Portugal

Defining new technical specifications for Portuguese reference cartography

Directorate-General for the Territory (DGT) is responsible for defining technical specifications for Portuguese reference cartography and has delivered enhancements to meet three main objectives.

These include aligning cartographic production technical specifications to the technological developments which have significantly changed the way users explore spatial data. DGT has also developed new ways to better connect the technical specifications for Portuguese reference cartography production with the INSPIRE rules and specifications to simplify data harmonisation procedures. Finally, the work will contribute to a better implementation of the Cartographic National Database.

The INSPIRE themes considered relevant for creating the new technical specifications were: Geographical Names, Transport Networks, Hydrography, Elevation, Land Cover, Buildings, Production, Industrial Facilities and Utility, Governmental Services and Orthoimagery.

A working group composed of several technicians with complementary skills was established to restructure the technical specifications for cartographic production. The process also included input from external experts from the central and local public administration, the private sector and the academy. This wide-ranging participation was designed to produce specifications which meet the many demands arising from multiple uses of spatial data.

The first draft was available for public consultation and was also analysed and approved by the organisations that coordinate the Portuguese National Spatial Data Infrastructure. It was also presented to the Portuguese Local Public Administration through several public events attended by more than 500 people.

The data model of these technical specifications was implemented using a database PostgreSQL/PostGIS and includes data for two levels of detail, level 1 for cartography in urban areas and level 2 for cartography for the whole territory. These new technical specifications will be tested in a real-life production environment through several case studies developed in collaboration with private companies.

It is expected that the new technical specifications for base geodata acquisition will meet the needs of the different users, and, in this way, will contribute to a more widespread use of Portuguese spatial data. The next steps will include capacity building and awareness sessions for the user community, namely for local government technical resources, which are the major users of spatial data.