



Contract No.: (GOCE) 514969  
Acronym: INTEGRATION4WATER  
Project title: Initiative 4 Facilitating Integration of Research Potential from the New Member States and the Associate Candidate Countries with the potential of the Old Member States in the area of Water Cycle including Soil Related Issues of the Sub-Priority 1.1.6.3 and relevant priority of FP7  
Instrument: Specific Support Action (SSA)  
Thematic priority: Global Change and Ecosystems

# Project Executive Summary

Period covered: from **01/05/2005** to **31/12/2006**

Date of preparation: **12/01/2007**

Start date of Project: **01/05/2005**

Duration: **20 months**

Project coordinator name: **Izabela Ratman-Kłosińska**

Project coordinator organisation name: **Institute for Ecology of Industrial Areas**

Final version

Project funded by the  
European Union,  
DG Research





## Background

The 7. Framework Programme for Research and Technology Development of the European Commission (FP7) imposes new challenges on the scientific community and the European Commission in terms of ensuring the coverage of research demands that address both: the emerging priority issues in the area of **water and soil related research** as well as gaps in knowledge identified in previous FPs, considering especially the perspective and needs of the enlarged European Union.

The FP6 calls in the Sub-priority 'Global Change and Ecosystems' have shown a progress in a joint building of the European Research Area (ERA) by research partners from the Old Member States (EU 15), organisations from the New Member States (NMS) and Associated Candidate Countries (ACC)<sup>1</sup>. These networking relationships and co-operations should be however expanded, strengthened and further explored for the benefit of a common identification of ambitious research topics and establishing European consortia to address them in the FP7.

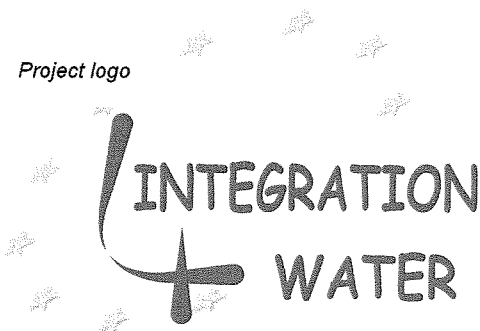
Teams and organisations from the New Member States and the Associated Candidate Countries as FP project partners offer a valuable potential and research expertise. However, their involvement in project consortia required facilitating.

## Project goal and objectives

Integration4Water: Initiative 4 Facilitating Integration of Research Potential from the New Member States, Associated Candidate Countries and Old Member States in the area of Water Cycle including Soil Related Issues of the FP6 Sub-Priority 1.1.6.3 and a relevant priority of FP7 is a Specific Support Action under the 6 Framework Programme for Research and Technology Development of the European Commission. The goal of the project was to effectively support participation of the NMS/ACC organisations in the last call of FP6 and in the FP7 as partners in project consortia because:

- ⇒ an effective and topic-oriented promotion of their research potential and expertise, was missing,
- ⇒ support of their early involvement in the formulation of the FP7 specific work programme in the area of water and soil research was needed,
- ⇒ ensuring that the research priorities and needs of the NMS/ACC countries emerging from the up-to-date conducted FP5 and FP6 RTD projects had been covered in the FP7 research agenda was necessary.

Project logo



To accomplish the project goal and satisfy the mentioned needs, two strategic objectives have been set up for the Integration4Water project:

- **Objective 1:** Stimulate and encourage participation of research organisations from the New Member States and Associated Candidate Countries in the projects of FP6 and FP7 in the area of *Water and soil related research*.
- **Objective 2** Actively contribute to the development and implementation of the FP7 workprogramme in the area of *water and soil related issues*.

OBJECTIVE 1 has been accomplished through the following activities:

- **Establishing the Integration4Water multifunctional internet service (<http://www.integration4water.org>) as a "one-stop-shop" for communication, promotion and dissemination of information on water and soil related research including:**

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<sup>1</sup> The target group of NMS/ACC countries comprises the present New Member States: Poland, Czech Republic, Slovakia, Hungary, Slovenia, Lithuania, Latvia, Estonia, Cyprus, Malta, and the Associated Candidate Countries: Turkey, Romania and Bulgaria.

- 14W Instant Messenger facility for a quick dissemination and exchange of information on water related research conducted by research organisations and teams from the New Member States, Accession Candidate Countries and the Old Member States especially for the FP7 needs.,
- 14W Forum as an Internet-based communication platform used for the project realisation and - after its completion - for promote them and maintaining and promoting the contacts among researchers towards a successful establishing of FP7 consortia.
- Topical Expert Groups sub -pages established in the service for promotion of research teams created during the Integration4water Workshops Event (see Objective 2)

The multifunctional service also serves as a gate the NMS/ACC organisations/research teams database equipped with a partner search engine, a tool supporting execution of project tasks and as the project dissemination platform.

- **Developing a database of the available NMS/ACC research potential in the area of water and soil related research which:**
  - serves as a centralised source where the NMS/ACC excellence of research teams active in the area of water and soil related research incorporated into a structured data system enabling an easy partner search especially for EU FP7.
  - provides specific information on the expertise of research teams in the priority issues of FP7 including contribution to research topics, experience in relevant FP as well as other projects, infrastructure etc.
  - enables a direct contact with of the research teams within organisations. The database has been furnished with combined with a dedicated partner search engine accessible through the service web page service.

OBJECTIVE 2 has been accomplished through the **organisation of a 3-day event Workshops event** on the days of 2-4 June 2004, in Warsaw, Poland which was aimed at:

- identifying new areas of research which reflect the specific research needs of NMS/ACC in relation to the FP7 priorities and research priorities identified in the WSSTP Strategic Research Agenda.
- training of NMS/ACC researchers in building integrated, interactive and multidisciplinary approaches as a strategy for proposals development enabling a more effective implementation of FP7 workprogramme
- serving as a forum to disseminate and exchange information on water-related research activities conducted in national, regional and European scale by NMS/ACC organisations and the EU 15 States,
- facilitating integration of NMS/ACC and researchers from the Old Member States through establishing 7 Topical Expert Groups - international research teams centred on the jointly identified, new research areas and promoted them in the Inetgration4Water internet service

## Project achievements and end results

Realisation of the Integration4Water project objectives has led to the following achievements and end results with a potential of further exploration:

- ✓ setting up a unique ACC/NMS dedicated Integration4Water internet service established a durable, sustainable and effective mechanism for a continuous dissemination and exchange of updated information on the water related research initiatives in Europe,
- ✓ setting up the database of NMS/ACC research teams structured for the FP7 proposal development needs in the area of water and soil ensures an easy access to NMS/ACC researchers and thus facilitates their involvement in the FP7 project comnsortia
- ✓ elaborating 11 new research themes jointly worked out jointly by over hundred NMS/ACC and OMS researchers as a direct outcome of the workshops event. The foci of these topics reflect the actual research needs as well as the substantial and specific expertise of researchers and organisations in the New Member States and Associated Candidate Countries. Elaborated jointly by researchers from the EU15 and NMS/ACC as potential call lines, they have been proposed to the Commission as contribution to the development of the specific programme of FP7 in the priority Environment: They are also available for downloading at the project web page <http://www.integration4water>.

#### Area 1 Climate change and water resources:

##### **New research themes/proposed call lines:**

1. *Advanced understanding of adaptive capacity of catchments under increasing environmental and climate change pressure.*
2. *Sustainability of the ecosystem goods and services under changing climate and environmental pressures in large Europe.*
3. *Enhancement of effectiveness and efficiency of adaptation strategies and measures under uncertainty*

#### Area 2 Water resources management

##### **New research themes/proposed call lines:**

4. *Managing water resources with conflicting demands*
5. *Soil, water and sediments interactions affecting water quality and quantity, and advanced integrative monitoring and evaluation systems for water environment and diffuse pollution.*
6. *Application of eco-technical measures to upgrade aquatic ecosystem services*

#### Area 3 Environmental technologies related to water and soil

##### **New research themes/proposed call lines:**

7. *Comparative studies of conventional and new agricultural practices (based on ecological knowledge) for supply, cropping and soil erosion prevention and development of DSS (Decision Support System) tools using new available information*
8. *Development of multi-barrier membrane systems for a low-risk re-use of effluents to promote water savings in SMEs and decentralised schemes*
9. *Novel preventive management tools and cost-effective technologies tailored for specific needs of industrial wastewater treatment and re-use*
10. *Risk assessments based upon the methods and models for evaluating soil, ground- and surface water degradation and contamination at appropriate scales*
11. *Methods for remediation of contaminated and/or degraded land, water and sediments*

The research themes presented as call lines combine the NMS/ACC research needs with the priorities of the FP7 and the priorities defined in the Strategic Research Agenda of the European water Supply and Sanitation technologies Platform. Description of each call line includes the state of the art and the rationale as well as gaps in knowledge and expertise needed.

- ✓ establishing 7 Topical Expert Groups composed of over 100 researchers – international teams of researchers who expressed interest and presented capacities to collaborate on the following research topics:

1. *Understanding ecosystem dynamics and developing approaches to enable functional carrying capacity*
2. *Adaptation and mitigation strategies for use of water resources to promote sustainable development (societal stability, economic development and ecosystem protection)*
3. *Managing water demand in the context of multiple objectives (water for people, industry, agriculture, ecosystems)*
4. *Elaborating measures for improving water quality and quantity*
5. *Harmonization of technological measures with ecosystem properties as a new management tool for IWRM, implementation of WFD, and other water-related Directives*
6. *Sustainable and cost-effective policies and technologies on water uses (production, consumption, recycling) for preventing and reducing environmental risks on water and soils, controlling pollution, and balancing demand and supply*
7. *Integrated and cost-effective system technologies, including ecohydrology based technologies, for evaluation, improvement and reclamation of water and soil quality*

## Project impact

### The accomplishments of the project have the following impact:

- ✓ Feedback for FP7 specific workprogramme in the priority Environment including the gaps in knowledge and research needs from the New Member States and the Associated Candidate Countries prepared by a

representative community of NMS/ACC researchers has been prepared. It can be used by the Commission and the FP7 Programme Committee for determining the contents of the future calls

- ✓ Integration4Water has been recognised in Europe as data provider on ACC/NMS research potential and information distributor among them for the use throughout the entire FP7 as well as supporting the activities of WSSTP as well as other initiatives related to water and soil research that it has been linked to. In this way it contributed both to a better involvement of NMS/ACC research teams in FP7 projects and in the activities of WSSTP
- ✓ Through organisation of the Integration4Water Workshops events, over one hundred researchers was provided with an opportunity to know each other, work together and exchange experiences on research activities with a potential to further explore them in cooperation in FP7 projects
- ✓ Through active participation of WSSTP in the Integration4water event and linking the identified NMS/ACC research needs with the priorities defined in the Platform's Strategic Research Agenda, NMS/ACC research teams active in water and soil research gained an opportunity to get involved in the WSSTP activities, in particular in the Pilot Themes Programme. In this way I4W may contribute to eliminating the imbalance of NMS/ACC representation in WSSTP.
- ✓ Through facilitated involvement in the FP7 projects and the activities of WSSTP NMS/ACC research organisation gain an opportunity in the development and implementation of policy related to water and soil issues e.g Water Directive, Groundwater Daughter Directive, Thematic Soil Strategy, Environmental technologies Action Plan.

## The Integration4Water project consortium

The project was performed by the following consortium composed of 5 partners with complementing skills and areas of expertise:

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