

## The Three Pillars of European GI

The **INSPIRE** directive is about establishing an infrastructure for spatial information within the Community (INSPIRE). This is appropriate, desirable and in accordance with community principles. The infrastructure will co-ordinate and make interoperable and accessible all spatial data collected at national level by Member States. The aim is to document more effectively and on a scientific basis environment-related decisions and their follow-up, in addition to reports required under certain directives.

The **GMES** programme is to enable decision-makers within Europe to acquire the capacity for global and regional monitoring. The aim is to effectively realise European Union objectives in a wide variety of policy areas. At a time when command of information has geo-strategic implications, GMES aims at co-ordinating existing and new technologies and systems to better meet a structured demand for information on the part of European, national, regional and local decision-makers and users in the field of environment and security. GMES addresses the needs of public authorities contributing to prediction and management of such phenomena as floods, forest fires etc, and monitoring of carbon sinks and sources within the framework of the Kyoto protocol.

The **GALILEO** project provides a European satellite navigation network independent from and compatible with the American (GPS) and Russian (GLONASS) systems. The GALILEO system controlled by Europe will meet demands for precision, reliability and safety. GALILEO will play an important role in protecting the environment, contributing to the tracking of pollutants, dangerous goods and icebergs, mapping the oceans and studying tides, currents and sea levels. It will help to monitor the atmosphere, water vapour for weather forecasting and climate studies, and the ionosphere for radio communications, space science and even earthquake prediction. It will make possible tracking the movements of wild animals to help preserve their habitats.

## Access and Services

INSPIRE provides an infrastructure enabling all to access geographic information, whilst GMES and GALILEO will enable the setting up of services meeting end-user needs. Notably, GMES intends to establish a European shared information service. In regard to the information dimension, GMES is closer to decision-makers, whereas GALILEO strictly delivers positions useless to decision-makers without other information. INSPIRE falls somehow in between, as it will enable access to more semantics.

Next steps for the GI community involve demonstrating to a wider audience the synergy amongst these three pillars and stimulating development of GI-related European systems in new fields; for example for decision-makers in agriculture, transport, energy, economy and social areas. EUROGI is definitely embarked upon this endeavour and is contributing to raising awareness of the strategic importance of geographic information within Europe.

https://www.gim-international.com/content/article/the-three-pillars-of-european-gi