



A Web-based knowledge management platform for practitioners in the water sector: AquaKnow.net

Andrea Leone (1), Celine Dondelynaz (1), Paolo Mainardi (1), Marco Giacomassi (1), Cesar Carmona-Moreno (1), and Daoyi Chen (2)

(1) Global Environment Monitoring (GEM), Joint Research centre, Ispra, Italy (Andrea.LEONE@ext.jrc.ec.europa.eu), (2) School of Engineering, University of Liverpool, Liverpool, UK

Information and knowledge management are increasingly recognized as important features supporting effective and efficient development of the water sector. In the water sector, since the introduction of the concept of Integrated Water Resources management (IWRM), the issue of knowledge management became even more complex as IWRM stresses the cross-cutting aspect of water management. In fact, the needed information became more heterogeneous: the knowledge has to be collected from many different providers, treated by many different organisations (such as basin agencies, universities, etc..), communicated to, used and interpreted by many other different stakeholders and organizations (such as final users, policy makers, etc...).

Therefore, in line with EU international cooperation policies supporting the water sector in developing countries, we researched on the feasibility, identification and design of solutions and on their sustainability towards the improvement of knowledge management for sector development. The objective is to gather, make available, share and use sound scientific/operational knowledge through interaction between a wide range of actors.

Consequently, taking advantage of the new 2.0 Web tools, we developed an innovative Web-based platform for knowledge management targeting practitioners involved in the water sector. The platform (<http://www.aquaknow.net/>), which is a content management system, was built around an open source project (DRUPAL) able to address the requirements expressed by a very heterogeneous user community and the related technical constraints. Other open source tools such as Web GIS have also been explored and their integration recommended into the platform.

In details, a multi-stakeholder consultation has been organised to define the system requirements according to the needs of the “water community”. The main and essential principle underlying this platform is the USER content generation through friendly interface, key element to stimulate the community involvement. In line with the consultation outputs, the Aquaknow platform is organised around two workings axes:

- Gathering the sector information

The general approach is to classify the information available through thematic indexes combined with customised search engines both internal and external. These thematic sections point out the existing information, data or tools, without duplication however hosting capabilities are offered to make data available and accessible online if necessary.

- Building a community

Offering the various interactive and user friendly tools, the platform also aims at building a community to capture the informal knowledge issued from single users through direct exchanges. The requirements for detailed functionalities, in terms of user friendliness and simplicity, need to be well-worked to ensure the maximum involvement of members, the essential element in this project.