

Access to Protected Areas Data through Geoweb services: A Case study in Portugal using open-source tools

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INSPIRE IMPROVED ACCESS TO BETTER INFORMATION to support ENVIRONMENTAL POLICIES

INSPIRE aims to deal with complex issues that shape the situation in Europe, such as:

- lack of co-ordination across boards and between levels of government
- incompatible information and systems
- fragmentation, redundancy and difficult data integration
- diversified data policies

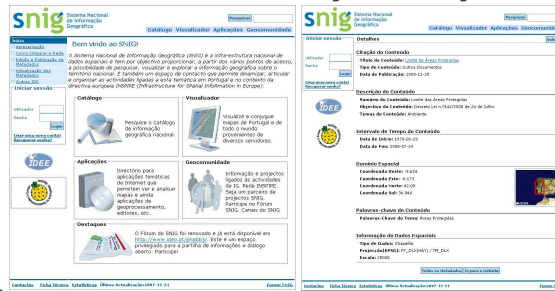


The directive lays down general rules to establish the European SDI that will be based on the infrastructures established and operated by the Member States.

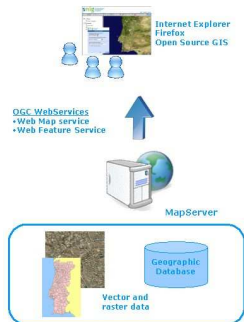
<http://snig.igeo.pt/inspire>

Portuguese SDI (<http://snig.igeo.pt>)

IGP (Portuguese Geographic Institute) the coordinator of the national SDI, SNIG, on-line since 1995 is investing in the development of geoweb services to disseminate its datasets at SNIG. The Nature Conservation and Biodiversity Institute (ICNB) provides access to metadata on its datasets through SNIG catalogue.



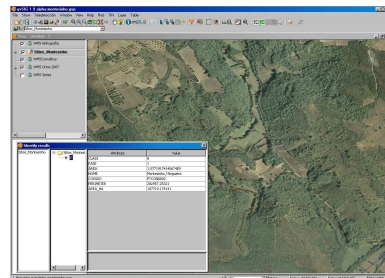
Geoweb services



The development of geoweb services is one of the relevant components of SDI. Services required by the Directive need to be conforming to the INSPIRE network services implementing rules IR, that are based in OGC Webservice specifications.

Open-source tools implement OGC Webservice specifications allowing to establish interoperability between systems from different vendors or data providers with different GIS technologies.

The **IGP OGC Webservices** are built in Open Source tool Mapserver and allows a client (gvSIG), overlay maps from multiple Webservices over the Internet.



The list of OGC WMS and WFS services developed by IGP contains: orthophotos, administrative boundaries, hydrography, transport Network, Protected Areas, DTM and Forest Fire Risk Map.

EU projects supporting INSPIRE implementation

INSPIRE directive covers several dataset themes, representing relevant environmental issues that are produced by different public authorities. In this context, IGP and ICNB are developing efforts to make Protected Areas information available through SNIG, based on INSPIRE orientations and on the experience of some EU projects, such as **HUMBOLDT** and **Nature_SDIplus**.

Protected Areas Case Study

A case study on Montesinho Natural Park, a protected area in the North of Portugal, is being developed promoting the access to the data on Protected Sites through the national SDI. Montesinho Natural Park was the selected use case for the development of the **HUMBOLDT Fast Track Scenario**.

- Creation of metadata according to ISO 19119, already available through SNIG.
- Contributions to the Protected Sites data model
- development of geoweb services using open-source tools



Transboundary Issues

To explore the transboundary issues associated to the use of GI for nature conservation, use cases are being developed with Spain:

- Montesinho Natural Park and the Natura2000 site "Sierra de la Culebra"
- Parque Natural do Douro Internacional and Parque Natural Arribas del Duero

