

Open Government Data Beyond Transparency

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Abstract. This paper aims to present and analyse the Open Government Data (OGD) legislation framework in force in the current Italian legal system. The previous legislation has been compared with the recently enacted Legislative Decree about transparency (the so called Transparency Act d.lgs. 33/2013). After discussing the normative contest, this paper completes the theoretical analysis with an empirical research conducted on the Italian Municipalities' web sites (35 portals) in order to deeply understand the connection between the Open Government Data legislation and the new Transparency Act. The aim of this comparison is to test and prove our theory about the fact that the Transparency Act doesn't enable and reinforce the OGD – as FOIAs do – but it subtracts resources, human capital, skills, funds and motivations. The Transparency Act, in fact, implements an old-style model of web site oriented to a "Public Administration centered" paradigm instead of an "ODG centered" one. The authors, finally, wants to identify a method to combine the two different approaches, having a unique production workflow of data and documents in Open Data format, with a semantic web metadata classification that qualify the information.

Keywords: Transparency, Openness, FOIA, Open Government, E-Government, Public Sector Information, Open Government Data, Open Data Format, Right to Access, Transparency Portal.

1 Introduction: OGA Beyond Transparency

The Open Government Data (hereinafter OGD) has started in 2009 in U.S. and U.K.¹ as movement for improving participation, transparency and cooperation². Open Government Data³ is used for releasing and disclosing data coming from the Public Entities in favour of citizens, companies, other Public Entities. This movement aims to reduce the lobby powers by enhancing transparency through the participation of

¹ September 2009 the portal data.gov.uk was opened.

² http://www.whitehouse.gov/sites/default/files/omb/assets/memoranda_2010/m10-06.pdf -
<http://www.whitehouse.gov/sites/default/files/omb/memoranda/2013/m-13-13.pdf> <http://www.w3.org/2009/Talks/0204-ted-tbl/>

³ <http://okfn.org/opendata/>

citizens, free availability and access to data and their reuse and redistribution aims also for driving the creation of innovative business and services that deliver social and commercial value. In Italy this movement has been so far really effective to fight corruption in Public Bodies, to counter criminal behaviours inside of the Public Administration, to combat mafia, to prevent unnecessary spending of public money and misuse of the public resources⁴ The E.U. already before the beginning of the OGD movement in 2003 adopted the Directive 2003/98/EC on Re-use of Public Sector Information (hereinafter PSI) introducing the concepts and the principles for the re-use of public sector information and establishing a minimum set of rules governing the re-use and the practical means of facilitating reuse of existing documents held by public Sector bodies of the Member States. The above-mentioned Directive has recently been amended by the Directive 2013/37/EU of 26 of June 2013. This new act has introduced in the recitals the concept of *Open Data* as to

“Open data policies which that encourage the wide availability and re-use of public sector information for private or commercial purposes, with minimal or no legal, technical or financial constraints, and which promote the circulation of information not only for economic operators but also for the public, can play an important role in kick-starting the development of new services based on novel ways to combine and make use of such information, stimulate economic growth and promote social engagement.

At meantime the new Directive at Art. 6 has introduced the possibility to sell the Open Government dataset under some special conditions that are “ marginal costs incurred for their reproduction, provision and dissemination” “together with a reasonable return on investment”.

This new provision opens an unexpected scenario for a business model⁵ based not on the free circulation of the knowledge as to the OD movement concept, but on a “reasonable return on investment” that put definitely the Open Government Data beyond the principle of transparency as above illustrated. Different scholars dealing with the debate about OGD have stressed the idea that the OGD should go beyond the pure rhetoric of transparency⁶ [1, 2, 3] or the spasmodic return of cash money as the result of an investment. The OGD is a new ecosystem capable to produce innovation, not only limited to transparency or revenue streams. The recent G8 Charter of Open Data introduces the concept of *free-release* of open data⁷ retracting the principles of the

⁴ <http://www.opencoessione.gov.it/> -

<http://www.openricostruzione.it/> - <http://www.openpompei.it/>

⁵ The business models for balancing private and public sectors in the open data domain will be investigated by the authors in another research.

⁶ <http://beyondtransparency.org/>

⁷ “Principle 1: Open Data by Default. 11. We recognise that free access to, and subsequent re-use of, open data are of significant value to society and the economy.” and “Principle 3: Usable by All. 20. We recognise that open data should be available free of charge in order to encourage their most widespread use.” and moreover “Principle 5: Releasing Data for Innovation: 26. Recognising the importance of diversity in stimulating creativity and innovation, we agree that the more people and organisations that use our data, the greater the social and economic benefits that will be generated. This is true for both commercial and non-commercial uses.”

new EU Directive on PSI where charging above *marginal cost* for the *return of investment* is also provided. So it seems that the transparency is not so longer the main reason that is leading the OGD strategy (see also the European Digital Agenda). A recent UNPAN [15] report remarks the areas where OGD should act: in government policy, social benefits and economical growth. We believe that the only transparency is a too limited goal for justifying a such world-wide phenomena, especially with the increasing of the private open dataset that should be integrated with the OGD dataset for making them usable and effective for substantial applications.

On the other hand the *Freedom of information act* (FOIA) [9] is for sure a pre-requirement in several countries where OGD has had so far a great improvement and success beyond the transparency concept (e.g. UK, Italy, Germany, Finland). The eGovernment survey 2012 by UNPAN⁸ report remarks this relationship between FOIA and OGD. Also the OECD⁹ report 2013 stresses the fact that PSI and FOIA are legislation enabling and favoring the OGD and so to reduce the resistances from the Public Administrations.

In this contest the Italian Government has introduced the so called *Transparency Act* with the aim to reinforce the *open by default* principle (see also the G8 Charter of Open Data [10]) with the intention of providing for Italy a FOIA Act. Actually, despite of the fact that the main principles declared in the first part, the above mentioned act doesn't follow this roadmap, the real goal of the *Transparency Act* is to supervise and keep watch on the public administration strategy, to monitor the performance of the public administration employees, to release information about the public administration plans and activities, to fight corruption and public employees absenteeism, to control the administration financial accountability and finally to compel the Public Entities to the publication of documents, that are already under the obligation of legal publicity, in open data format.

The Transparency Act has introduced in the Italian legal framework the principles of transparency; accessibility to the public administration public acts and documents. The Act has also introduced some good principles for reinforcing the Open Government Data application. However this Act has a different aim compared to the Open Data Paradigm as widely accepted within the OGD movement. The Transparency Act is target to monitor the performance of the public administration and to provide public documents to the citizens in Open Data technical format. The Act introduces a special section within the already existing public administration web sites, called "Transparent Public Administration" with a predetermined tree and typology of acts. In this respect Public Entities (in particular Municipalities that are enacting every day lots of different Acts) goes into confusion following the obligations settled in the d.lgs. 33/2013 and the Open Government Data legislations already existing.

This paper would like to present the current situation in Italy dealing with OGD legislation in comparison with the mentioned *Transparency Act* that is affecting the

⁸ See [8], Figure 6.8 FOI laws in countries around the world: Global view.

⁹ <http://www.oecd-ilibrary.org/docserver/download/5k46bj4f03s7.pdf?expires=1396804834&id=id&accname=guest&checksum=896E69C1130F06422BE63EBA218452F8>

Open Data Paradigm in favor of a very bureaucratic approach (§ 2). Secondly the paper completes the theoretical analysis with an empirical research conducted on the Italian municipalities web sites (35 portals) in order to understand the connection between the Open Government Data and the *Transparency Act* (§ 3). We would like to test and prove our theory that the *Transparency Act* doesn't enable and reinforce the OGD as other already existing FOIA in the World, but it is subtracting resources, human capital, engagements, motivations for implementing a parallel an old-style fashion web site more oriented to a *public-administration* center paradigm concept instead of a OGD centered concept (§ 4).

2 Italian Open Data Legislation

The Italian Open Government Data Legislation nowadays permits to the Public Administrations to have a reasonable legal framework for releasing open dataset at national, regional and local levels. The legal framework of the OGD is composed by several different Acts. Above all the fundamental important pillars are: the legislative decree n. 82/2005 and modifications, the implementation of the Directive 2003/98/EU with the legislative decree n. 69/2009 and the recent legislative decree n. 33/2013, the *Transparency Act*. The d.lgs. n. 82/2005 defines the Open Government Data modality, but there is no distinction between data and document in open data form. The d.lgs. n. 69/2009 provides the definition of document and the modality and practical means for the public administration that permit the release of documents in open format. In d.lgs. n. 33/2013 we can read a long list of public documents that should be published in digital format in a specific part of the official web site of the public administration as above referred but not mandatory in Open Data. We would like to investigate the contradictions and the ambiguities arising from cited legislation and especially to point put the norms that constitute an obstacles or a barriers for the OGA nowadays Italy.

2.1 Code for the Digital Public Administration

The d.lgs. n. 82/2005 the so called Code for Digital Public Administration (hereinafter CAD [18]) includes two important articles that defines the modalities and the format for the Open Government Data: see art. 52 and art. 68. Art. 52 in the paragraph 2, defines the *open data by default*. All the data and the documents owned by the public administrations and published in the web in any forms without license, are automatically released with an open data license. Art 52 refers to art. 68 where are defined two different concepts: open data format and Open Data Approach. The first definition is limited to the technical features such as neutrality from a specific technology. The second definition includes the characteristics of the Open Data phenomena: dataset in open format, with license that permits the reuse also for commercial purposes, free-release of data set or at charge at marginal costs.

2.2 Italian Implementation of PSI Directive

Italy implemented the PSI directive with the legislative decree n. 36, at 24 January 2006, after the adoption by Italian Government of the CAD Act. The harmonization

of the definitions among the two mentioned acts sometime are not always perfectly aligned. In particular is that emerges referring to the definition of document, licenses, owner of the documents or data. Also the multiple citation to both are creating clashing interpretations. The implementation of PSI Directive is more nebulous respect the CAD, at the same time the PSI Directive is more oriented to the document rather than to dataset. This distinction between data and document is relevant. Data are objective atomic measurement of a phenomena (e.g. wi-fi access, environment data, sensor values, traffic mobility data). Documents, better administrative documents, represent some step in the administrative process, a function with legal validity, and authenticable interpretation from the Public Administration. This is the reason why it is important to preserve the integrity of the administrative documents even if public. From the document, especially if they are modeled in XML, it is always possible to extract dataset to publish in open data.

2.3 Transparency Act: d.lgs. 33/2013

The Law 241/90 on the Administrative Procedure introduced in the legislative Italian framework the right to access to the administrative process for the subjects with a lawful and justified interest. The law represented real revolution in the Italian legislation for disclosing the public administration information in favor of a more transparent and ethic behavior of officers. This act produced a substantial change in the cultural management in favor of a unprejudiced and impartial public service for fighting favoritism, subjectivity and unfair bad practices including corruption crimes.

Despite to the Law 241/90, the missing point in Italy was to adopt a real FOIA. For this reason at end of 2013 the government released a d.lgs. (legislative decree) 33/2013 called, in very demagogic way, *Transparency Act*. This law created in the OGD community a great expectation and several associations asked to the government to foster this occasion for filling the gap about the freedom of information. The expectations have not so far been met and to despite to the statements of principle, the substantial of the norms are different.

For understanding the real goals of this act we need to consider that it is the coordination of several previous actions included in a larger strategy for fighting against the corruption in the Public Sector. The previous actions where: i) act n. 69, 18 June 2009 that introduced provisions for economic development, simplification, competitiveness; ii) legislative decree n. 150, at 27 October 2009 that introduced measures for the optimization of productivity of public work and the efficiency and transparency of public administrations; iii) act 6 November 2012, n. 190 that introduced provisions for the prevention and repression of corruption and illegality in the public service.

Following this roadmap the Transparency Act can't be considered a FOIA because the purposes and the basis are completely different.

Art. 1 of *Transparency Act* defines the General principle of transparency concept:

“Transparency is understandable as total accessibility to information about the organization and the activities of public administrations, in order to encourage widespread forms of control on the pursuit of official duties and the use of public resources.”

Reading this definition we can understand the real goal of this act as to the Government purposes.

Continuing the analysis of the Transparency Decree there are also other key articles that has an important implications and impact on the OGD.

Art. 2 defines the structure of the web site dedicated to the transparency as designed in the annex A. This structure is obligatory but is set up on an old-style, public administration oriented aimed to the internal organization and not based on the “event of life”. The structure is very difficult to navigate.

Art. 3 statues the freely right to access to the public documents with the possibility to use and re-use them.

Art. 4 defines limits to the application of the free access to the digital documents that are in contrast with the OGD. In particular a large of number of information and documents are excluded by this Transparency Act included databases and the document collections that are managed as databases. On the other hand the norm imposes that the information should be indexable from any search engine.

Art. 5 can be considered he main provision of the *Transparency Act* The articles defines the right for everybody, without providing a justification, to access to those information. In case the administration has not yet published the information, any citizen can make a formal request and the public administration should disclose the document within 30 days, is the so called “Civic Access”

Art. 7 defines the format for the publication of document . The article statues that the information should be published in open format not in Open Data modality. The difference is substantial. The open data format is limited to the technical digital form and the citation is done exactly to the CAD Act in the part (art. 68, parag. 3, point a) where it is defined only the technical aspects. This means that is not required and obligatory to define a license, the metadata, the provenience and the persistency of the dataset. At the moment in Italy 80% of the published data are in PDF, only and some time there is also the Excel format, without any license and certainness about them persistency over time. Art. 7 of the Transparency Decree reinforces also the *open data by default* but with a citation of the CAD and of the implementation of the PSI . “The license should be without any restriction except the attribution and the integrity”. This provision opens different interpretations about the concept of attribution and integrity of document. Theoretically a cc0 license is not eligible because it excludes the attribution. Also any other license that permits the manipulation of the document is not eligible because it changes the integrity of the document. So the perfect license, following art. 7 of the Decree statement, is *cc-by-sa-nd*, but this licence is contrary to the principle of free reuse. On the other hand the above explained transparency portal aims to comply with the legal publicity obligation and the document should guarantee the integrity and the conformity respect the original administrative act (art. 6).

Therefore art. 8, art. 14 and 15 define the limitation of time for the publication of the documents (from 3 to 5 years). This is another relevant difference with open dataset that not have limitation of time.

Thus for the explained reasons we can consider the Transparency portal a kind of old fashion web site dedicated to the publishing function for implementing the already existing right of access to public documents as to the Law 241/90. Publication of documents should be in open data format, but the license could be a non open license

(e.g. *cc-by-nc-nd*¹⁰). There is a limitation of time for the publication and no metadata are mandatory.

The *Transparency Act*, enacted the 14 March 2013 and entered in force at 20 April 2013, has been already implemented by the majority of Italian the public administrations thanks also to the penalties provided by the act:

“within 6 months from the enter in force for any violation of the tree there is a disciplinary notice to the manager of the public administration responsible and also an monetary penalty”.

The side effects of the Transparency Act is that all the public administration has now blocked or reduced the ongoing project of Open Data for concentrating the attention and the energy on the *Transparency Act* obligations.

Often because the transparency is a matter of the general secretary of the municipality it is not unusual to see different teams working on the same documents or datasets with two different perspectives: open data and transparency. This generates confusion in the end-user, duplication in different part of the portal of the same object, disorientation in the citizens that don't know which source is preeminent in case of clashing. A classical example is the balance-sheet: it is mandatory to publish the official balance-sheet of the Municipality in the Transparency area, usually it is published in PDF with the signature of the major. On the other hand a more machine-readable form is necessary for favouring the real reuse of the dataset inside of applications. This approach produces a duplication of documents, in the best scenario, or in the worst case the obligation to publishing in the transparency section, de facto, de-motivate the body to re-publish the same document in a different open format. Transparency Act becomes an excuse for publishing with a minor accuracy and attention to the Open Government Data Approach and in meantime it is an alibi for releasing PDF documents rather than to design a open data workflow.

3 Comparison Analysis between Open Government Data and “Transparency Portal”

3.1 Data.gov.it

Italy has an official government portal for collecting in a unique catalogue all the Open Government Data portals, at national, regional and local level. The current number of the official web sites dedicated to the open government data in Italy are 97¹¹ and 35 are municipality. The authors analyzed the OGD portals in comparison with the transparency portal starting from the official site.

¹⁰ Creative commons with attribution, non commercial uses, no derivative works, <http://creativecommons.org/licenses/by-nc-nd/4.0/>

¹¹ [http://www.dati.gov.it/content/infografica#Dove sono i data store italiani?](http://www.dati.gov.it/content/infografica#Dove%20sono%20i%20data%20store%20italiani?)
http://www.dati.gov.it/sites/default/files/dataset_infografica_27022014.zip

3.2 The Compass of Transparency

The Ministry of the Public Administration sets up a portal for helping the public administration to be compliance with the d.lgs. 33/2013 called “Compass of Transparency”¹² and so to implement the principles of transparency, access, accountability, participations, cooperation. This tool permits also to the citizens to monitor the implementation of the Transparency Act and so to directly participate to the improvement of the quality of the accessibility of the information. There is a session dedicated to collect comments, notices, and warning to send to the public administration entities. The system is based on a mathematical algorithm that calculates the compliance with the mandatory web site structure defined by law, the quality of the web sites dedicated to the transparency data, the presence of some type of data. There isn’t a specific parameter dedicated to measure the form of open data (e.g. CSV, excel). For this reason we have conducted a separate research with the following goals:

- 1) to know if all the municipality included in the data.gov.it have a session dedicated to the “transparency” as the law requires and in case which is the score calculated by “Compass of transparency” parameters;
- 2) to verify the percentage of pdf document respect the other open format;
- 3) to check the overlapping with open government data portal and in case if there is a strategy in the municipality for managing in coordinated way the publication of the information.

As to the research the average of the Compass of Transparency evaluation is 80,2%, the 86% of the public administration publish in PDF inside of the transparency portal without another corresponding open data format (usually xls and csv), the 28,6% of the 35 municipalities has an overlapping in the area of tender and balance-sheets between transparency portal and open data. Only few administration has optimized the overlapping using links, avoiding redundancy. All the resources used for the Transparency portal could be invested also in the OGD and so producing more return of investment in the open data ecosystem. An interesting similar work that confirm our finding, even if with a different methodology and approach, is [13] conducted for measuring the quality of the “Transparency Portal” on the 20 Italian regions, 10 provinces out 105 and on 15 municipalities out 8100. The outcome is the same: the quality of the “Transparency Portal” of those public administration has an average index of completeness 0,577 out 1 for the Italian Regions, 0,622 out 1 for the Provinces and 0,543 out 1 for the Municipalities.

In our research we have tried also to analyze the relations between the quality of the Compass indicator (manually calculated) and the number of the open dataset released by the municipality. The goal is to see if the good practice in the open data paradigm can produce a better quality management of the “Transparency Portal”. We have discovered that only three municipalities (Albano, Bologna and Florence) have a good relation between the two indicators (the number of the dataset is normalized with the *min-max* function in order to reduce the indicator in the range [0,1]. We have

¹² <http://www.magellanopa.it/bussola/page/overview.html>

used this formula $\frac{Xi-Xmin}{Xmax-Xmin}$. For the Compass indicator we have calculated how many parameters are passed out 74 and we have calculated the percentage). This means that the cultural and the human capacity of the open data staff are often isolated in a particular area of the public administration (usually ICT department) without a real integration in the whole policy of the institution, and so the add value of the open data is underused.

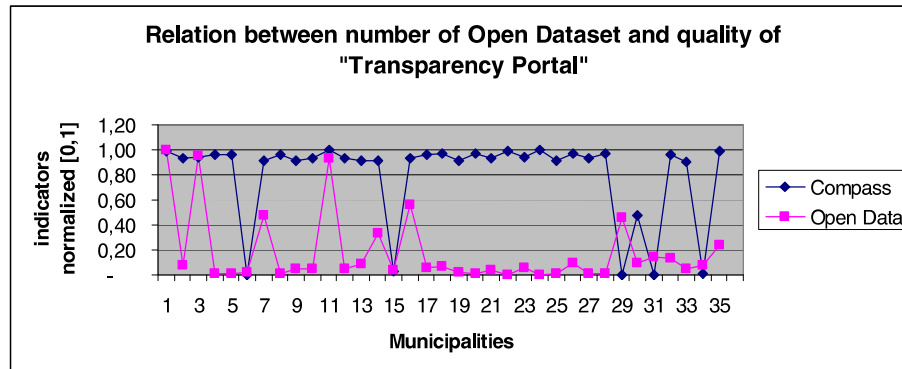


Fig. 1. Different characteristics of the four official web portals

4 New Strategy Beyond the Transparency

The OGD is entering the second generation era and the transparency principle is not so longer the main motivation for investing resources, human capital, time. The OGD is an ecosystem where at least three key areas should be involved: government policy improvement (transparency, participation, cooperation, accountability); social benefits (quality of services, quality of life, cohesion) and economical growth (new business models for the digital economy). The paradigm is not so longer *eGovernment* but *we-Government* [12] with a strong engagements of all the stakeholders: citizens, public sector, private companies, no-profit organizations, associations. In this scenario we need to have a real FOIA act for enabling a paradigm beyond the transparency and for permitting the real participation in the management of the public data and things (smart cities). Considering all the above mentioned and explained reasons the Italian *Transparency Act* in our opinion is not a FOIA. It disregards the expectations and affect the Open Data.

In the following figure 1 we show how complex is the relationships between the different web portals of the public administration. The first column represents the *right to access* to the documents that includes also not public documents but that could be access from everybody with a *eligible interest*. An example of type of information usually under the *right to access*, present in the eGov service but not in the OGD portal, is the administrative procedure for the building authorization (e.g. label B) presented by a physical person. Some documents could be public and so they are published in the *Transparency Act* portal, e.g. label A is present in all the three

portals. An example could be the list of a tender selection. In the second column there are all the documents archived in the eGov services, usually they are the outcome of the interaction between the web services provided by the public administration and the citizens/companies. Some of them could be transformed in OGD (e.g. public financial funding released to beneficiaries for reimbursing damages caused by environment disasters or earthquakes. The label *L* and *M* could be those typology of information). In the third column we have *Transparency Act* portal where there is the obligation to publish every public act. Also in this case a sub-set could be published also in open data modality. Finally the fourth column presents the Open Data official portal for releasing dataset with metadata, license, multiple format.

The overlapping is evident with the great confusion for the end-users and for the public servants.

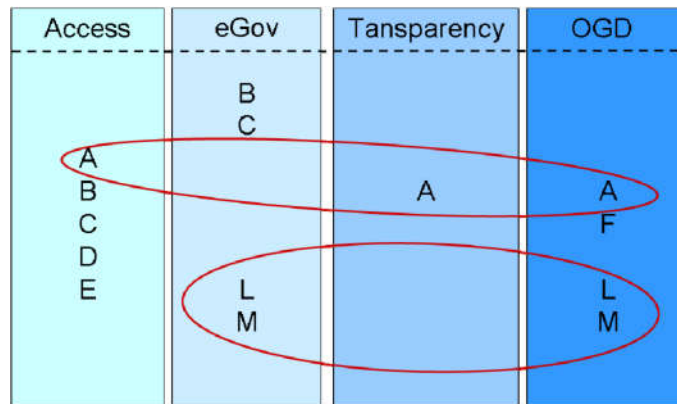


Fig. 2. Overlapping among different official web portals of the public administration

Access	eGov	Transparency	OGD
Right to access Transparency of the Administrative process Right to know if there is a Legitimacy to know	eGOV -eService -Efficacy -effectiveness -Event of life -Citizen centric vision	Open Gov Data -reuse -Open format -Open License - Open data without connection with the right of access -No personal data - No temporal limits - Not mandatory but recommended	Transparency -Obligation of publicity -Internal performance vision -Organization oriented -Performance oriented -Anti-corruption -Anti-mafia - Personal data included -Limitation of time of publication -Right to be forgotten -Right to not retention of data

Fig. 3. Different characteristics of the four official web portals

The purposes of the four portals are different (see the figure 2) and we can see that there are strong overlapping (e.g. balance-sheets, employees data, tenders). The correct way, as to the opinion of the authors, is to design the web sites as output of an unique workflow of the data and document production oriented to the Open Data. If the OGA is a method of work and not only a method for publishing document and data, all the internal back-offices could be designed for producing output in Open Data.

5 Conclusions

Italy has a legal framework enabling and supporting OGD process in all the public administration and is a matter of fact that the web site data.gov.it has nowadays about 10.000 dataset. However the recent *Transparency Act* has affected the quality and the quantity of the dataset in the last six months. As referred *Transparency Act* is not FOIA and it is oriented to contrast bad practices in the public administration (corruption, mafia, nepotism, etc.) rather than helping and enabling the OGD, furthermore the solution proposed by the Transparency Decree is a web site old-style oriented. The theory of the authors, that *Transparency Act* affected the open data, was also tested using the “Compass of Transparency” for measuring the quality of the transparency area of the web site and we have also measured in the parallel open data portal how much the two portals overlap (28,6% of overlapping). The solutions that some Municipality applies is to include inside of the open data portal a special session dedicated to the transparency act, but also this approach is not appropriate considering that some documents (e.g. contract, cv) should be removed according with the *right to be forgotten*. The authors maintain that should be appropriate and convenient to adopt a unique production workflow of data and document in open data format, with a semantic web metadata classification that could qualify the information and so to help the rendering in the correct portal and modality.

Secondly the author calculated also the relation between the quality of the “Compass of Transparency” indicator with the number of the dataset released by the administration in order to verify if it exists some positive correlation among the two phenomena. We have discovered that the open data paradigm rarely is adopted as a cultural opportunity to change the data quality management. This means that the open data staff is still isolated inside of the public administrations of Italy and it is remain a niche area, some time with marketing or political finalities. The real open data transformation, and so the real transparency, will be implemented when the open data principles are absorbed and digested by all the back-offices of the information systems working inside of the complex architecture of the intuitions and moreover by all the public servants as cultural behavior.

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23. Directive 2013/37/EU of the European Parliament and of the Council of 26 June 2013 amending Directive 2003/98/EC on the re-use of public sector information, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013L0037>
24. Legislative Decree of 14 March 2013, n. 33, Riordino della disciplina riguardante gli obblighi di pubblicità, trasparenza e diffusione di informazioni da parte delle pubbliche amministrazioni, G.U. n. 80 (April 5, 2013), <http://www.normattiva.it/uri-res/N2Ls?urn:nir:stato:decreto.legislativo:2013-03-14;33!vig=>

Annex with Statistical Data

Data for creating the “Compass of Transparency” indicator

Municipality	Region of the municipality	Link to the open data portal	Link to the “PA transparent”	Num. dataset ¹³	Percentage ¹⁴
Comune di Albano	Lazio	http://dati.opendataground.it/comune/albanolaziale	http://www.comune.albanolaziale.rm.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/170	557	98,6%
Comune di Bari	Puglia	http://opendata.comune.bari.it/	http://www.comune.bari.it/portal/page/portal/bari/comune/amministrazioneTrasparente	46	93,2%
Comune di Bologna	Emilia-Romagna	http://dati.comune.bologna.it/	http://www.comune.bologna.it/trasparenza/	533	94,6%

¹³ Number of the dataset released by the municipality.

¹⁴ Percentage of compliance calculated with the tool “Compass of Transparency” <http://www.magellanopa.it/bussola/page/overview.html>

Comune di Borgomanero	Lombardia	http://www.comune.borgomanero.no.it/trasparenza/opendata.aspx	http://www.comune.borgomanero.no.it/trasparenza/trasparenza.aspx	7	95,9%
Comune di Busto Garolfo	Lombardia	http://www.comune.bustogarolfo.mi.it/index.php/opendata/	http://www.comune.bustogarolfo.mi.it/index.php/trasparente	6	95,9%
Comune di Cagliari	Sardegna	http://www.comune.cagliari.it/portale/it/opendata_info.page;jsessionid=6AC7856D951D3C7665E10CD06CFABA23		11	
Comune di Cesena	Emilia-Romagna	https://servizi.comune.cesena.fc.it/opendata/index.jsp	http://www.comune.cesena.fc.it/amministrazionetrasparente	265	91,9%
Comune di Cosenza	Calabria	http://www.comune.cosenza.it/pagina784_opendata.html	http://cosenza.etrasparenza.it/	9	95,9%
Comune di Faenza	Emilia-Romagna	http://www.comune.faenza.ra.it/Amministrazione/Bilancio/Open-data	http://www.comune.faenza.ra.it/Amministrazione/Amministrazione-trasparente	31	91,9%
Comune di Ferrara	Emilia-Romagna	http://www.comune.fe.it/index.phtml?id=3507	http://www.comune.fe.it/index.phtml?id=3590	28	93,2%
Comune di Firenze	Toscana	http://opendata.comune.fi.it/	http://www.comune.firenze.it/export/sites/retcivica/comune_firenze/comune/trasparenza/index.html	520	100,0%
Comune di La Spezia	Liguria	http://www.comune.laspezia.it/servizionline/open_data/	http://www.comune.laspezia.it/ilcomune/trasparenza	31	93,2%
Comune di Matera	Basilicata	http://dati.comune.matera.it	http://www.comune.matera.it/it/amministrazione-trasparente	49	91,9%
Comune di Milano	Lombardia	http://dati.comune.milano.it/	http://www.comune.milano.it/portale/wps/portal/CDM?WCM_GLOBAL_CONTEXT=/wps/wcm/connect/ContentLibrary/elenco+siti+tematici/elenco+siti+tematici/amministrazione+aperta/amministrazioneaperta_home	188	91,9%

Comune di Napoli	Campania	http://goo.gl/Mr658U	http://www.comune.napoli.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/21982	25	2,7%
Comune di Palermo	Sicilia	http://www.comune.palermo.it/opendata.php	http://www.comune.palermo.it/amministrazione_trasparente.php	316	93,2%
Comune di Pavia	Lombardia	http://goo.gl/bZBP9	http://www.comune.pv.it/site/home/il-comune/amministrazione-trasparente/home.html	35	95,9%
Comune di Piacenza	Emilia-Romagna	http://web2.comune.piacenza.it/comune/opendata	http://www.comune.piacenza.it/comune/trasparenza/amministrazionetrasparente	39	97,3%
Comune di Pioltello	Lombardia	http://goo.gl/6xRtR	http://www.comune.pioltello.mi.it/PortaleNet/portale/CadmoDriver_s_128378	12	91,9%
Comune di Pisa	Toscana	http://www.comune.pisa.it/progetto/8340/Open-data.html	http://www.comune.pisa.it/progetto/8867/Amministrazione-Trasparente.html	6	97,3%
Comune di Ravenna	Emilia-Romagna	http://opendata.comune.ra.it/	http://www.comune.ra.it/Amministrazione-Trasparente	23	93,2%
Comune di Reggio Calabria	Calabria	http://www.reggio-cal.it/online/Home/AreeTematiche/OpenData.html	http://www.reggiocal.it/online/Home/AreeTematiche/AmministrazioneTrasparente.html	4	98,6%
Comune di Rimini	Emilia-Romagna	http://www.comune.rimini.it/filo_diretto/open_data/	http://www.comune.rimini.it/servizi/amministrazione_trasparente/	34	94,6%
Comune di Riva del Garda	Trentino-Alto Adige	http://goo.gl/gQ18Vz	http://www.comune.rivadelgarda.tn.it/Amministrazione-Trasparente	3	100,0%
Comune di Roncade	Veneto	http://goo.gl/fWlp7c	http://www.comune.roncade.tv.it/index.php?area=1&menu=327	9	91,9%
Comune di San Giuliano Milanese	Lombardia	http://www.opendata.sangiulianonline.it/	http://www.sangiulianonline.it/amministrazionetrasparente/atrasp/	54	97,3%
Comune di Sestu	Sardegna	http://www.comune.sestu.ca.it/opendata-sestu	http://www.comune.sestu.ca.it/amministrazione-trasparente	10	93,2%
Comune di Tolentino	Marche	http://www.comune.tolentino.mc.it/?page_id=37143	http://www.comune.tolentino.mc.it/?page_id=38146	10	97,3%

Comune di Torino	Piemonte	http://www.comune.torino.it/aperto/		256	
Comune di Trento	Trentino-Alto Adige	http://www.comune.trento.it/Comunicazione/Trasparenza/Open-data	http://www.comune.trento.it/Comune/Organizzazione-comunale/Amministrazione-trasparente	58	47,3%
Comune di Udine	Friuli-Venezia Giulia	http://goo.gl/pZtlo	http://www.comune.udine.it/opencms/opencms/release/ComuneUdine/comune/Nuovo_progetto_trasparenza/Disposizioni_generali/Programma_per_trasparenza_e_integrita.html?style=1	84	0,0%
Comune di Venezia	Veneto	http://dati.venezia.it/	http://www.comune.venezia.it/flax/cm/pages/ServeBLOB.php/L/IT/IDPagina/63887	75	95,9%
Comune di Verona	Veneto	http://www.comune.verona.it/nqcontent.cfm?a_id=37264	http://portale.comune.verona.it/nqcontent.cfm?a_id=37902	29	90,5%
Comune di Viadana	Lombardia	http://www.comune.viadana.mn.it/?q=content/infog-en_altro_open-data		45	1,4%
Comune di Vicenza	Veneto	http://dati.comune.vicenza.it/	http://www.comune.vicenza.it/amministrazione/trasparente/	134	98,6%
Total Dataset				3542	80,2%

Data for creating the figure 1.

Num.	Municipalities	Compass	Open Data
1	Comune di Albano	0,99	1,00
2	Comune di Bari	0,93	0,08
3	Comune di Bologna	0,95	0,96
4	Comune di Borgomanero	0,96	0,01
5	Comune di Busto Garolfo	0,96	0,01
6	Comune di Cagliari	-	0,01
7	Comune di Cesena	0,92	0,47
8	Comune di Cosenza	0,96	0,01
9	Comune di Faenza	0,92	0,05
10	Comune di Ferrara	0,93	0,05
11	Comune di Firenze	1,00	0,93
12	Comune di La Spezia	0,93	0,05
13	Comune di Matera	0,92	0,08
14	Comune di Milano	0,92	0,33
15	Comune di Napoli	0,03	0,04

16	Comune di Palermo	0,93	0,56
17	Comune di Pavia	0,96	0,06
18	Comune di Piacenza	0,97	0,06
19	Comune di Pioltello	0,92	0,02
20	Comune di Pisa	0,97	0,01
21	Comune di Ravenna	0,93	0,04
22	Comune di Reggio Calabria	0,99	0,00
23	Comune di Rimini	0,95	0,06
24	Comune di Riva del Garda	1,00	-
25	Comune di Roncade	0,92	0,01
26	Comune di San Giuliano Milanese	0,97	0,09
27	Comune di Sestu	0,93	0,01
28	Comune di Tolentino	0,97	0,01
29	Comune di Torino	-	0,46
30	Comune di Trento	0,47	0,10
31	Comune di Udine	-	0,15
32	Comune di Venezia	0,96	0,13
33	Comune di Verona	0,91	0,05
34	Comune di Viadana	0,01	0,08
35	Comune di Vicenza	0,99	0,24