

TERRITORIAL OPEN DATA TO SUPPORT SEAP DEVELOPMENT

Fabio Disconzi, University of Padua, +39 049 827 7531, fabio.disconzi@unipd.it
Arturo Lorenzoni, University of Padua, +39 049 827 7559, arturo.lorenzoni@dii.unipd.it

Overview

Up to May 2014, more than five thousands European local authorities signed the Covenant of Mayor, 2719 of them are located in Italy. Signatories express their commitment preparing a document that represent the historical environmental performance, the Baseline Emission Inventory (BEI), followed by the Sustainable Energy Action Plan (SEAP) which describes envisioned activities and measures to implement in order to achieve the 2020 CO₂ reduction target. The definition of those documents requires substantial efforts both in terms of administrative resources and of data analysis (data-searching, management, exploitation and visualization). The research carried out in this paper has the roots in the latter context and focuses on the domain of territorial data.

Public, freely available, searchable, reliable and updated datasets might support analysts in understanding the community capability and weaknesses, helping administrations in drawing actions to undertake within the covenant timespan. The focus of the research has been to make a portrait on how territorial data are distributed and can be used for environmental improvement and policy setting in Italy. The article presents a rating system, developed bearing in mind the needs of energy-economics analysts, and shows the first application on 21 Italian regional geoportal.

Methods

The evaluation of territorial data distribution in Italy has been carried out by developing a rating system composed by 27 indicators grouped in 6 classes. The investigated issues are: 1- search engine optimization (data have to be discoverable via internet search engines), 2- geoportal structure, 3- data-directory organization, 4- territorial and environmental data availability, 5- WebGIS (online data visualization) and 6- other services.

The methodology is scalable to geoportals with different geographical dimensions, from national to municipal ones. The regional dimension has been choose as the most representative of the Italian data-distribution situation.

Results

The first version of the rating system and related evaluation is presented. There are huge differences amongst geoportals both in terms of data-availability and usability. None of them presents the same functionality neither the same structure. Almost all geoportals have good characteristics in terms of search engine optimization. Majority of them do not permit users to locally-download datasets related to specific territorial data even if they let to investigate the same dataset via Web Map Services (WMSs). Some data-directories require registering and logging in order to download and view datasets, a functionality deprecated by European directives.

An overview of data distribution situation in Italy is provided by the overall rating report, for each regional geoportal more details, notes and guidelines are provided to highlight which are the poorest services and to stimulate the implementation of best technical and organizational practices.

Conclusions

Data management issues are of paramount importance, “data are the new gold”, as said in 2011 by the Vice-President of the European Commission Neelie Kroes. Data availability, especially in the field of energy-economics, generate benefits that span from the technical sphere to the social and political ones.

From the point of view of analysts, territorial data provide valuable and sound information for designing energy-environmental models able to support plans and policies development as BEI and SEAP in the Covenant of Mayors initiative. From the point of view of citizens, they represent a possibility to understand complex decisions. For administration, they are a source to exploit in order to understand community capabilities and weakness. The impact of

data-distribution affect also the communication between local authorities and citizens with effects on transparency issues.

References

Presidenza del Consiglio dei Ministri – Agenzia per l'Italia Digitale, (2014), Agenda Nazionale per la valorizzazione del patrimonio informativo pubblico (anno 2014)

European Commission, Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE)

Decreto Legislativo 27 gennaio 2010 n.32., Attuazione della direttiva 2007/2/CE, che istituisce un'infrastruttura per l'informazione territoriale nella Comunità Europea (INSPIRE)

Bernard L., Kanellopoulos I., Annoni A., Smits P., (2005), "The European geoportal—one step towards the establishment of a European Spatial Data Infrastructure", *Computers, Environment and Urban Systems*, 29: 15-31

Maguire D. J., Longley P. A. (2004), "The emergence of geoportals and their role in spatial data infrastructures", *Computers, Environment and Urban Systems* 29: 3–14