



# SmartOpenData

## Linked Open Data for environment protection in Smart Regions



**This project has received funding from the European Union's Seventh Programme for research, technological development and demonstration under grant agreement No. 603824**

### Introduction

SmartOpenData has created 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 provides 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 has been 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 overcomes 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 specifically to public open data portals, GEOSS Data-CORE, GMES, INSPIRE and voluntary data (OpenStreetMap, GEOWIKI, 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 used the power of Linked Open Data to foster innovation within the rural economy and increase efficiency in the management of the countryside. The project proved this in a variety of pilot programmes in different parts of Europe.

SmartOpenData goal is making INSPIRE/GMES/GEOSS infrastructure better available for citizens, but also mainly for SME developers. On one hand, Europe and EU invest hundreds of millions of Euros in building the INSPIRE infrastructure. 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.

## At a glance

### Project title:

SmartOpenData – Linked Open Data for environment protection in Smart Regions

### Partners:

TRAGSA Group (TRAGSA, TRAGSATEC), Universidad Politécnica de Madrid, The National Microelectronics Applications Centre LTD, Sindice LTD, Mid-West Regional Authority and Limerick City and County Council, Environment Protection Regional Agency, Fondazione Bruno Kessler, SpazioDati, Help Service Remote Sensing SRO, Forest Management Institute, Czech Centre for Science and Society, Stiftelsen SINTEF, Latvijas Universitātes Matēmatikas Un Informatikas Instituts, Direção Geral do Território, Slovak Environmental Agency, European Research Consortium for Informatics and Mathematics – W3C.

### Project coordinator:

Mr. Jesús Estrada

TRAGSA Group, TRAGSATEC (SP)

### Duration:

November 2013 – November 2015

### Total cost:

€ 2.355.400,00

### More info

<http://www.smartopendata.eu/>