

## **INSPIRE'D LINKED OPEN DATA TOWARDS WATER FRAMEWORK DIRECTIVE ACCOMPLISHMENT- ADDRESSING WATER MANAGEMENT SUSTAINABILITY AND INDUCING ECONOMIC GROWTH**

Vale, M.J; Reis, R.; Meneses, B.M. and Saraiva, R.

Linked open data is critical for decision making in matters related to the territory, namely for spatial planning and water management. Creating a Co-operative Spatial Data Infrastructure to deal with complex environmental problems and assure economic growth is one of the most relevant concerns that the INSPIRE Directive has to address. Addressing water stress problems within EU is a main concern and one of the most relevant issues within environmental policy promoting effective economic growth.

Several work has been developed within the Information management field to address these problems, namely integrating WebGIS based approaches to address water management efficiency. This paper presents the most recent achievements in this field in line with what can be improved in order to evidence INSPIRE relevance and align several other initiatives, to build stronger development strategies.

Reviewing WebGIS collaborative platforms implementation integrating INSPIRE achievements and addressing Data Reuse Directive is critical at this stage and this paper synthesizes the main issues that should be considered giving examples based on the work that has been done do far.

The linked open data Inspire'd related initiatives at European level, like the recent developments achieved within ongoing EU funding projects, SmartOpenData and eEnvPlus, are combined with other member States relevant initiatives like, within the Portuguese context, the TerAgua, SNIG, IGEO and SNIT platforms and their relevance and weaknesses are analyzed. This analysis has the main goal of understanding INSPIRE contribution to address the water legal framework accomplishment within different regions. This task considers several datasets from the Annexes I, II and III and explores relevant issues to be considered when reviewing SDI and spatial data policies to support collaborative efficient government.

Reviewing recent achievements by crossing technological and data management initiatives against legal framework accomplishment, within territorial and water management, is therefore the main goal of the presented work.

The results obtained evidence, that problems can be much better understood by decision makers, at political, institutional and operational level, as well as by general public, integrating collaborative oriented solutions, and that private partnerships can be build supported by a knowledge based platform integrating well defined goals to solve many of the existing problems. Additionally increasing oriented participatory actions and data dissemination helps increasing knowledge, and will contribute to an increased relevant open data sharing with emphasis on harmonized spatial data pointing out pilot actions to be addressed within INSPIRE.