

A Spanish Standard for defining Open Geographic Data

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Abstract:

There are a wide variety of initiatives and guidelines recommending publishing government data, especially geospatial data as open data, for instance:

G8 launched in June 2013 in a meeting in Lough Erne (Ireland) the G8 Open Data Charter recognizing that Open Data improves Governance and it is an innovation engine. Geographic data were included as one of the areas of great value. The eight countries were committed to approve an action plan before 2013 October and yearly publish a report.

G20 and United Nations supports the International Open Data Charter since 2015 extending the former proposal to all the countries. Six basic principles are defined: data should be open by default, timely and comprehensive, accessible and usable, comparable and interoperable, for improved Governance and Citizen Engagement, and for inclusive development and innovation. Until now 19 national and 43 local governments has adopted the chart and 46 organisations has endorsed it.

The European Interoperability Framework v2, approved by the European Commission on March 2017 to improve the quality of European public services devotes a full section to explain what exactly Open Data is and to support it.

The United Nations Global Geographic Information Management (UN GGIM) recognizes in its Integrated Geospatial Information Framework – Part 1 Overarching Strategic Framework (July 2018) that geospatial information is a key component of the government's open data agendas which stimulates opportunities and include government delivery systems focused on the citizen in an efficient and effective way.

But, although it seems there is a wide consensus on the positive effect of having governmental Open Data, and there is a common understanding of the theoretical meaning of Open Data (data with no barriers for use and reuse by everybody under any circumstances) there is not a common practical understanding about what Open Data is. In our opinion, the more detailed and precise technical definition of Open Data is due to the Open Knowledge International (opendefinition.org), but the problem is that there is not an Abstract Test Suite to check and verify if a dataset is published fulfilling the requirements defined in it.

By the other hand, Open Data are not yet widely implemented. The Global Open Data Index 2018 states that the National Map 1: 250,000 data are published as Open Data only in the 10 % of the countries studied. We think one of the reasons of the lack of implementation Open Geographic Data (OGD) is that there is no a standard easily verifiable technical definition of OGD.

Because of that, the Spanish Standardization Technical Committee 148 “Digital Geographic Information” decided in 2016 to define a Spanish standard on Open Geographic Data to have an objective procedure to verify and certify if a geospatial dataset is published or not as Open Data, as a tool to promote and support Open Data.

UNE 148004:2018 “Datos geográficos abiertos” (Open Geographic Data) was approved in 2018 after following the standard UNE processes, including two rounds of comments and one public information period. More than the eighty five per cent of the comments received were totally or partially accepted and we think the result reflects the consensus reached in the Spanish geographic data community around this topic.

This Spanish standard establish a technical full and detailed definition of what exactly is Open Geographic Data (OGD) and defines a set of objective requirements to be fulfilled in order to publish a geographic dataset as Open Data. It is based in three main principles:

- Principle of minimizing barriers, following the idea that Open Data are data published without economic, technical and legal barriers for their use and reuse.
- Principle of no-discrimination of any kind of users, field of application, social group and future use of data.
- Principle of technological neutrality, which is in fact a particularization of the former one, stating that any user shall be discriminated on the basis of the technological solutions (browser, operating system, software...) he has chosen.

Applying those general principles, UNE 148004:2018 defines four conceptual levels for geographic data in the way of progress towards having OGD: available, well described, under an open license and in an open format geographic data. It provides also an Abstract Test Suit for verifying and certifying, if required, Open Geographic Data.

In this communication a general approach to open geographic data, a justification for developing this standard and a brief and complete summary of its contents and prescription are given. We think this new Spanish standard will promote and support Open Data in the field of Geographic Information and we hope it will promote the progress and growth of the Spanish geospatial sector.