

## VECTOR TILES MAPPING WITH OFFICIAL GEOGRAPHICAL INFORMATION

The spread of mobile devices connected to the Internet has universalized the daily use and application of geographic information.

Geolocation, routing applications, or simply the representation of general information on a geospatial context, requires accurate, usable and updated geographical references.

Until a few time Topographic maps were the geographical reference by excellence but they are being replaced by another type of non-official contextual cartographic documents, specifically designed to offer a global geospatial framework capable of minimizing visual competition with the data it supports.

Cartography producers must consider the way this information is going to be used, and the necessary technological aspects for its use in mobile devices. The multiscale cartographic solutions, based on services of pyramidal raster and vector tiles, are the best options that fits this environment.

In order to respond to the challenges posed by this new technical and semiotic context, a working subgroup was established in the Geographic Standards Specialized Commission of the Spanish Geographic High Council. The objective was to develop a guide for the implementation of the Official Geographic Information (IGO) basemap, for use in displays with vector tiles technology.

A technical and symbolic proposal was based on free software tools and libraries, using also the official geographic information generated by all Public Administrations, gathered in the Spanish National Cartographic System.

Through this project, a set of geomatic processes are being studied and defined. The objective is to produce a distributed collection of multi-scale vector tiles services containing the geographical elements necessary for the representation of different cartographic products of the Spanish territory and also in a global scope.

As a result, an official vector tile service of the Spanish national territory will be offered based on official geographic information (geographical names, administrative boundaries, roads, addresses..). It will also be proposed a complementary collection generated from open data in order to offer a raster tile service for global applications.

The detailed information related with the development of the project is available in the following URL <https://sgtmapabaseigo.github.io/Ma>

The vector tiles services (official and global) are available on the following website <https://vts.larioja.org/>

### Sub-category

1.4 Macro-regional cooperation

### IJSDIR

No, I will not submit an article to IJSDIR

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