Project acronym: **SDI4Apps**
Project title**: Uptake of Open Geographic Information Through Innovative Services Based on Linked Data**

Brief description of the Project:

Spatial Data Infrastructures' (SDIs) main goal is to provide access to geospatial data in a country, across a given area or a domain. It has been estimated that over **80% of all data has a spatial component or dimension**.

The European SDI (INSPIRE) is based on existing data of Member States. The INSPIRE Directive does not intend to change the way how data are collected, processed and stored. **INSPIRE focuses on harmonisation and interoperable exchange of spatial data and services**. For this reason, it is necessary to see INSPIRE in relation with two other initiatives including GEOSS and Copernicus (former GMES).
Next to the INSPIRE, Copernicus and GEOSS, there are many **voluntary initiatives** supporting building of different parts of SDI. The SDI world is changing with the development of new GNSS devices, smartphones, mobile cameras and tablets. More and more localised information is collected by citizens.

The main target of **SDI4Apps** is to bridge the 1) top-down managed world of INSPIRE, Copernicus and GEOSS built by SDI experts and 2) the bottom-up mobile world of voluntary initiatives and thousands of micro SMEs and individuals developing applications (apps). **SDI4Apps** will secure that users profit from INSPIRE and INSPIRE profits from different voluntary initiatives. **SDI4Apps** will build a **win-win strategy** for building a successful business for hundreds of European SMEs on the basis of INSPIRE, Copernicus and GEOSS. The main objectives of **SDI4Apps** are to:
- integrate a new generation of SDI based on user participation and social validation,
- support easy discovery and accessibility of spatial data for everybody,
- link spatial and non-spatial data using the Open Linked Data principles,
- support multilingualism of spatial data,
- build scalable cloud-based infrastructure for support of SDI initiatives and location-based services,
- design open API supporting integration of spatial data and LBS into applications developed and deployed by non-GI developers,
- integrate a demonstration set of pilot applications,
- test the new approach for data sharing by end users through pilot applications,
- attract external developers (mainly from SMEs, students and researchers) to test the newly integrated platform,
- organise contests for application developers supporting wider use of GI data,
- build a sustainable business model for a cloud based SDI.

The objective of **SDI4Apps** is to bring existing INSPIRE, GEOSS, Copernicus and voluntary based information to different user groups and their needs:
- SMEs, students and researchers developing new apps,
- local and regional NGOs and other organisations dealing with sustainable development of regions,
- local businesses that can benefit from spatial data and spatial apps,
- local communities contributing to the regional sustainable economic and social development via supporting tourism related activities,
- citizens, mainly young generation, using smart devices and web applications

In order to demonstrate the innovative features of the platform and to serve as a space for validation and testing of the SDI4Apps platform, pilot applications are to be developed in the following areas:

1. PILOT I: Application of SDI4Apps for identification, reporting, and recording of Aquatic Invasive Species (AIS) instances by wider communities for subsequent eradication, as they relate to salmon and all inland and coastal native fish species conservation in Ireland and Europe.
2. PILOT II: Application of SDI4Apps for providing tourism information, by combing data from various sources, such as users' data (e.g. notes and comments of particular visitors), data from tourism services providers, data published by local and/or state administration or international organizations, as well as crowd-sourced data and social media.
3. PILOT III: Application of SDI4Apps for integrating low cost sensors (meteorological, quality of air, etc) into local and regional web sensor networks by various groups of volunteers (e.g. farmers).
4. PILOT IV: Application of SDI4Apps for mapping land use
5. PILOT V: Application of SDI4Apps for allowing young people to contribute to different environmental and social issues (e.g. students mapping their territories and also collecting information about historical, environmental, cultural and socio economic issues).
6. PILOT VI: Application of SDI4Apps for the identification of spatial representation of the outcomes of ecosystem services evaluation with focus on sustainable support of tourism

Partnership
- University Of West Bohemia, Czech Republic
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- Zemgales Plānošanas Reģions, Latvia
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- Baltic Open Solutions Center, Latvia
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