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# Open data at the Government of Catalonia, a government strategy

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## Abstract

*Open data refers to data made available by the public administration for citizens to refer to and which can be freely used and shared by anyone, at any time and in any place. These data have enormous potential value and are essential for ensuring transparency in the public administration as well as efficiency and equal opportunities in wealth creation.*

*The Government of Catalonia's open data strategy is aimed at encouraging the use of open data, both inside the administration and externally, and generating economic and social value through its use.*



## Open data by default

One of the most innovative aspects of the Government of Catalonia's open data strategy, due to its potential impact, is the conceptual leap represented by releasing all the administration's data by default, in other words, releasing all data that are not expressly protected.

All the administration's data, including information it has compiled and any data reflecting its activities or functions, are open by definition and justification needs to be given for any cases where data are not released openly, in accordance with the exceptions and limits set out in Law 19/2014, on transparency, access to public information and good governance.

This new openness evidences the shift away from administrations that keep information private, storing it away in a drawer because it is associated with having control and power, to administrations prepared to lay everything out on the table. We know that while this change is difficult and complex, it is absolutely necessary.

Accordingly, the government has subscribed to the principles of the **International Open Data Charter** promoted by the international Open Data Charter network, the result of a collaboration between over 70 governments and organisations from all over the world.

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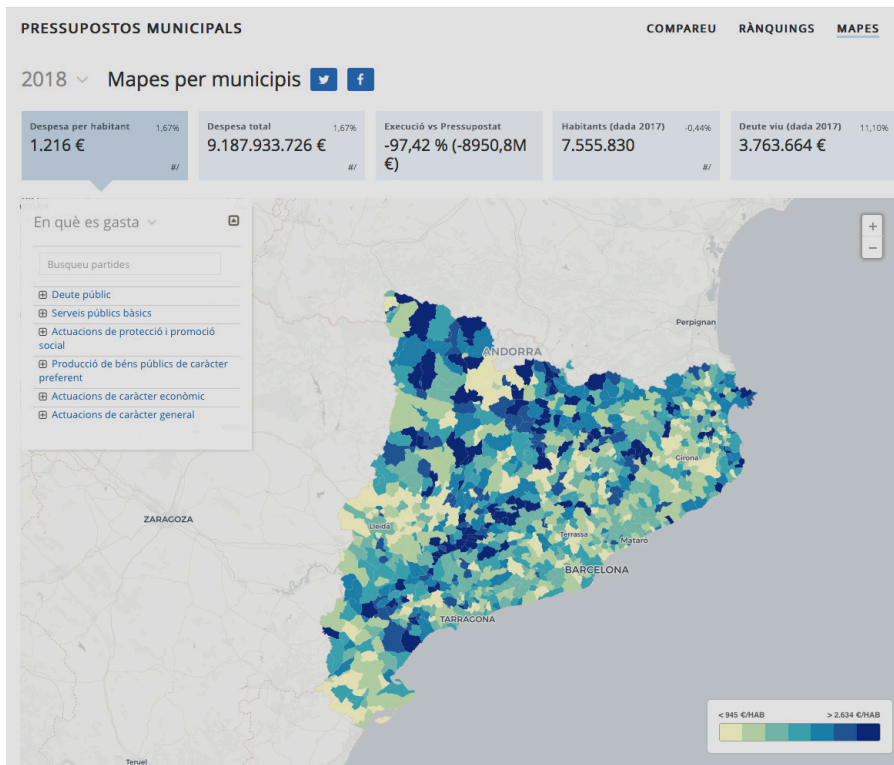
The goal of the network is to make sure that governments integrate open data culture and practice into their own working practices. The charter stipulates that data should be open by default, timely and comprehensive, accessible and usable, and comparable and interoperable. Data should also improve governance and citizen engagement and promote inclusive development and innovation.

Adherence to these principles also involves an undertaking to allocate the necessary resources to work within our legal and political framework to implement these principles in accordance with best technical practices and the time frames set out in our action plans.

## Open data and accountability

The Government of Catalonia has devised an open data strategy aimed at managing and drawing greater attention to all its data as well as that of the Catalan public sector in general. The strategy is part of its efforts to offer transparency and make government information available for reuse by society.

The main purpose of the strategy is to equip citizens with the necessary tools to play a direct role in government administration and to enhance the administration's social value by providing open data that can be reused by different parts of society. For this reason, as a government we want to promote tools such as the **municipal budget comparison tool**, which provides simple and dynamic access to information about each town council's budget to facilitate comparison across councils.



## Open data to generate value

Generally, the provision of open data by the public administration is automatically considered to reflect its desire to offer accountability and transparency in its actions as well as its fight against corruption and the development of well-founded policies. Despite all this, there is little awareness of the full potential of open data and its capacity to become an agent of change to tackle, for example, global challenges such as sustainable development, human rights, health and education.

The Directorate-General for Transparency and Open Data has therefore set clear

**There is little awareness of the full potential of open data and its capacity to become an agent of change**





goals that aim to foment the generation of social value through the use of open data by sharing public data with citizens and promoting the use of these data while offering guidance on usage.

To this end, the administration is promoting outreach and usage activities in the field of open data that facilitate the exchange of experiences and the sharing of knowledge between different sectors of the population.

A series of bimonthly outreach sessions is currently being offered, called **Cafè amb dades** (Coffee with data), in the form of two hour capsules designed to boost the knowledge and use of open data among Catalan public administration workers, society, the business world and the social sector.

The sessions provide a space to discuss, analyse, share and swap experiences and knowledge in an informal, relaxed environment while enjoying a nice cup of coffee.

We are convinced that the only way we can move forward in the reuse of data as a tool for defining better policies is through collaboration between entities, organisations, institutions and other administrations, promoting outreach and awareness-raising activities, enhancing the value of initiatives for the reuse of open data and publicising them and, finally, promoting the development of open-data-based tools (visualisations, apps, etc.) that are useful to the public.

It is especially relevant to share reuse experiences that have served to create new services or products with social value with the aim of improving public policies or increasing efficiency within the administration, or which have contributed to developing new business models that have a positive impact on the economy.

## Data for the analysis and implementation of policies

Today's world is witness to a significant global transformation, driven by technology and digital media and powered by data and information. This transformation has an enormous potential to promote governments, civil society and private organisations that are more responsible, efficient, receptive and effective. In fact, all the agents involved in open data define the current period as the fourth industrial

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**The amount of data generated grows exponentially, day after day, and it is therefore essential to find systems that allow us to refine, process and analyse these data to make them useful**

revolution, a revolution that is transforming every aspect of our lives, the way we produce, consume, communicate, etc.

The amount of data generated by the public administration, companies and citizens grows exponentially, day after day, and it is therefore essential to find systems that allow us to refine, process and analyse these data to make them useful. Only in this way will we be able to offer added value across all our spheres of work.

The **Government of Catalonia's Open Data Portal** has been devised as an instrument to facilitate the implementation of information analysis tools, following the relevant criteria for different territories and sectors. Accordingly, great attention has been paid to incorporating geographic variables and information by gender with the aim of promoting the implementation and assessment of gender policies. In addition, in order to fully integrate the data that reflect the reality of the country, the Government of Catalonia promotes the inclusion of data from town councils and other local administration entities.

## **Open data, a collective project**

The Government of Catalonia's open data strategy stands out for its collective vocation since it is being developed by the entire public administration – both the Government of Catalonia and other Catalan administrations – as well as the general public, data processing experts, journalists, companies, social activists and technology experts, among others. All this collective data is driving the project and we





are working hard to teach people how to use it as well as making them aware of its existence.

A well-consolidated work network, which has a good relationship with the open data team in the Directorate-General for Transparency and Open Data has been created internally to ensure smooth coordination between departments. This network receives support, assistance, advice and continuous training so that it can autonomously manage its data and create visualisations, thereby making data much easier for the public to interpret.

At local level, we are promoting and facilitating the integration of data from the town councils and other local administration entities to build datasets that reflect the whole reality of the country.

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Catalonia's public sector can therefore provide information that can be analysed in terms of area at municipal level as well as by sector.

The strategy encompasses a relationship with society that is being built on different fronts with the aim of creating a community. We have a close relationship with civil entities, activists and data journalists and technology experts, who often collaborate in the acts we organise as well as in policy development. Their contributions are essential if we are to achieve our project goal of continuous improvement.

One of the most successful experiences, due to the complexity of the act and the diversity of the attendees, was the **Open Data Ideathon** (7 and 8 July 2017), an initiative to come up with ideas for digital tools to improve the visualisation of open data in the field of public procurement.

**We have a close relationship with civil entities, activists and data journalists and technology experts**

To make sure that Catalan public administration data reaches the widest audience possible, the Government of Catalonia is promoting the integration of its open data catalogue into the **European Union Open Data Portal**, which gives access to the open data of institutions and entities throughout the European Union.

## **Technology at the service of open data**

The open data service of the Government of Catalonia covers all the functionalities and technological components required to publish public data in an open format



and enable the data to be reused freely by citizens, entities, companies and other public administrations.

The administration of the Government of Catalonia offers a technological platform, among other functionalities, which allows data and metadata to be hosted and has a catalogue of accessible data and datasets, which are interoperable and accessible through automated reading and writing (API).

The platform can host other datasets provided by any private sector association, entity or business that requests it, provided that they are considered of public interest.

Access to the open data service is through the **Government of Catalonia's Open Data Portal**, which incorporates its open data catalogue. This catalogue does not only offer data from the Government of Catalonia and the rest of the Catalan

**Our catalogue does not only offer data from the Government of Catalonia and the rest of the Catalan administrations, but also from other sources that may be of public interest**



administrations, but also from other sources that may be of public interest.

The datasets in this catalogue reflect all kinds of sectors and formats and contains information ranging from statistical data to satellite images, all of which are freely accessible.

As an additional strategy, the Government of Catalonia is promoting a federation of open data catalogues between the Catalan local public administration, Catalan public universities and businesses and associations in the private sector. We are also working towards this federation with the European Union Open Data Portal and other international data portals that may be of interest.

**There is still a long way to go and we have a clear objective to generate a circle where an increased use of open data stimulates the publication of new datasets and their reuse**

## **Open data, the Government's commitment**

The Government of Catalonia has shown its commitment to rolling out an open data strategy through its **Government of Catalonia Open Data Governance Agreement**, approved on 20 December 2018 and which aims to consolidate the open data policy as a collective and shared project and turn Catalonia into a democratic pacesetter within Europe.

As an administration we are aware that there is still a long way to go and we have a clear objective to generate a circle where an increased use of open data stimulates the publication of new datasets and their reuse.

We are therefore working to bring data to citizens from different angles simultaneously. Internally, this work can be seen in our quest to offer transparency and accountability to citizens as well as in our development of analyses and indicator tools that enable us to design more efficient policies.

Externally, we are helping to generate value through the use of open data and by turning it into a collective project and promoting data reuse among entities, organisations, institutions, technology experts and other administrations. Our aim is to create coherent products, such as the creation of visualisations and the development of applications, to make everyday life that much easier.

Meanwhile, we are also working to achieve fluid communication channels, which will enable us to detect any needs for open data and prioritise them according to their capacity to generate the most value for society and the economy. In this sense, networking and mutual collaboration are essential and we encourage you to visit our **Open Data Portal**, participate in it proactively and request open access to data that are not yet available. ■

**Our aim is to create coherent products, such as the creation of visualisations and the development of applications, to make everyday life that much easier**



# Assessing the impact of open data: a missed opportunity?

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## **Abstract**

*It is undeniable that data publication by public administrations has become a global trend. Since 2010, most EU public administrations have significantly expanded the amounts of data they publish. However, no proper assessment has yet been made of the impact of these publications, although various studies have revealed that the actual impact could exceed initial estimations. A proper assessment could also help give us a greater understanding of the main kinds of impact and thereby speed up progress in these areas to achieve the highest and broadest impact on our society.*



## 1 Introduction

According to Eurostat,<sup>1</sup> the public sector budget accounts for 45.8% of GDP in the EU as a whole; its key role in our society is therefore self-evident. One of the latest mechanisms for controlling this budget is the provision of open data portals that provide access to raw data about public activities (open government data). This approach has also become popular in other fields such as research and science (open science data).

Thus, since 2010 most EU countries have launched open data portals to release data freely to society. Currently, most of these data are compiled in the European Data Portal. This Portal, available at <https://www.europeandataportal.eu>, currently links about 900,000 datasets from over 70 official sources from EU countries in addition to Iceland, Moldova, Norway, Serbia and Ukraine.

**Since 2010 most EU countries have launched open data portals to release data freely to society and most of these data are compiled in the European Data Portal**

### 1.1 What are open data?

The data compiled in this portal are released mostly as open data, in accordance with the following definition: "Open data and content can be freely used, modified and shared by anyone for

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1. [http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=gov\\_10a\\_main&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=gov_10a_main&lang=en)

any purpose" (summary of the official definition).<sup>2</sup> It is important to note that this definition emphasises the fact that data can be used by anyone and for any purpose. Data that are restricted for commercial uses, such as any data released under a Creative Commons NonCommercial<sup>3</sup> license, are not considered part of this open data source.

## 1.2 The benefits of open data

The benefits of releasing open data have been extensively reviewed. Janssen *et al.* (2012) grouped the benefits into three categories: political and social (including transparency and accountability); economic (including stimuli to innovation and competitiveness); and operational and technical (including optimisation of processes and improvement of public policies). Welle Donker *et al.* (2016), identified the benefits as being an increase in transparency, government efficiency and effectiveness and external benefits, including societal and economic benefits. This approach is, to a large extent, aligned with the concepts reviewed in the official report on the European Data Portal (Cecconi and Radu, 2018). The benefits identified in the report are transparency and improved government efficiency and public service delivery. Additionally, it also considers the use of open data to drive decision-making processes.

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2. <https://opendefinition.org>

3. <http://creativecommons.org/licenses/by-nc/4.0>



## 2 The three stages in open data

But before a vision of the benefits of open data was developed, many open data portals were launched without a clear strategy. Thanks to the lessons learnt by the pioneers, subsequent portals – followers – were much more efficient in their activities. From a time perspective, three main stages can be identified in terms of open data publication strategies, as illustrated in the table below. The dates provided have been adjusted for the leaders in this movement, and do not mean that every portal in Europe has achieved the last stage. For a more accurate estimation of the current situation, it is worth looking at the Open Data Maturity in Europe Report 2018 (Cecconi and Radu, 2018).

**Before a vision of the benefits of open data was developed, many open data portals were launched without a clear strategy**

Beginners	Followers	Fast-rackers	Trend-setters
Iceland	Denmark	Austria	Cyprus
Liechtenstein	Estonia	Belgium	France
Malta	Lithuania	Bulgaria	Ireland
	Norway	Croatia	Italy
	Portugal	Czech Republic	Spain
	Sweden	Finland	
	Switzerland	Germany	
		Greece	
		Latvia	
		Luxembourg	
		Netherlands	
		Poland	
		Romania	
		Slovakia	
		Slovenia	
		United Kingdom	

Table 1: Open data maturity clustering. Based on Cecconi and Radu, 2018.



# OPEN DATA

From 2010 to 2015, the national open data portals were massively launched and populated with data and local and regional portals also appeared. The philosophy was “the more data the better”

## 2.1 First stage. Birth and extension

During this stage (from 2010 to 2015), the national open data portals were massively launched and populated with data and local and regional portals also appeared. The philosophy was “the more data the better”. In some cases, original data sources were split into several datasets (by year, type, etc.) so that a higher number of datasets appeared to be available. At the beginning of this stage (2010), there was not a standardization regarding the format of published content or the content itself. For example, Spanish standardisation (NTI-RISP) was published in February 2013 and the first version of European standardisation (DCAT-AP) was published in August 2013.<sup>4</sup> Therefore, portals set up prior to these dates may lack a proper system for categorising data if they have not been subsequently adapted. During this

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4. [https://joinup.ec.europa.eu/solution/dcat-application-profile-data-portals-europe?f%5B0%5D=solution\\_content\\_bundle%3Aasset\\_release](https://joinup.ec.europa.eu/solution/dcat-application-profile-data-portals-europe?f%5B0%5D=solution_content_bundle%3Aasset_release)

stage, open data portal managers started to be aware that manual publication of data was not sustainable in the long term and data management systems (CKAN, Socrata, OpenDataSoft, etc.) were needed to replace ad hoc software developments.

## 2.2 Second stage. Use of the open data

After a successful publication of data, open data portal managers started to realise that data consumption varied significantly depending on several factors. This stage of the open data movement lasted from 2015 until 2018 for the leaders and focused not only on launching a proper and proactive communication campaign with society but also on establishing a successful relationship with reusers of the data. Open data portal managers also started to pay attention to the features of the published data, that is, the format, topics, geolocation of the information, frequency of updates, metadata, SEO, API, search capabilities, etc. Since the process for publishing open data was automated, it became increasingly necessary to also automate the internal production of data in order to meet demand.

During this stage, open data portal managers faced the “open circle challenge”. This term describes the fact that the entity publishing the data does not receive direct remuneration/compensation for its publication (open data is free) and, therefore, no additional income is obtained for maintaining the publication. Hence, the more they published, the more expensive the data was to maintain.

**Publishing the data does not receive direct remuneration for its publication (open data is free). The more we publish, the more expensive the data is to maintain**



### 2.3 Current stage. Impact of open data

And now, in 2019 a brand-new stage has commenced. Now that the first two stages have been completed, open data portals are capable of publishing data regularly with an acceptable level of quality. To sustain this level of service and justify maintenance and improvements, it is important to assess the impact of the data released; otherwise, public funding of the publication could be jeopardised in future public budgets. Unlike with roads, open data portals are infrastructures that have to demonstrate utility in order to secure funding. Hence, this article focuses on the challenge that open data portal managers face in proving the impact of published data. In fact, this is also an issue that needs to be addressed by the public administration as the publication of open data is a public resource that requires investment. However, few statistics of open data portals across the world would seem to suggest that usage is intense. As an example, datasets in European open data portals, national Spanish open data portals and even the Canadian open data portal – all of which are world leaders in this area – average fewer than five visits a month. The graph below shows trends in visits to the Spanish open data portal ([datos.gob.es](https://datos.gob.es)).

It should be pointed out that the portals previously mentioned are meta-portals and therefore only provide information about where an actual resource is located.

Vickery (2011) estimated that the market created by open data accounted for 1% of the EU's GDP. A more recent study

**The challenge is to prove the impact of published data, few statistics of open data portals across the world would seem to suggest that usage is intense**

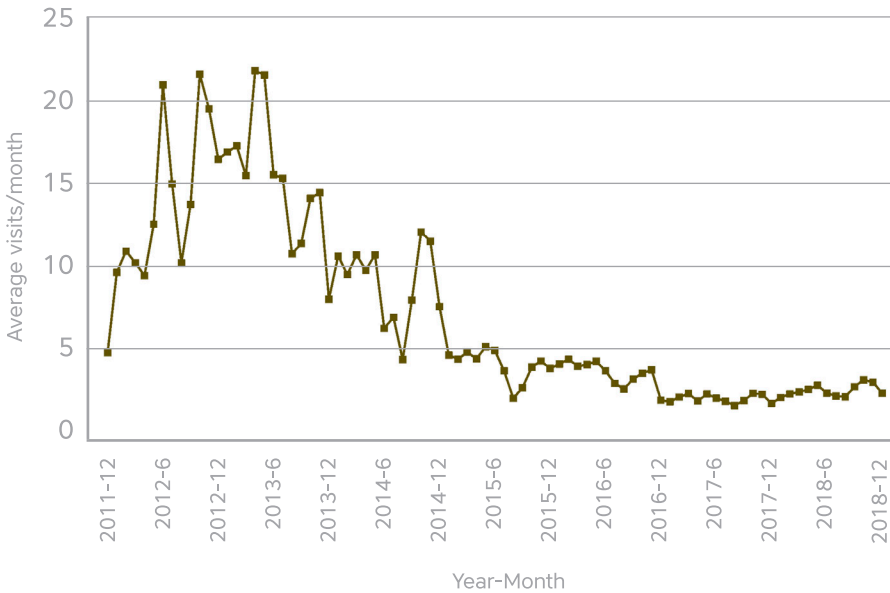


Illustration 1. Source: our own construction based on data from [datos.gob.es](https://datos.gob.es)

conducted by the European Data Portal (Carrara *et al.*, 2015) claimed that the potential impact of the open data market on the European economy would be 75.7 billion euros by 2020 and would generate savings of 1.7 billion euros for the public administrations of the EU28.

The reason that this article focuses on the impact of open data portals is that, judging by some examples of use, we believe we may be missing out on a huge opportunity to see returns on investment in these portals multiplied twofold, tenfold or even one hundredfold. However, we also need to be open to the possibility that the return could be much lower and investment in open data should therefore be frozen or restricted, or that both situations may co-exist depending on the characteristics of the different datasets.

**We may be missing out on a huge opportunity to see returns on investment in these portals multiplied twofold, tenfold or even one hundredfold**



### 3 The open data impact chain

Innovation appears to be the most important open data impact mechanism

Let us look at an example of the difficulties involved in assessing the impact of open data. What is the economic impact of one single app that reuses open data about transport if it is downloaded half a million times and used by more than thirty thousand people regularly?<sup>5</sup> What is the social impact of an application that facilitates bicycle use in four hundred cities across the world?<sup>6</sup> Or what is the social impact for people with mental disabilities in terms of them moving independently around Amsterdam using public transport?<sup>7</sup>

Jetzek *et al.* (2014) assessed open data impact mechanisms and examined four areas: innovation, transparency, efficiency and participation. Their initial findings showed that innovation appears to be the most important open data impact mechanism. Abella *et al.* (2017b) listed some potential indicators of the economic and social impact of open data. Later in 2018, these same authors described

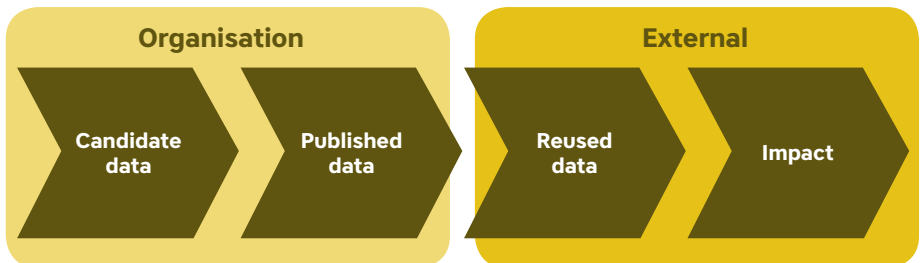


Illustration 2. Own elaboration based on Abella *et al.*, 2018.

5. <https://play.google.com/store/apps/details?id=cat.ereza.properbusbcn>

6. <https://www.bikecitizens.net>

7. [https://www.europeandataportal.eu/sites/default/files/use\\_case\\_netherlands\\_-\\_goov.pdf](https://www.europeandataportal.eu/sites/default/files/use_case_netherlands_-_goov.pdf)



the process of open data publication by examining it from its point of source within an administration or organisation to its impact on society. (See illustration 2)

Due to the open nature of open data, further reuses are hardly tracked and even in 2017 a survey conducted on open data managers in Spain found that 40% of them did not have a proper way of analysing the use of the published data (Abella *et al.*, 2017a) and were therefore unable to assess the impact.

The Open Data Maturity in Europe Report 2018 by Cecconi and Radu, provides a good compilation of the practices of open data impact assessment across Europe. The report examines five indicators: strategic awareness, political impact, social impact, environmental impact and economic impact, and found significant differences between countries.

**Our lack of knowledge about the factors that determine the potential of open data could mean that we are missing out on an excellent opportunity**

## **4 Conclusion**

Globally, the EU could be considered one of the worldwide leaders in open data. In addition, there is certain evidence to suggest that the potential impact of open data publication could be much bigger than expected, and some global reports estimate that the economic impact could be highly significant. Most managers of leading open data portals are well aware of the need to assess the impact of the open data they publish. However, no proper assessment has yet been undertaken, making it hard to justify any dramatic increase in investment in this area. Therefore, we have to consider that our lack of knowledge about the factors that determine the potential of open data, or how the impact can be properly assessed, could mean that we are missing out on an excellent opportunity. ■



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# Open data as a public asset

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## **Abstract**

*The disclosure of data is often accompanied by many promises from an open government standpoint that use catchwords such as transparency, participation and engagement, not to mention innovation, viewing such data as a raw material that could be used by old and new companies to create and improve services. Although these promises effectively represent the potential of open data, in actual fact, they prove very difficult to accomplish. The delays, or rather the hurdles, that stand in the way of these data's use are multi-faceted: cultural resistance to sharing data, legal constraints and issues with creating sustainable updating processes. By retracing the steps of open data, this article highlights these issues, proposes courses of action and suggests considering open data as a common good: a resource shared by all the members of a community and from which everyone can benefit.*

## Introduction

"I could have certainly done more, especially regarding the statistical aspects; however, in our country both private and non-profit organizations show reluctance relying on public domain for data, facts and content" (C. Battisti, 1898).

So reads the preface of Cesare Battisti's geography and anthropology book, *Il Trentino*, published in 1898. Although this text is over 100 years old, its words still ring true.

People who need data to write reports, inform, make decisions, etc. have always had to use up a lot of energy to obtain them.

Over time the situation improved, thanks to the arrival of data sharing policies that overcame all these hurdles and also thanks to advances in the technologies which now enable anyone to collect data.

Enter **OpenStreetMap**. In 2004, student Steve Coast, fed up with having to ask Britain's mapping agency, Ordnance Survey, if he could reuse its geographical data, proposed a collaborative collection of this type of data with the aim of promoting any type of reuse – in this first instance, the creation of a free world map. Fifteen years later, the project is still going strong,

**People who need data to write reports, inform, make decisions, etc. have always had to use up a lot of energy to obtain them**



**OpenStreetMap**



not only attracting contributions from over 5,000,000 people and the interest of great corporations such as Apple, Facebook and Microsoft, but also becoming a key tool for the management of humanitarian aid.

Then US president Barack Obama significantly helped to draw attention to the importance of open data with the 2009 **“Transparency and Open Government”** memorandum, in which open data was set out as being crucial for achieving transparency, participation and engagement.

From then on, the dialogue between activists clamouring for data and political decision-makers became smoother.

In Europe, the 2003 PSI Directive opened the door to open data's implementation. With the help of Tim Berners-Lee (the creator of the World Wide Web) and under the motto "Unlocking Innovation", the UK Government created its own open data catalogue, which was soon followed by the Open Data Institute and, at European level, the European Commission's European Data Portal, which federates all the open data catalogues of its Member States.

From then on, we saw a boom in data opening initiatives and the creation of portals and dissemination activities. The buzzword was social-economic growth: social, thanks to improved transparency, which enables citizens to understand how decisions are made and based on what data; and economic, equating data with raw material ("data is the new oil") through which old and new companies can generate services.

Civic activism initiatives led by civic hackers ("[...] programmers, designers, data scientists, good communicators, civic organizers, entrepreneurs, government employees and anyone willing to get his or her hands dirty solving problems [...]") (Tauberer, 2014) came onto the scene to promote these initiatives. These consisted of simple and effective projects that were able to explain the government budget, metrics on MPs, report problems in cities... These initiatives sparked a great deal of enthusiasm, although they were always geared to a limited number of citizens.

**US president Barack Obama significantly helped to draw attention to the importance of open data with the 2009 "Transparency and Open Government" memorandum**



## Open data and economic impact: what is necessary?

Any process to open up data requires a number of actions to be carried out, starting from the production of data on the basis of reuse principles and dissemination activities

A McKinsey **report** of 2013 estimated that open data could contribute \$3 trillion a year to the global economy. However, when we look at each initiative in detail, one discovers various deficiencies that quickly discourage the hopes of growth on that scale.

Any process to open up data requires a number of actions to be carried out, starting from the production of data on the basis of (technical, legal and documentary) reuse principles and dissemination activities.

The dissemination activities help create engagement and obtain quick responses from the civic hacker community. Unfortunately, we often find that as soon as those at the helm of the open data process leave the project, the process' sustainability tends to suffer.



As such, the desired economic advantages fail to materialise.

The *Open Data Barometer - Leaders Edition* report of 2018 points out how “governments are still treating open data as isolated initiatives” and emphasises the need to “prioritise and invest in open data governance to support the substantial changes needed to embed an open approach across agencies and departments”.

It is a necessity that can be accomplished only if we “build and consolidate open data infrastructure: improve data quality and interoperability through effective data management practices and data management systems that are built to manage open data”.

The **ten principles for opening up government information** as defined by the Sunlight Foundation in 2010 establish a series of technical characteristics that are fundamental for the distribution of quality data: completeness, primary source indication, timely updating, ease of telematic access, distribution in readable machine format, use of open standards... and the presence of licences which state that they may be reused.

However, open data initiatives do not always meet these criteria and often limit themselves to basic ones such as the use of licences, open formats and being machine-readable.

These criteria are undoubtedly important, but they are also superficial, especially in terms of providing data that promotes

**Open data initiatives often limit themselves to basic criteria such as the use of licences, open formats and being machine-readable**



**Many open data initiatives prove ineffective in the end**

**To obtain effective results, cost-benefit analyses should be taken into consideration to examine various problems such as sustainability, specification and coverage, adoption of standards or legal constraints**

economic growth. Between 2014 and 2016, the European Community, through its 7th Framework Programme (FP7) to fund research and innovation, commissioned the FINODEX (Future Internet Open Data Expansion) project, the aim of which was the creation of start-ups based on the provision of open data and the firmware platform. Through FINODEX, 4.64 million euros were distributed in order to finance 101 projects chosen from among the over 500 proposals received from 25 countries of the European Union. The project also entailed a series of meetings of “open data coaching” to give help and guidance to the companies involved. However, discussions with these businesses have shown that a large part of the data produced was “junk data”, i.e. data that had not been updated or that was incomplete, with scarce (or non-existent) documentation, that had been distributed in a way that was excessively aggregated and too anonymous, all of which limited the reuse of this data and demonstrated how many open data initiatives prove ineffective in the end. Distribution in aggregated or anonymous form is, unfortunately, an encumbrance that simply comes with the territory, given that this is often the result of legal constraints (e.g. privacy laws).

When promoting an open data policy, it is a good idea to think about what we expect to gain through the techniques we apply to overcome such obstacles.

One solution can be found in the article **“A ‘calculus’ for open data”** by Arnaud Sahuguet and David Sangokoya, which proposes taking cost-benefit analyses into





consideration. Such an analysis examines and considers various problems such as sustainability, specification and coverage, adoption of standards, legal constraints and many other matters, and sets out, in a very critical way, the correct evaluations needed to obtain effective results.

## Open data is a commons

To ensure the sustainability of an open data process, we must turn our gaze to the advantages for the data provider.

Simply examining one's own data to detect any inefficiency gives one a notable advantage.

David Eaves, in an [article](#) where he reviews the first ten years of open data's history and what has been achieved, states that,

**Public administration data must be considered as a public asset, a resource that should be shared by all those who could benefit from it and that nobody wants to keep private**

**A data provider should concentrate on the quality of their data and should perceive the term “open” as synonymous with reuse. The production of junk data must be halted**

“Open data convinced governments that the data they collect was a public asset with critical value, that that value should be shared openly. And that said value needed to be captured by public servants with the capacity to manage, analyse and deploy data in policy more frequently” .

This is indeed an important assessment and one that should not be underestimated. Nevertheless, if we want to truly make headway, we must address one further matter: public administration data’s consideration as a public asset, a resource that should be shared by all those who could benefit from it and that nobody wants to keep private.

A good place to start would be with data that can be viewed as infrastructure, such as data on the environment, the territory, population and transport, etc.

When a whole community recognises something as a public asset, this community will act to safeguard its existence. A data provider should concentrate on the quality of their data and should perceive the term “open” as synonymous with reuse. The production of junk data must be halted; we must promote the culture of good data and readiness to listen.

The quality of open data can indeed be improved if it is managed as a commons. ■

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# Open data, gender and violence in Latin America

**Silvana Fumega,**  
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Data Initiative (ILDA)  
(Uruguay)



## **Abstract**

*This article focuses on the project entitled Estandarización de datos de femicidios (Standardisation of Data on Femicide). Firstly, we contextualise the current status of open data in Latin America. We then explain our hypothesis of how standardising data could help us improve data quality and, lastly, we reflect on our study. Standardisation (and the eventual release of data) is not some kind of magic wand; rather, it is a process that enables us to see the problem more clearly and reflect on the criteria used by government agencies to produce data.*



## 1 Open data in Latin America<sup>1</sup>

The year 2012 saw the open data agenda start to gain momentum in Latin America. Since then, we have continued to see how numerous national, regional and local data portals (over 200 according to the Open Data Inception project) have sprung up at a growing pace, and how the private sector and civil society have been putting data to use in promising ways. Latin America has now developed its own open data agenda, forging particularly strong links between countries and within the open data community (Mora and Scrollini, 2017).

In this way, Latin America countries have demonstrated their enthusiasm to advance this agenda in different ways: from events such as AbreLatam and ConDatos, the adopting of the International Open Data Charter by national and regional governments (most of the signatories to the Charter are from Latin America), to the development of open data policies and regulations in some countries. To date, seven countries from the region (Argentina, Brazil, Uruguay, Peru, Costa Rica, Colombia and Mexico) have put in place sound open

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1. A more extensive, Spanish-language version of some of the ideas contained in this article can be found in Fumega, Silvana; Scrollini, Fabrizio and Rodríguez, Gabriela (2018).

In addition, developments in the Open Data in Latin America movement can be found in the relevant section of the State of Open Data <https://www.stateofopendata.od4d.net>.

**The Open Data Barometer has verified that Latin America is leading the way since five countries are among the top 20 in the global ranking**

**ILDA is a diverse and inclusive Latin American organisation that contributes to generating and using evidence to solve the biggest problems facing Latin America**

data policies, and many of them have done so with the aid of civil society experts and organisations (Mora and Scrollini, 2017). In addition, in terms of measuring open data publication, the Open Data Barometer has verified that the region is leading the way since Mexico, Uruguay, Brazil, Argentina and Colombia are among the top 20 countries in the global ranking (Web Foundation and ILDA, 2017).

As a result of this growing open data movement, the Latin American Open Data Initiative (ILDA)<sup>2</sup> was created. ILDA was founded after the first Regional Open Data Conference (ConDatos) in Montevideo in 2013.<sup>3</sup> It is a diverse and inclusive Latin American organisation that contributes to generating and using evidence to solve the biggest problems facing Latin America and is based on an ethical use of data. One of the main problems in the region is gender violence and, by extension, the most tragic of outcomes – femicide.

Discussion of femicide at regional level has drawn attention to the issue, to the extent that it is now recognised as a problem that needs to be tackled by societies and governments. However, attempts to make the issue more visible have not been matched by improvements to official systems for recording these incidents. Such improvements are essential if societies and governments are to take

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2. <https://idatosabiertos.org>

3. Although the initiative began as an international research project supported by Canada's International Development Research Centre (IDRC) and Fundación Avina, it has since become an international civil association and continues to enjoy the support of the IDRC, together with the Luminare Group.



better decisions and develop public policies that are based on the reality of the situation to combat femicide.

Largely due to the pressing nature of the situation, at ILDA we have decided to study the issue from an empirical perspective within our *Standardisation of Data on Femicide* project.<sup>4</sup>

In this context, it is important to understand how these data are constructed, the variables considered, the methodology employed and, lastly, the levels of access to the data collected in each country. Without understanding the specifics of the methodology employed, it will be hard to gather data that accurately reflects this serious issue, and it will be very difficult to devise adequate solutions and initiatives to mitigate the situation unless an accurate diagnosis is performed.

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4. This work is supported by the IDRC, Fundación Avina and the Development Bank of Latin America (CAF) through their shared Platform for Innovation with Purpose initiative.



**In 2017, owing to the magnitude of the problem, ILDA launched an exploratory study to understand how data production and use can contribute to potentially combatting femicide in Latin America**

## **2 Is standardisation the right way to go?**

At the start of 2017, owing to the magnitude of the problem of femicide in the region, ILDA, at the petition of the member countries of the Open Data group of the Network of e-Government Leaders of Latin America and the Caribbean (Red GEALC), coordinated by the Organization of American States (OAS), launched an exploratory study to understand how data production and use can contribute to understanding and potentially combatting femicide in Latin America.

With this aim, ILDA has designed research-action methodology to assess the scale of the problem, understand how working with data – especially open data – can contribute to finding a solution, and devise recommendations for the countries involved.

This initiative has built upon the work carried out on aspects linked to the production and compilation of data about femicide, such as those provided by the Gender Equality Observatory of the Economic Commission for Latin America



**Iniciativa Latinoamericana  
por los Datos Abiertos**



and the Caribbean (ECLAC)<sup>5</sup> as well as upon the progress made in standardising concepts as a result of the Bogota Protocol.<sup>6</sup>

## 2.1 Data and social process standards

ILDA has experience in standardising data in the areas of health, employment and air quality. These standardisation procedures involve working actively with those who produce, store, use and eventually release data. The process involved in this standardisation is therefore key. Data standardisation procedures force organisations to think about the kind of data they require, how to collect and store it, and ultimately the processes for using the data (Goëta and Davies, 2016). In other words, the standards are not only shaping how open data are produced but are also bringing about silent, localised changes in bureaucracies (Fumega, Scrollini and Rodríguez, 2017).

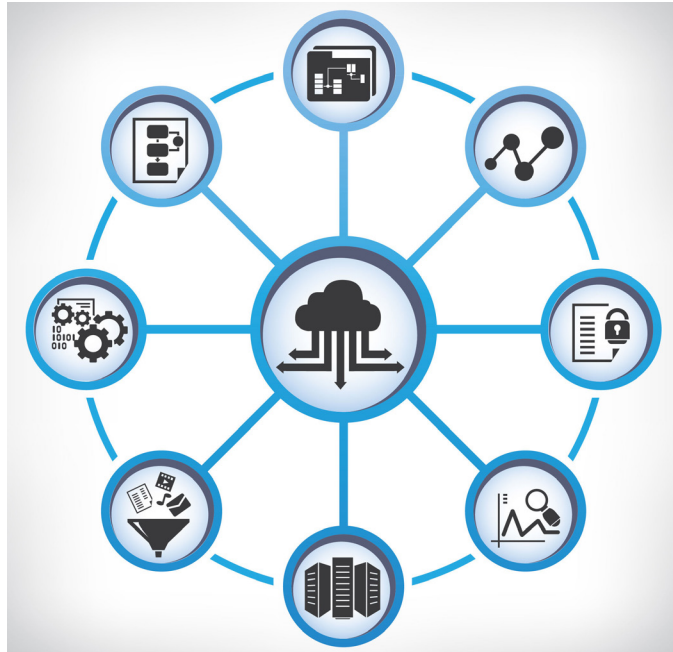
In this way, ILDA explores how uniform and standardised production of data can help the authorities understand different phenomena, develop informed public policies and use these data in a way that allows the public to build on them, thereby improving the quality.

**The standards are not only shaping how open data are produced but are also bringing about silent, localised changes in bureaucracies**

5. <https://oig.cepal.org/en/indicators/femicide-or-feminicide>

6. [http://conferenciahomicidiosbogota2015.org/wp-content/uploads/2015/11/Calidad-de-datos-entregable-ESPA%E2%80%A220L\\_SOLO\\_TXT.pdf](http://conferenciahomicidiosbogota2015.org/wp-content/uploads/2015/11/Calidad-de-datos-entregable-ESPA%E2%80%A220L_SOLO_TXT.pdf)





Based on its prior experience, ILDA decided to develop a research strategy that was divided into four stages:

- a) Identify and compare the current status across the board by reviewing the available literature;
- b) Test out different approaches to standardisation with a group of previously identified players in the fields of security, gender and open data;
- c) Test out the possible steps to standardise these data and move the process forward; and
- d) Identify promising uses of data by the government and society.

Through this process, ILDA aimed to collect relevant information to understand how modifying or adapting the infrastructure of data on security and gender could affect the issue of femicide.

## 2.2 Testing out our suppositions: our first workshop

The first workshop took place in San José, Costa Rica on 21 and 22 August 2017, prior to the 5th edition of AbreLatam/ConDatos.<sup>7</sup> The aim of the meeting was to reflect and work on these issues, which are an important part of the regional agenda. Gender equality activists, public servants working in justice and security, and academics and technology experts from Argentina, Brazil, Uruguay, Bolivia, Costa Rica and Mexico took part in the workshop.

The participants confirmed that one of the tools needed to help draft public policy and civic technology projects is access to all the data necessary for accurately assessing the situation. Achieving this requires not only better data production tools but also protocols for data collection, publication and use as well as a constant updating of these protocols.

In this highly complex universe, all the participants agreed that it was vital to standardise a minimum dataset that would enable interoperability, cooperation and/or comparison between different jurisdictions.

One of the tools needed to help draft public policy and civic technology projects is access to all the data necessary for accurately assessing the situation

It is vital to standardise a minimum dataset that would enable interoperability, cooperation and/or comparison between different jurisdictions

7. <http://2017.abrelatam.org>



### 3 Making continual progress

Our process to construct a standard for femicide is still underway, with our pilot project being carried out in collaboration with Argentina's Ministry of Justice and Human Rights. For this reason, final conclusions cannot yet be drawn. However, we can offer a series of lessons learned that relate to the standardisation processes, drawing attention to femicide and the need to devise iterative methodology for standardising public sector data, in particular, in relation to gender:

**The same database can be interpreted differently by the government and society**

1. When standardising data, it is important to consider the concepts involved and that different ways of interpreting data exist, which give rise to different "truths". In other words, the same database can be interpreted differently by the government and society. Although initially this could be seen as a problem, it is actually a strength as it contributes to dialogue about femicide and policy.

**Costa Rica and its observatory provide an example of good practice to be followed in terms of regulating access and sharing data about femicide**

2. It is important to establish institutional mechanisms that enable data to be made available with different access levels. In our experience, Costa Rica and its observatory provide an example of good practice to be followed in terms of regulating access and sharing data about femicide. It is particularly important to know what entity has a voice when communicating data.

3. Most standardisation processes involve dealing with systems that have been passed down, and many of them experience the problem of having to input data manually. Different methods exist to automate and improve processes. In our case, we have decided to take these systems as given (part of the reality) and consider that data collection methods need to be modified. In the meantime, it is vital to have clear rules about how to process the data that is obtained from these systems and the validation chains that follow.
4. A general problem is the lack of gender perspective of the players working on this issue. The reasons for this are manifold, but it is indicative of the need to train players within the judicial and security systems on how to collect a series of important data to determine whether a particular incident is a case of femicide or not.
5. A complex situation to resolve is that the death of a woman is not automatically recorded as a femicide. During the investigation of a case or even after the case has been closed, information may emerge that indicates that it is a case of femicide when it had not originally been classified as such. This means that in some cases the official data needs to be reviewed, and protocols must be in place for this.

**A complex situation to resolve is that the death of a woman is not automatically recorded as a femicide**



**The standardisation enables countries to improve the way in which they exchange data reciprocally in a more reasonable timeframe than via an annual report**

**This process involves back-and-forth dialogue between the standardisation processes, society and decision-makers within organisations**

6. The standardisation work at this level reveals the limits that regional comparison instruments have, but it also enables countries to improve the way in which they exchange data reciprocally and in a more reasonable timeframe than via an annual report.
7. An aspect that has yet to be studied is whether applied technologies for automated learning and data analysis can help in the creation and implementation of specific government policies to tackle femicide.

In summary, standardisation experience in the case of femicide shows that rather than being a technical process, it is an exercise which allows data production and use, as well as the problems with gender bias when constructing these data, to be reconsidered. Standardisation takes part within legal and institutional contexts, which may then be modified by such standardisation, although this process involves back-and-forth dialogue between the standardisation processes, society and decision-makers within organisations. ■

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# Interview with Rufus Pollock,

Founder and President of **Open Knowledge Foundation** (United Kingdom)

Rufus Pollock is a researcher, technologist and entrepreneur as well as President & Founder of **Open Knowledge**. He has been a pioneer in the global open data movement, advising national governments, international organisations and industry on how to succeed in the digital world. Formerly, he was the Mead Fellow in Economics at Emmanuel College, University of Cambridge. He has worked extensively as a scholar and developer on the social, legal and technological issues related to the creation and sharing of knowledge. More information can be found on his [home page](#). Last November he was in Barcelona to participate in the **Smart City Expo World Congress**.



“There’s a lot more that could be done, things are not progressing. There have been some really significant wins, I’ve seen definitely positive institutionalization in that [open data] is becoming good practice. But at the same time, it’s becoming routine for governments to do open data”



# ESCOLA D'ADMINISTRACIÓ PÚBLICA DE CATALUNYA

Capacitar  
persones per servir  
les persones



eapc

“Giving people information is not the same as them having time to be an informed citizenry. Improving governance is a lot harder, open data is a huge win for the administration, in terms of efficiency or innovation. Will it transform governance? Probably not, it will help it but there are many more things that make up better government”

“I almost start to talk at the moment often less about open data and more about frictionless data. Really what we are trying to do when we do open data is reduce the friction of getting that data to where it can generate value and insight”

“For decision-makers this is a way to do public services faster, better and with more understanding of what is going on, they actually have insights into what is happening

in their administration. There are also benefits for innovation, other companies using these data and finally transparency”

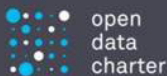
“Open source data management and integration systems would be revolutionary, to generate as much value as you want from data. Data quality is often really poor and needs to get a lot better. Even when you got it listed in your catalogue it's difficult to get the data together”

“Don't do open data on its own, it must be part of a frictionless insight strategy: how we use data and information to make better decisions, allow for more innovation and participation. It's a part of a bigger strategy where data is maintained and used”

# Good practices

## Open Data Charter (global)

The **Open Data Charter** is a collaboration between governments and experts working to open up data. It was founded in 2015 around six principles to guide governments on the release of information and data: 1) Open by default, 2) Timely and comprehensive, 3) Accessible and usable, 4) Comparable and interoperable, 5) For improved governance and citizen engagement, and 6) For inclusive development and innovation. Over 70 governments and organisations have joined the movement, the goal of which is to embed open data as a central ingredient to achieving better solutions to the most pressing policy challenges as well as to embed the culture and practice of openness in governments in ways that are resilient to political change. Adopting the Charter brings the following benefits to administrations: 1) Provides a common framework, 2) Supports governments in implementing open data projects, 3) Connects with different sectors to turn high-level open data principles into practical action, and 4) Champions high-level commitments to open data in key international fora. The Government of Catalonia adopted the Open Data Charter last summer, thereby committing itself to embracing the six main principles in managing its public data.



International  
Open Data Charter

## Open Government Partnership (global)

**Open Government Partnership (OGP)** has become a global platform of reformers working to make their governments more effective and responsive to citizens. Since 2011, 79 OGP participating countries and 20 subnational governments have made over 3,100 commitments – subject to independent review – to make their administration more open, inclusive, responsive and accountable. At the heart of each country’s participation is a National Action Plan, developed in collaboration with civil society. Governments and citizens are encouraged to experiment with bold changes that address urgent public policy challenges, learning and inspiring each other along the way. OGP has six thematic working groups that help governments design and implement more ambitious open government commitment in the areas of open data, access to information, fiscal openness, openness in natural resources, legislative openness and anti-corruption. Other cross-cutting themes that feature in the OGP, and for which recommendations have been made regarding the steps and actions to be taken by each country, include civic space, an enabling environment, education, gender, health and nutrition and marginalised communities.



## Open Standards for Data (United Kingdom)

One of the biggest obstacles when dealing with open data is the lack of normalisation and standardisation of data, making the data difficult to reuse. The London-based **Open Data Institute** (ODI) has published the *Open Standards for Data* guide, which offers an introduction to open standards for data as well as giving an idea of the potential impact of these standards. It also acts as a support for data editors and users by informing them of existing standards and offers advice on creating new standards and facilitates the experiences of the organisations that make up the broad community specialised in this area. The standards are reusable agreements that resolve a specific set of problems or respond to specific needs. Open standards are available to the public and are developed and maintained through collaboration and consensus. They enable the publishing, access, sharing and use of better quality data. There are thousands of open standards being used every day around the world, which can be classified according to objectives and products. They allow us to share a common vocabulary and language, exchange data between organisations and systems using equivalent formats and guidelines and make recommendations on how to share better quality data that are driven by a full awareness of how information processes and flows work.

# Open Standards for Data

[How to use this guide](#) [About](#)

[Introduction](#) [Find existing standards](#) [Creating impact](#) [Creating open standards](#) [The standards community](#)

Open standards for data are reusable agreements that make it easier for people and organisations to publish, access, share and use better quality data.

This guidebook helps people and organisations create, develop and adopt open standards for data.

It supports a variety of users, including policy leads, domain experts and technologists.

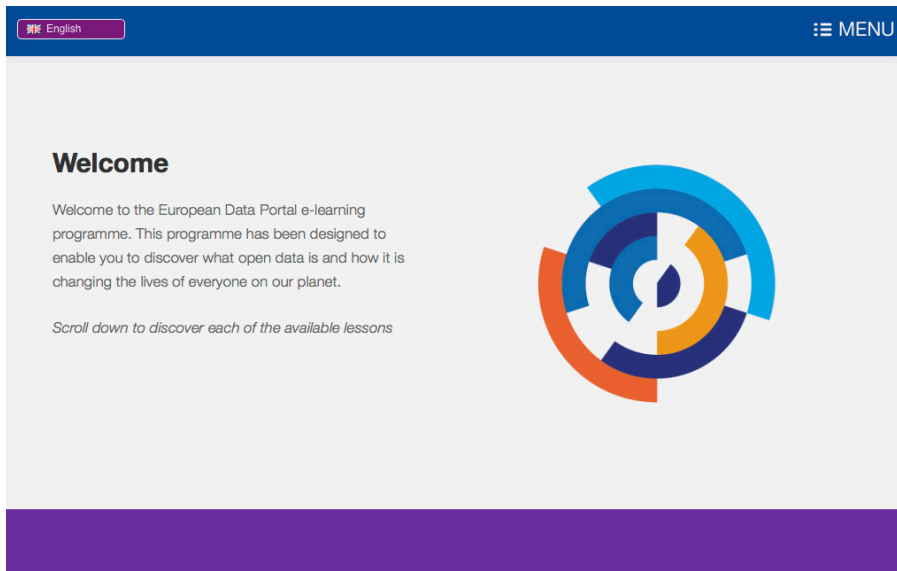
GETTING STARTED

## Introduction to open standards



## European Data Portal e-learning programme (European Union)

The **European Data Portal** (EDP) has developed a free **e-learning programme** to enable people to discover what open data is and how it is changing many citizens' lives. It contains 16 lessons such as “What is open data?”, “Unlocking value from open data”, “Open data. Agent of change” and “Linking up the web of data”. Expert knowledge, content development and learning plans are provided by the **Open Data Institute** training team. The modules suit all levels from beginners to experts. The e-learning programme introduces every aspect of open data. It includes definitions related to the concept and success stories from across Europe. It also introduces the major trends in open data and explains how people publish, access and use it. Finally, it highlights the future of open data and gets people thinking about the next steps for their own work. The EDP harvests the metadata of public sector information available on public data portals across all European countries. Information regarding the provision of data and the benefits of reusing data is also included. The strategic objective of the European Data Portal is to improve accessibility and increase the value of open data, which is why training is one of its pillars.




English

≡ MENU

### Welcome

Welcome to the European Data Portal e-learning programme. This programme has been designed to enable you to discover what open data is and how it is changing the lives of everyone on our planet.

*Scroll down to discover each of the available lessons*



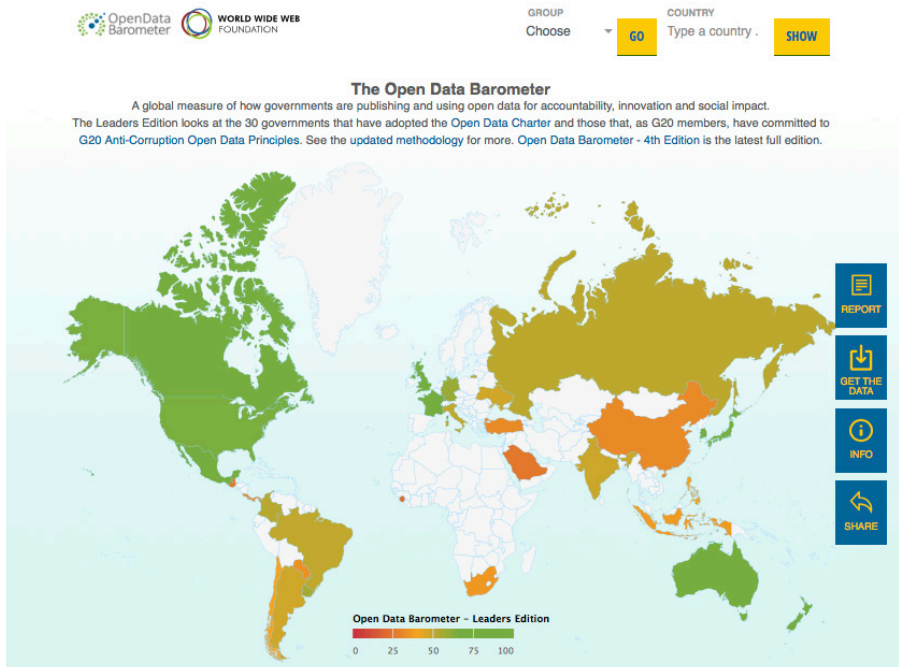
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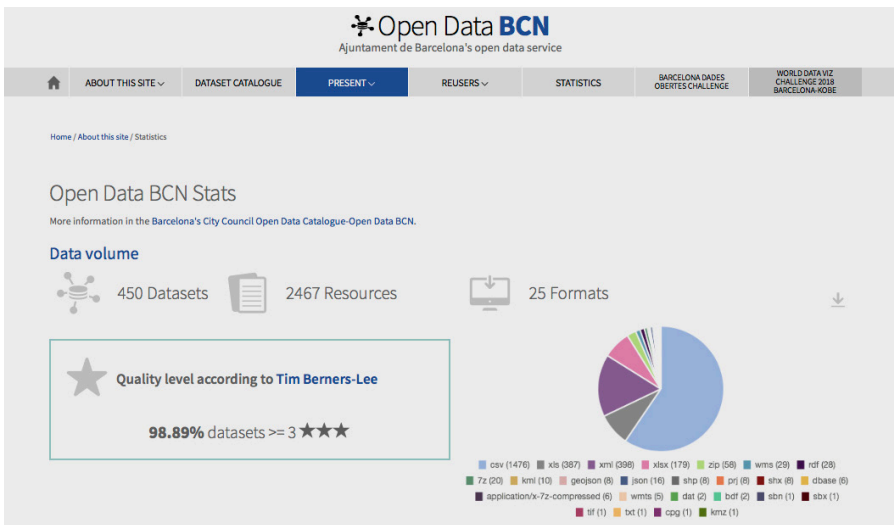
## Open Data in the World (global)

The **Open Data Barometer** of the World Wide Web Foundation is a global measure of how governments around the world are publishing and using open data for accountability, innovation and social impact. An interactive world map enables you to check and display the index and allows you to compare information by year, region, groups of countries, etc. The fourth edition published in 2016 concludes with five main recommendations for governments: 1) Government data must be open by default, 2) Open data must be integrated across all agencies and departments, 3) The **Open Data Charter** must be adopted to ensure open data practices are embedded beyond political mandates, 4) Citizens and intermediaries must be consulted when prioritising which open data to publish first, and 5) Investment must be made in using open data to improve the lives of marginalised groups. The **European Data Portal** performs a similar function for European countries through its **Open Data in Europe** portal.



## Open Data BCN (Catalonia)

**Open Data BCN** is a project that was launched in 2010 as part of the **Barcelona Digital City** strategy, fostering a pluralistic digital economy and developing a new model of urban innovation based on the transformation and digital innovation of the public sector and its implications for companies, administrations, the academic world, organisations, communities and people. The project, which encompasses several of the main pillars underlying the city's digital strategy, is based on the main open data standards and international recommendations, and adopts certain characteristics that summarise the principles of this movement: 1) Open data by default, 2) Quality and quantity of information, 3) Data for the whole world, 4) Data to improve governance and 5) Promotion of innovation. The dataset catalogue forms the main section of the website, providing a place for users to find all the information made available by the **Barcelona City Council** in reusable formats. The information is classified into five main topics: Administration, Urban environment, Population, Territory, Economy and Business, which are also divided into subtopics. All the resources can be downloaded and, depending on the format and type of storage, can also be previewed in the form of tables, graphs and maps. The dataset catalogue section uses CKAN software, which has been developed by the **Open Knowledge Foundation**.



The screenshot shows the Open Data BCN website interface. At the top, the logo "Open Data BCN" is displayed with the tagline "Ajuntament de Barcelona's open data service". A navigation bar includes links for "ABOUT THIS SITE", "DATASET CATALOGUE", "PRESENT", "REUSERS", "STATISTICS", "BARCELONA DADES OBERTES CHALLENGE", and "WORLD DATA WIZ CHALLENGE 2018 BARCELONA-KOBE".

The main content area features a breadcrumb "Home / About this site / Statistics" and a section titled "Open Data BCN Stats" with the subtitle "More information in the Barcelona's City Council Open Data Catalogue-Open Data BCN".

A "Data volume" section displays three statistics: "450 Datasets" (with a network icon), "2467 Resources" (with a document icon), and "25 Formats" (with a download icon). Below this is a box stating "Quality level according to Tim Berners-Lee" with "98.89% datasets >= 3 ★★★★★".

To the right, a pie chart shows the distribution of data formats. A legend below the chart lists the following formats and their counts: csv (1476), xls (287), xml (398), xlsx (179), zip (56), wms (29), rdf (28), 7z (20), kmz (10), geojson (8), json (16), shp (8), prj (6), shx (8), database (6), application/x-zip-compressed (6), wmts (5), dst (2), bdf (2), sbn (1), sbx (1), tif (1), txt (1), cpg (1), kmz (1).

# New trends



## Solving Public Problems with Data

The explosion in the availability of new sources of data and the emergence of new data science technologies are expected to have a significant impact on public institutions and how they solve problems and make decisions. Whether the goal is improved outcomes and equities, reduced cost and inefficiency, more evidence about what works or the identification of new operational solutions, the ability to use data is becoming essential to governing well in the 21st century. However, much of the promise of such data-driven and evidence-based decision-making has failed to materialise because of a lack of the experience needed for turning data into actionable insights. Even those with quantitative skills are often confronted with legal or technical impediments making it difficult to know how to collect, analyse, use, share, and store data responsibly and ethically. To examine how data can be used to improve decision-making and problem-solving in the public sector, **GovLab** offers the course **Solving Public Problems with Data**. Through real-world examples and case studies, it discusses the fundamental principles of data science to help foster a data analytic mindset. The goal is to enable public entrepreneurs to define and leverage the value of data to achieve their missions. GovLab is an organisation based in New York that is working to strengthen the ability of institutions and people to work more openly, collaboratively, effectively and legitimately to make better decisions and solve public problems.







## NGO Activism for Open Data

A growing number of Non-Governmental Organisations (NGOs) around the world are using open data as a tool for transforming society, tackling inequality, improving democratic quality and countering political corruption. One example of this new trend is **openAFRICA**, Africa's largest volunteer-driven open data platform, which aims to be the largest independent repository on the African continent. Users can upload their data, either to store it or to make it available to a wider public. They can also download data already on the platform for reuse in their own projects. Much of the data has been liberated by pioneering organisations, volunteers and activists, and is an eclectic collection that is far from comprehensive. All the data is intended to be actionable. OpenAFRICA is a grassroots initiative maintained by **Code for Africa**, a project driven and co-funded by citizen organisations focused primarily on building civic technology capacity within civil society and the watchdog media. The goal is to empower active citizenry and strengthen civic watchdogs to help governments shape and improve the services they offer to their citizens. Africa is a continent made up of one billion people living in 54 nations with a wide variation in economic and government systems, further differentiated by language, religion and a shared history. Code for Africa operates as a federation of autonomous, country-based, digital innovation organisations that support "citizen labs" in nine countries and major projects in a further 15 countries, including Tanzania, Nigeria, Sierra Leone and Morocco.

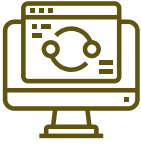




## Open Contracting Data

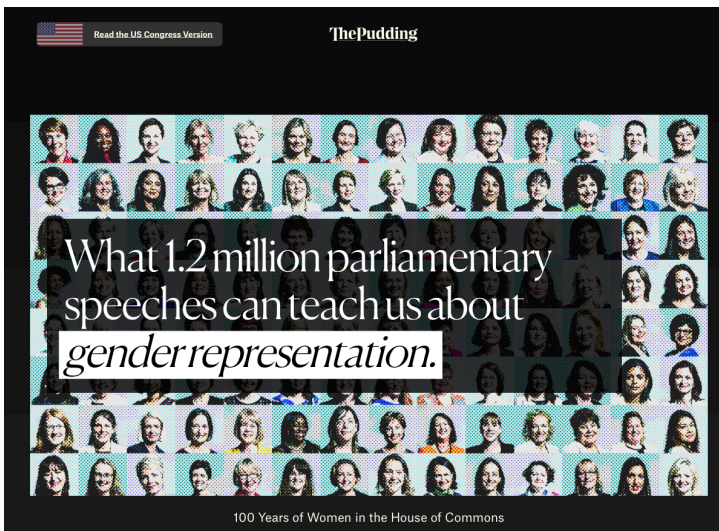
Approximately 15% of the EU's gross domestic product is spent every year on procuring goods and services. Yet, contracting information is often unavailable for public scrutiny. To keep corruption from compromising widely-supported public goals, different tools such as **Opentender** provide public procurement information in an easy-to-use format to all stakeholders. The aim is to increase market transparency, reduce transaction costs and facilitate government accountability. Opentender is a public and open procurement platform set up to contribute to achieving value for money in public procurement and increasing integrity throughout the public sector. Another similar tool is the **Open Contracting Partnership**, an organisation based in Washington D.C. (USA), working on the whole process of government contracting to use the power of open data to save administration time and money and deliver better goods and services to citizens, prevent corruption and create a better business environment. One of its core products is the **Open Contracting Data Standard**, which enables disclosure of data and documents all stages of the contracting process by defining a common data model. The **Directorate-General of Public Procurement** of the Government of Catalonia was recently handed the Alfons Ortuño Award for good practices in the Catalan public administration for its plan for publishing public procurement indicators through viewers and interactive maps.





## Data Journalism

In recent times, new technologies have led to the emergence of a “new” discipline in the field of communications sciences – data journalism. The media is increasingly offering its readers visual materials that are interactive, as well as big data processing to make sure that the news is clear, accurate and easy to understand, for example, through infographics, graphs and concept maps. This is partly thanks to a huge quantity of government data being released by administrations and governments around the world. This trend has become more acute over recent years due to the approval of legislation on transparency and access to information in response to European Union guidelines for countering corruption and the lack of transparency in the public administration. Data journalism is a tool that is here to stay and which is capable of explaining complex realities in a simple way, although data must always be analysed in context and properly interpreted to generate knowledge rather than an information overload. There are many examples of these new uses or media content based on government data. One of these is the study carried out by **The Pudding** on women’s participation in politics and the way in which their presence in the British parliament has developed over the years, starting with their acceptance into the House of Commons 100 years ago to the present day. For further information, see the **Data Journalism Awards**.



Read the US Congress Version

ThePudding

What 1.2 million parliamentary speeches can teach us about *gender representation.*

100 Years of Women in the House of Commons



# Newsflash

## UN E-Government Survey 2018

The *United Nations E-Government Survey 2018: Gearing E-Government to Support Transformation towards Sustainable and Resilient Societies* was launched on 19 July 2018. It offers a snapshot of trends in the development of e-government across the globe with headlines such as: European countries lead e-government development globally, generally there is a positive correlation between the country's income level and its e-government ranking and all 193 Member States of the United Nations had national portals and back-end systems to automate core administrative tasks. In the E-Government Development Index we can find the Top 10 Countries, ranked from highest to lowest: Denmark, Australia, Republic of Korea, United Kingdom, Sweden, Finland, Singapore, New Zealand, France and Japan.



## Open Government Data Report

The OECD has launched the publication *Open Government Data Report: Enhancing Policy Maturity for Sustainable Impact*, which provides an overview of the state of open data policies across OECD member and partner countries, based on data collected from 2013 to 2017. It assesses governments' efforts to enhance the availability, accessibility and reuse of open government data. It makes the case that beyond countries' commitment to opening up good quality government data, the creation of public value requires engaging user communities from the entire ecosystem, such as journalists, civil society organisations, entrepreneurs, major private technology companies and academia. The report also underlines how open data policies are elements of broader digital transformations, and how public sector data policies require interaction with other public sector agendas such as open government, innovation, employment, integrity, public budgeting, sustainable development, urban mobility and transport.



## EU Datathon

**EU Datathon** is a competition promoted by the Publications Office of the European Union with several partners in order to show and illustrate the power of open data as a way of stimulating enterprises, start-ups, individuals and other data enthusiasts from all over Europe to find practical solutions to societal problems, as well as generating jobs and growth. Participants have to develop apps using at least one dataset available via the **EU Open Data Portal**. The second edition took place in Brussels last October with 16 teams reaching the final out of a total of 72 proposals. The winning teams were **Medicatio** (“EU open data – For more innovation in Europe” challenge), **Lexparency** (“National and EU law – Make legislation interoperable” challenge), **Tenderlake** (“EU public procurement – Value for citizens, value for businesses” challenge) and **Open Food Facts** (“European Food Safety Authority – Fostering data reuse and innovation” challenge). The 2019 edition has just been launched.



## Open Data. Strategic guide for its implementation

The **Federation of Municipalities and Provinces of Spain (FEMP)** has published the guide *Open data: strategic guide for its implementation and minimum data sets to be published*. Its aim is to provide support in opening and reusing data with the capacity to generate value for citizens and businesses through open technological platforms. It consists of a working plan for the opening of data and its reuse, especially aimed at local administrations. One of its recommendations is for open government policies to be embedded in a global strategic plan. Based on this recommendation, it proposes creating a customised project that comprises different open data management processes and elements associated with a technological plan, data models, reuse measurement indicators, a training plan and internal and external outreach activities. It includes a legal framework on this matter, a model map of an open data portal, a bibliography and recommended resources.

## Data Economy: Wealth 4.0

The **Telefónica Foundation** has published the book *Economía de los Datos. Riqueza 4.0* (Data economy: Wealth 4.0) to help readers familiarise themselves with big data, one of the pillars of the digital age, and with applications that are becoming ever more present in our day-to-day lives. Led by Emilio Ontiveros and coordinated by Verónica López Sabater, the book includes chapters on open data (concept, limitations and measures adopted to help create standards), personal data protection in the world and the emergence of new professional skills and profiles such as those of chief data officer, big data engineer, lead data scientist, chief information security officer and data protection officer. The book also includes other important aspects related to data sovereignty and security.



## Data Visualisation Guide

In 2018 the Government of Catalonia published its *Guia de visualització de dades* (Data Visualisation Guide), a publication aimed at its departments and agencies, but also at citizens in general, which explains in simple terms how to efficiently represent complex information in graphs, something that is key to having a more informed society. The tool has been developed by the



Directorate-General of Citizen Services with the support of the Directorate-General of Dissemination and extends the guidelines for the corporate design of graphs and tables. Data visualisation is based on sorting data and communicating them in a straightforward, easy-to-understand way using graphs. The data viewer enables us to understand the relationship between social, economic and demographic trends by showing them on a map, crossing data from different sources, predicting future trends and drawing conclusions.

## New Spanish Personal Data Protection Act

Towards the end of 2018, the Spanish parliament approved the Spanish Data Protection and Guarantee of Digital Rights Act with 93% parliamentary support. The new legislation adapts the provisions of the General Data Protection Regulation of the European Union to Spanish law. The Act makes it easier for citizens to exercise their rights by demanding, in particular, that the means to do so are easily accessible. Another new aspect is the specific recognition of access, modification and erasure rights of people linked to deceased persons through family relationships and civil partnerships or of the heirs of the deceased. The text also regulates the right to be forgotten on social media and equivalent services and sets the minimum age for automatically consenting to the use of personal data at 14 years.



## Sharing personal data in the new data economy

The Government of Catalonia's Ministry for Digital Policy and Public Administration and the Centre of Excellence in Big Data in Barcelona (Big Data CoE) published a report in October 2018 entitled *Bones pràctiques per compartir dades personals en la nova economia de les dades* (Good practices for sharing personal data in the new data economy) in Catalan, which provides guidelines for appropriate processing of personal data and the right to anonymity in technologically complex environments. The aim of this publication is to facilitate the development of the new data economy in order to take full advantage of the opportunities it offers. It equips businesses and organisations with the tools to successfully meet the challenge of implementing the General Data Protection Regulation of the European Union without jeopardising the potential of this new economy. In order to facilitate

the decision-making processes of data-processing managers, the report reiterates the need to follow the recommendations laid down by ENISA (European Union Agency for Network and Information Security) in security and privacy matters.



## Alfons Ortuño Awards

Last December, the Government of Catalonia's Minister for Digital Policy and Public Administration, Jordi Puigneró, officiated over the award ceremony of the fourth edition of the *Alfons Ortuño Awards* for innovation and good practices in the Catalan public administration. In this fourth edition of the awards, promoted by the Public Administration School of Catalonia, 21 projects were put forward for awards, including projects developed by the different departments of the Government of Catalonia, local authorities and inter-municipal entities from all across Catalonia. The judges awarded four first prizes and three runner-up prizes in the categories of Organisation, processes and economic management; Transparency, good governance, assessment and quality; Development of teams and people; and End services. The jury also awarded two special prizes, one of which was for the Government of Catalonia's Open Data service because of its shift in policy towards open data by default beyond the obligations established by law. This service offers data that generate a public value, empower citizens, facilitate decision-making and accountability and establish a new framework for the relationship between the government and its citizens.



## Identities and Biases in the Digital Age

The European Political Strategy Centre (EPSC), in the context of the European Strategy and Policy Analysis System's (ESPAS) Global Trends to 2030 report, has released the fact sheet ***Identities and Biases in the Digital Age***. The document describes the growing concern that digital technologies may be impacting in unforeseen ways on human behaviour and social interactions. The ways in which digital technologies are used and the effect they have on personal identities, societies and politics can be shaped by public policies and everyday choices. This publication identifies key trends, uncertainties, risks and opportunities and issues for discussion about the impact on Europe.

## Fake News, Algorithms and Filter Bubbles

Issue 44 of the journal *Quaderns del CAC* (Consell de l'Audiovisual de Catalunya) examines a phenomenon that defines modern society, an entire system for constructing parallel realities: ***Fake news, algorithms and filter bubbles*** (available also in **Spanish** and **Catalan**). To manage the abundance of content available, major platforms and social networks use selection algorithms to offer each individual a collection of content that fits his or her preferences, which the algorithm ascertains based on the user's digital footprint. This practice creates real filter bubbles populated by ideologically-similar people. Fake news and filter bubbles become especially important in politically-polarised situations, such as those recorded in the cases of Brexit or the Catalan independence process, and during electoral campaigns, as in the USA or French elections. Issue 44 of the journal is an invitation to think about this concern.



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