

Re-use of Public Sector Information

How do we see ourselves?, How are we seen?, What is the tendency?

Until not so long ago, the term “public data” was associated with data re-use policies by the private sector. It went on to be associated with transparency and democratic legitimacy policies. Nowadays, there are many technological tendencies that feed off data to provide new and better services to society, such as those related to *big data*, high performance computing or the Internet of Things.

Policies that foster the re-use of public sector information are paving the way for the opening of data required for the implementation of other initiatives. The idea that data is what is interesting has become established and, consequently, a revolution is looming which extends this approach; the Administrations are incorporating the “**data-centric**” character into their modernisation strategies.

The OECD, fully aware of this reality, attaches considerable importance to the data-based administrative culture and related notions, such as the data-based economy. Therefore, in the [Recommendations for the development of Digital Administration Strategies](#), we can find an explicit reference to data as one of the pillars of the digital ecosystem in the definition of the digital administration concept expressed as the “*Use of digital technologies, as an*

integral part of the modernisation strategies of the administrations, to create public value. It is based on a digital ecosystem comprised of: governmental players, non-governmental organisations, companies, citizens' associations and individuals that support the production and access to data, services and contents through interactions with the government.”

In particular, the third recommendation refers to “***entrenching a data-based culture in the public sector***”; that is developed in two parts; the first part expressed as “*the development of frameworks to allow, steer and foster access, use and re-use of the growing amount of evidence, statistics and data related to operations, processes and results to increase transparency and in the formulation of policies, the creation of public value, the design and provision of services*”; and the second part as “*balancing the need to provide opportune official data with the need to provide reliable data, manage the risks of the misuse of data related to the increased availability of data in open formats (in other words, allow its use and re-use and the possibility that non-governmental players use and complement data in order to maximise the public economic and social value).*”

In the European Union, the new European Interoperability Framework published in March 2017 includes recommendations related to “*developing a common infrastructure of re-usable services and sources of information that can be used by all Public Administrations*”; and to “*establish procedures and processes to integrate the opening of data in common business processes,*

work habits and in the development of new information systems”, among others.

Undoubtedly, the inexorable tendency is to put the spotlight on data and maximise its open and reusable nature.

In this technical note, the situation of the re-use of information policies in Spain are reviewed from a triple perspective: how the Spanish Public Administration is moving forward, its position in the international sphere, and the situation of the industry that bases part of its activity on the re-use of data.

How are we seen in Spain?

According to the latest [Characterisation Report of the Infomediary Sector in Spain](#), the Public Administrations obtained a high pass of 3 (in a score out of 5) in relation to available information, improving its score with respect to previous editions of the Report.

This figure reflects the ongoing effort of the administrations in their commitment to the opening up of public data to facilitate its re-use for the generation of new services.

As can be seen in the following image, there are now 153 open data initiatives in the Spanish Administration, from the national, regional and local sphere:



Source: <http://data.gob.es/es/iniciativas>

The number of *datasets* published in the national Data Catalogue, data.gob.es, is also growing significantly, reaching close to 15,000.

There are many factors that contribute to the ongoing improvement in the opening of public data.

On one hand, in the regulatory field, the transposition of Directive 2013/37/EU, which modifies Directive 2003/98/CE related to the re-use of public sector information, has led to a reactivation of the importance of the unlimited opening up of data, as far as possible in the Administration. In the sphere of the General State Administration, the [regulatory development](#) of Law 37/2007, of 16th November, on the re-use of public sector information is being addressed, in which it aims to move forward in the concept of opening up data by default, reducing existing restrictions in terms of re-use,

fostering the use of open licences, as well as the link with transparency policies.

On the other hand, at a technical level, a new version of the data.gob.es national portal was published in December 2016 to increase its performance and usability and to extend the services in accordance with the new needs of users. It is worth mentioning the new sections introduced:

- Scorecard: allowing the graphic monitoring of the most relevant metrics of the activity, both the data catalogue and the portal.
- Re-use Cases: aimed at characterising and placing value on initiatives or companies that have developed new services or have enriched those produced to date through the re-use of public information.
- Data Availability: communication channel in which the publication of required datasets can be consulted or proposed, as well as suggesting improvements and new formats of those already published.

This evolution not only represents a design change but also a technological evolution that is enabling publishing organisations to incorporate datasets in the catalogue and, visitors can find the information through powerful search engines and information filtering mechanisms. Furthermore, tools are incorporated for technically advanced users to be able to use the data professionally and automatically: an enriched API with predefined consultations and a SPARQL point to access semantic information.

Furthermore, a multi-lingual interface and *responsive* design is offered that guarantees multi-device browsing, in line with today's technological mediums. From the tablet or *smartphone*, the user can explore the different sections of the platform via the simplified upper menu, locating the information he/she needs rapidly and simply.

How are we seen in the world?

There are numerous international indicators referring to the situation of opening up data from the different countries.

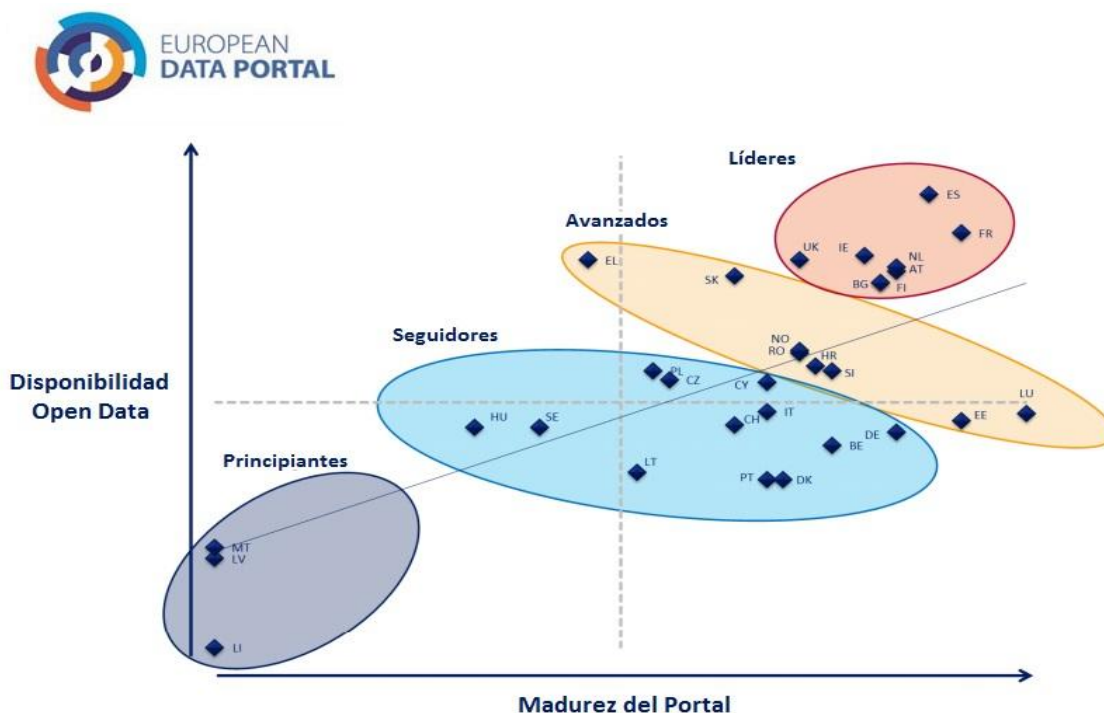
One of them is the [state of maturity of the Open Data initiatives in Europe](#) indicator, in which Spain boasts a leadership position. It is worth highlighting that, in this study, the analysis is performed on all of the existing open data initiatives in a country and the activities carried out to foster its re-use. More specifically, the study reflects indicators related to the availability of open data as well as the policies, rules, licences, coordination, use and impact of data and indicators related to the maturity of the portal, and its usability, re-usability and diffusion.



Evaluación de madurez de datos abiertos							
Disponibilidad open data					Madurez del portal		
1. Políticas open data	2. Normas licencias	3. Grado de coordinación nacional	4. Uso de datos	5. Impacto open data	6. Usabilidad del portal	7. Reusabilidad de los datos	8. Difusión de los datos en dominios

Fuente: Tabla 1. Indicadores de Madurez de Datos Abiertos. Estudio de Madurez de Datos Abiertos en Europa 2016. EDP.

The ranking of countries and their classification can be seen in greater detail in the following graph:

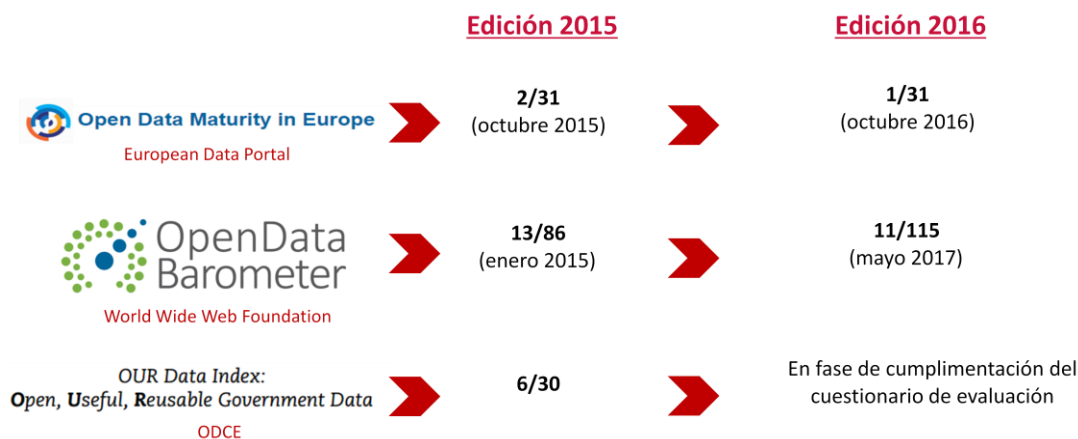


Fuente: Figura 3. Ranking de Madurez de Datos Abiertos de UE28+. Estudio de Madurez de Datos Abiertos 2016. EDP.

The major advance in Spain in comparison with 2015 is the **significant increase in the impact of open data**, particularly in the economic sphere. Indeed, Spain has obtained the maximum score, 120 points, compared to 90 the previous year. It is also worth highlighting that only two completely

mature countries have been identified in **terms of data availability**: France (84.4%) and Spain (92.2%), emphasising the work carried out by the latter in measuring the **social impact of open data**, in which it obtained 100% of the possible points.

On the other hand, there are another two international indicators: the World Wide Web Foundation’s [Open Data Barometer](#) and the OECD’s [OUR \(Open, Useful, Reusable Government Data\)](#). In both cases, Spain occupied a high place in the ranking, improving year on year, as can be seen in the following graph:



How is the re-use industry?

Spain has been a pioneer in the preparation of studies to find out the state of industry that bases part of its activity on the re-use of public sector information. Today, there are two reputed reports in the sector:

- The [Characterisation Report of the Infomediary Sector in Spain](#), prepared by the Telecommunications National Observatory and the Information Society, which was mentioned above.
- The [Infomediary Sector Report](#), produced by the Multi-sector Information Association (ASEDIE).

In the last edition of both reports, the evolution of this market was clearly seen. It is worth mentioning that the infomediary activity does not identify with any specific sector from the point of view of the National Classification of Economic Activities (CNAE), but there are many economic activities of companies that re-use information. The identification of infomediary companies is not generally carried out from the classification of these activities, but from their production processes and the added value products and services they generate.

Both reports point out that this type of company is mainly located in Madrid and Catalonia, followed by the Basque Country. They also coincide in pointing out the “market study”, “geographic information” and “economic-financial information” sectors as preferential for this type of activity.

Among other significant data, the ASEDIE report estimates that the total annual income of this sector amounts to 1.705 billion euros, up 2% on that of the previous report.

On the other hand, from the *Characterisation Study of the Infomediary Sector in Spain – Edition 2016*, we are particularly interested in the demands placed

on the public sectors by the Infomediary Sector, such as greater homogeneity of information at a regional and local level; greater pro-activeness in the management of information from the Public Administrations, fostering the opening up of data by default; increased availability and quality of public data, fostering structured data in reusable open formats and the interoperability; development of ICT tools that facilitate the automation of public data access, depuration, processing, enrichment and analysis processes; as well as a better orientation towards demand.

We have also detected a proposal or come to the conclusion that the **Administration can improve the re-use of its own data**, but it is also good for others identify it and put it down in writing. It is necessary to ask whether it uses all of the potential of the data and we must be aware that **it is necessary to project the methods and practices learnt from the re-use of information on a larger scale**. Therefore, the guidelines, methodologies, specifications, practices and solutions that are being implemented for the re-use of public sector information by those that provide this information and by the so-called re-use agents are now a reference that helps to distinguish a potential that is yet to be exploited by the Administration.

Conclusions

We are moving towards a *data-centric* scenario in which the focus of attention is increasingly being placed on all types of data, and in which there are many tendencies that seek their exploitation through the re-use of *big*

data, cloud computing, or high performance computing; in order to provide more and better services, resolve the problems of citizens and facilitate decision-making based on data.

The sources and volumes of data are growing. Data is the fuel of the digital economy. The OECD insists on the need to entrench a data-based culture and highlights its re-use. The European Union is also calling for the widespread sharing, use and development of public data resources through the Strategy for a Single Digital Market and its derived instruments, such as the new European Interoperability Framework.

Apart from the exceptions and precautions set out in the legal framework, the idea that public data should be available for re-use has been fostered. The Administration handles data intensively for all of its activities. In fact, the Public Administrations compile, generate and store huge amounts of data, which is necessary for the service of citizens, for decision-making, for the development of public policies, for re-use due to its social and economic interest, or for the transparency of the public activity.

Spain boasts a leadership position in Europe in terms of data re-use. However, the Infomediary Sector is calling greater homogeneity of the information at a regional and local level; greater proactivity in the handling of information from the Public Administrations, fostering the opening up of data; increased availability and quality of public data; and better orientation towards demand.

The Administration can increase the re-use of its own data; although, here, we can talk more about sharing rather than re-using, leaving this second voice for the dynamics of the re-using agents. As indicated in the Digital Transformation Plan of the General State Administration and its Public Bodies and the new European Interoperability Framework, this will involve the incorporation of practices aimed at identifying potentially reusable information from the design of the information systems and fostering the use of reusable formats in data handling.

The future is data, regardless of the technique used for its exploitation.

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