes, External pressure is the only reason we now have some open data in Romania No, The Directive has weaker provisions than the Romanian legislation on access to information. It allows the state entities to charge the public for the data in stead of stimulating the pro-active release. Yes, Because it involves a participatory level expressed only through the use and exchange of data. No, The Directive is not fully implemented and followed in the national and local activities of the public institutions. Yes, It is an additional tool for pushing into the direction of open data. Unfortunately, the Romanian public administration lacks the capacity to enforce it properly. Also, civil society or other stakeholders also lack the resources to advocate for a better implementation of the Directive (e.g. through strategic litigation)

Yes, DSOD was created because of this Partnership and we have a started Open Data movement in Romania because of this agreement.

No, Because it is not generally known and used, neither by

No, Romania should make use of the access to information law 544/2001, rather than law 109/2007 that transposes the directive; the mere possibility of charging money for data, present in 109, is detrimental to the concept of open data, so we should make better use of 544, which works on the presumption that data is free of charge, especially when in

electronic format

data users or data providers.

Yes, They provide success stories, which should be a good incentive.

Yes. The Governments are stimulated to make concrete commitments. The non-state actors are getting an advocacy instrument to make things happen.

Yes, Yes because it calls for an unprecedented layer of transparency when it comes to the measurable results of governance acts.



Drivers for open data

open data?

		Yes, The Open Government Partnership might work better because governments assume responsibility for releasing open data, instead of being forced by the law. The partnership better enables the cooperation between the government and the civil society.
		Yes, It provides extra pressure on public administration to release the data, an argument for us on the outside to convince them to release and, at the same time, it is an opportunity for learning on both sides.
		Yes, Even though it is important for Romanian authorities to have an international requirement for implementing a standard and this commitments helped with making some steps forward, the existence of such agreements showed that the efforts towards compliance with the OGP are mainly made right before a review takes place (and not necessarily a constant effort).
		No, with or without the OGP, romania would have embarked on the open data trailOGP may be a catalyst, but it's not _the_ driver :( what really drives the open data movement is the enthusiasm of a handful of activists, some of whom do occupy governmental positions at the moment; yet, without a highly visible champion of open data, the effort and/or movement is still in its infancy, and (unfortunately) not sustainable
		Yes, Open data commitments wouldn't have existed if there were no international obligations to develop them. The Romanian context wasn't ready for this step.
	27. How important do you consider to be the requests forwarded by the civil society in the open data movement?	very important. civil society should involve and accelerate the open data movement process  Very important, we are the ones that will use the data.  Important for who? The government is actively ignoring them.  In Romania, the civil society appears as being the main actor in pushing for OG,  it is the prime beneficiary and the one who is most aware of the value of that data.  Very important, because the civil society is one of the main beneficiaries of the open data movement.  Extremely important.  Important, but the administrative capacity to implement them is low.  crucial! without such requests, romania wouldn't have had the new portal  Very important in making open data a constant resource.
	28. Are you aware of any example when the pressure of civil society determined the release of datasets as open data?	The open data portal for Romania, the OGP national action plan, wouldn't have been a reality if civil society wouldn't have been this determined to obtain data sets. the pressure of civil society started to manifest in sept 2011, when the ministry of foreign affairs send a letter to OGP, the expression of interest; then, dec 2011 to march 2012, organizations pushed for the consultation process that yielded the national action plan; after the adoption of the OGP action plan in april 2012, an even larger number of organizations and activists put together 3 consecutive



29. In what conditions do you think

individuals/groups within public

institutions can act as open data

drivers?

Issue / Revision 1/0 Date: 15.09.2014 versions of an inventory of high-value datasets that government should release, and that started to happen during sept-oct 2013, when the portal was launched (currently, 70+ datasets published, while the said inventory included about 100; not all of the 70+ published were in the list of 100, so many of the published datasets are really of lower value) The consultations before the OGP summit in London lead to the release of some datasets. The pressure of the civil society in Timisoara determined the City Hall to start the process of releasing its open data sets. OGP mandate in Romania lead to establishing the data.gov.ro The whole OG process in Romania has been moved forward in cooperation with civil society. I am not aware of any individual initiative (a single ONG asking for data). Not yet. Not in Romania, unfortunately. yes, CityProjects and OpenData Timisoara will finish soon the partnership protocol with local administration and they will release first Open Data series on the central portal we need to invest more in civic education and explain the benefits of voluntary acts. also we could get better results if we understand the way we can help and communicate with local authorities When they are knowledgeable (i.e. training would help), open data is a constant preoccupation (not just an extra task to a long list of duties) and they get credit for their work. Adoption of change can only come from the top down. So the higher placed someone is in the government hierarchy, the better chance he has to change something. The Romanian institutions are very centralised. If the "individuals" are at the top of the chains of command, they can affect - for good or for bad - the conduct of the institutions If they understand the OG philosophy and they are backed by knowledgeable It people, progress is around the corner. Total transparency of the administrative decision leaving an

exploitable trail of data.

Through intrinsic motivation for creating a better public institution.

Through creating a position within that public institution that deals specifically with open data.

If they have experience with positive examples of use of open data (I highlight positive!) and if they feel confident enough to release it (legal protection that it is safe to do so, their is no law impeding it or potentially impeding it).

Even though it is important to have individuals/groups that push forward the open data standards in the public institutions, it is not a sustainable solution. The real open data drivers are: a coherent legislation, clear procedures for releasing and updating datasets and ensuring the infrastructure to implement those.

they first need to understand that transparency allows for fixing management errors; then, they need to understand that vulnerability through openness allows for increased credibility; third, if they really do want to be credible in their efforts, heads of institutions will simply channel resources towards full transparency and proactive release of all data (my assessment is that ~70% of the information in any given institution should be released, as it cannot possibly infringe



Issue / Revision 1 / 0
Date: 15.09.2014

Report on Barriers and Drivers for Open Data Policy

	on personal data protection, copyright or security; the challenge is to get expert advise on how to discriminate "clean" data from _exempt_ data, and figure out a procedure for the "problematic" data in between the other 2 categories; but ~70% is clean, ~20% is exempt, and the rest needs to be weighted with the 3-step method or the public interest test, on a case-by-case basis)  When they understand that reuse can be beneficial for them, for the public and for the business sector and when they understand how it works.
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