

## The Infrastructure for Spatial Information in Europe (INSPIRE) Directive: Implications and Opportunities for Coastal and Marine Research

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The INSPIRE directive<sup>1</sup> was published in the Official Journal of the European Union on 25th April 2007. This directive aims to create the legal basis for a European Spatial Data Infrastructure. In such a spatial data infrastructure geographical data, metadata<sup>2</sup>, geographical services and a set of rules and regulations on the functioning and the coordination of the infrastructure are provided. The directive lays down general rules aimed at the establishment of the Infrastructure for Spatial Information in the European Community (hereinafter referred to as Inspire), for the purposes of Community environmental policies and policies or activities which may have an impact on the environment. The directive does not impose the collection of new data, but tries to create an environment where data is collected only once, but used many times. The scope of the directive is quite wide, reaching from geographic reference data such as the coordinate system, the transportation network, land use, to thematic information linked to the environment, including many themes relevant for the marine and coastal areas.

The MS have until the 15th May 2009 to comply with the directive which creates a legal framework for establishing an Infrastructure for Spatial Information in the European Community. In Belgium a cooperation agreement between the Federal state, the regions and the communities is on its way.

INSPIRE will be implemented through 'Implementing Rules' for metadata, data specifications (interoperability), network services, data sharing and monitoring and reporting. The time frame for implementing these sets of rules

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<sup>1</sup> 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) 25.4.2007, Official Journal of the European Union

<sup>2</sup> Metadata provide information describing a set of data or a service

varies for the different themes, coming quickly for reference data such as transport networks, and foreseen in a medium time frame for many environmental data.

Many of the INSPIRE themes are related to the coastal and marine research. Of course the reference data of annexes 1 and 2 of the directive are useful material also for coastal and marine research, but a strong support from this research community will be needed to provide data that are required in the annexe 3 themes such as *oceanographic geographical features* (the physical conditions of oceans (currents, salinity, wave heights, etc.)) *Sea regions* (the physical conditions of seas and saline water bodies divided into regions and sub-regions with common characteristics) or *Habitats and biotopes* and *species distribution* of marine and coastal species.

The directive will in this way certainly influence the scientific community on Coastal and Marine research, in its role as a data providing community to the Belgian and European public authorities, but also the infrastructure will probably induce a more open, integrated and efficient access to geographical data throughout Europe, for the citizen and thus also for the researcher.