Pilots

Slovakian Pilot

Segment: Citizens
Domain: Environmental data reuse
Leader: SAZP

Slovakian Pilot will include the proposal, development and deployment of two conceptually different types of web applications.

Czech Republic pilot

Segment: Enterprises & Public sector
Domain: Forest sustainability
Leader: UHUL FMI

Czech Republic pilot is focused on the forest site classification, sustainable management and utilisation of forest road network using the National Forest Inventory and the Regional Plans for Development datasets.

The Italian pilot

Segment: Citizens
Domain: Water monitoring
Leader: A.R.P.A. Sicilia

The Italian pilot in Sicily will explore the role of aggregating information from different Open Data sources in order to support ARPA institutional mission of providing up to date monitoring of water quality in Sicily.

Irish Pilot

Segment: Research
Domain: Enterprises Environmental research
Leader: MAC

Irish Pilot will focus on the use of the SmartOpenData to provide open data and open INSPIRE-compliant geospatial sources for environmental researchers particularly focused on biodiversity and habitats, building on the participative social validation.

Portugal-Spain Pilot

Segment: Public sector
Domain: Agroforestry management
Leader: TRAGSA

Portugal-Spain Pilot will focus on building a web based collaborative spatial data infrastructure prototype with the main goal of promoting sustainable agroforestry management.

Partners

Tragsa Grupo
Fondazione Bruno Kessler
NAVTEQ
SINTEF
d.gTerritório
MAC
indice
CCSS
SPAZIODATI
W3C ERCIM
HS-RS
ARPA
Institute of Mathematics and Computer Science University of Latvia

SmartOpenData Project developed under the activity code ENV.2013.6.5-3: Exploiting the European Open Data Strategy to mobilise the use of environmental data and information

More info
http://www.smartopendata.eu/

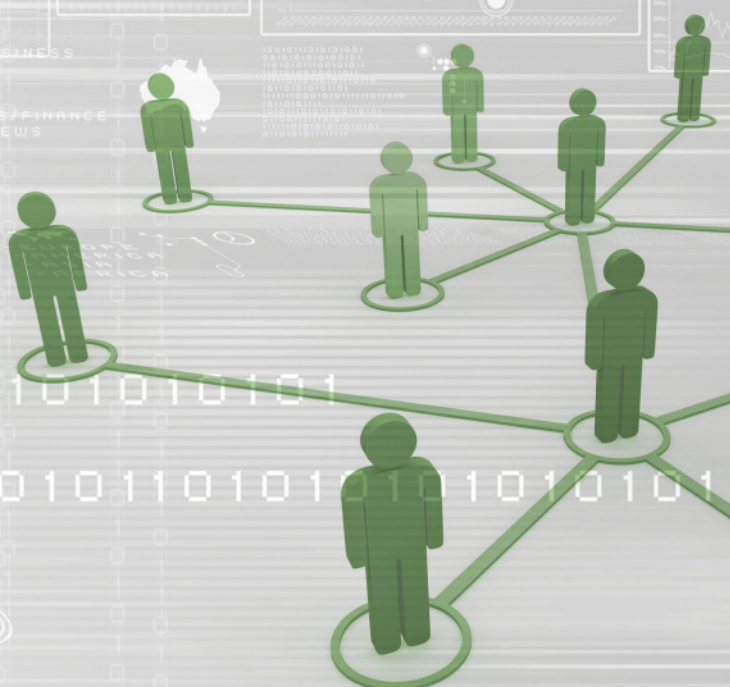
Contact
Jesús María Estrada Villegas
jmev@tragsa.es

Affordable Open Data Services & Public Private People Partnerships in Smart Regions
SmartOpenData

FP7-Seventh Framework Programme

SmartOpenData

Linked Open Data for environment protection in Smart Regions



Introduction

SmartOpenData aims to create a Linked Open Data infrastructure (including software tools and data) fed by public and freely available data resources, existing sources for biodiversity and environment protection and research in rural and European protected areas and its National Parks.

This will provide opportunities for SMEs to generate new innovative products and services that can lead to new businesses in the environmental, regional decision-making and policy areas among others.

The value of the data will be greatly enhanced by making it accessible through a common query language that gives access to related datasets available in the linked open data cloud. The commonality of data structure and query language will overcome the monolingual nature of typical datasets, making them available in multiple languages.

Motivation

Linked Open Data is becoming a source of unprecedented visibility for environmental data that will enable the generation of new businesses as well as a significant advance for research in the environmental area.

Nevertheless, in order for this envisioned strategy to become a reality, it is necessary to advance the publication of existing environmental data, most of which is owned by public bodies.

This project is focused on how Linked Open Data can be applied generally to spatial data resource and specifi cally to public open data portals, **GEOSS Data-CORE**, **Copernicus (formerly known as GMES)**, **INSPIRE** and volun-tary data (**OpenStreetMap**, **GEO Wiki**, etc.), and how it can impact on the economic and sustainability progress in European Environment research and Biodiversity Protection.

There exist many different information sources for protecting biodiversity and environmental research in Europe -in coastal zones, agricultural areas, forestry, etc.-, mainly focused on the Natura 2000 network, and areas where environmental protection and activities like agriculture, forestry or tourism need to be balanced with the Habitats Directive and the European Charter for Sustainable Tourism in Protected Areas.

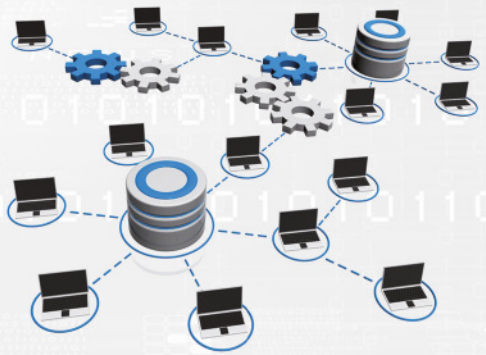
Goals

The vision of the **SmartOpenData** project is that environmental and geospatial data concerning rural and protected areas can be more readily available and re-usable, better linked with data without direct geospatial reference so different distributed data sources could be easily combined together.

SmartOpenData will use the power of **Linked Open Data** to foster innovation within the rural economy and increase efficiency in the management of the countryside. The project will prove this in a variety of pilot programmes in different parts of Europe.

SmartOpenData goal is making INSPIRE/Copernicus (formerly known as GMES)/GEOSS infrastructure better available for citizens, but also mainly for SME developers. On one hand, Europe and EU invest hun-dreds of millions of Euros in building the INSPIRE infrastruc-ture. On the other hand, most of European SMEs and citizens use for their applications Google maps. National and regional SDIs offer information which is not available on Google, but this potential is not used. One of the main goals of SmartOpenData is making European Spatial Data easily re-usable not only by GIS experts but also by SMEs.

In order to support Open Data Strategy for Europe and increase re-use of open public data from the European Commission, SmartOpenData will use where possible data and services from EC Open Data Portal. In addition, any application built on this data source will be registered on this portal. Same initiative is ongoing on national level, where SmartOpenData participants will try to disseminate the project outcomes in the same way.



Linked Open Data

What does it mean „to use Linked Data for Spatial Data“? In the context of the **SmartOpenData** project, using linked data for spatial data means identifying possibilities for the establishment of semantic connections between **INSPIRE/ Copernicus (formerly known as GMES)/GEOSS** and Linked Open Data spatial related con-tent in order to generate added value.

The project requirements are within the environmental research domain. This will be achieved by making existing “INSPIRE based” relevant spatial data sets, services and appropriate metadata available through a new Linked Data structure. In addition, the proposed infrastructure will provide automatic search engines that will crawl additional available geospatial resources (OGC and RDF structures) across the deep and surface web.

A RDF structure is used to describe the relation between two objects (for example object A is next to object B, where object A and B could be eventually stored in different databases).

The point is that by re-using existing identifiers available in the Linked Open Data cloud, SmartOpenData immediately will have access to a lot of other data sources and these will be available through SPARQL queries. But the project goal will go much further. The project will build an infrastructure of objects and relationships with the added value of further links.