# Supporting the implementation of reliable monitoring networks in the scope of the WFD: recommendations for the establishment of a European Quality Assurance and Control system

## The EAQC-WISE project

**To support Member States implementing the Water Framework Directive (WFD) and designing water monitoring networks, the EAQC-WISE project was built with the ultimate objective to provide a blue print of an efficient and potentially sustainable pan-European Quality Assurance / Quality Control (QA/QC) system for the measurements taking into account water, biota and related soil monitoring. Such a system will allow the improvement of data reliability and comparability at river basin scale as well as at European scale.**

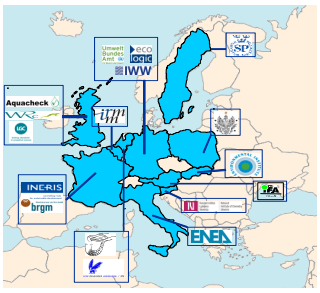
## *Policy Context*

The Water Framework Directive (2000/60/EC) includes requirements for monitoring of the chemical status of surface and ground waters. Such monitoring programmes, to be carried out by all Member States, should have to be operational by the end of 2006. The effectiveness of this implementation highly depends on the ability of MS' laboratories to measure chemical, biological and ecological changes of the **quality** of Community waters.

***=> an appropriate analytical quality control system has to be established across all EU monitoring laboratories to ensure the reliability and comparability of these data***

## *The Project consortium*

The partnership involves 17 partners from 10 countries with 1 European reference centre, 2 academia organisations, 7 public organisations and 7 independent organisations teams.



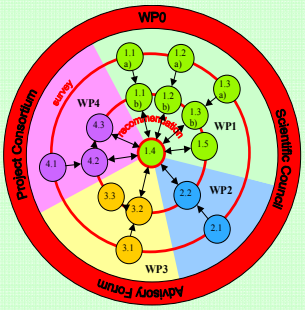

## *Objectives*

✓ **<u>In the short-term</u>** (within the first 6 months of the project)
- To study different structures & existing QA/QC system at national and EU level.
- To identify gaps and needs for additional research and standardisation.

✓ **<u>In the medium-term</u>** (2006-2007)
- To develop activities to fill in the gaps identified above.
- To derive a recommended approach of a QA/QC system that is likely to work at Member State, at river basin and at European scale.
- To assess the impact of such a recommended QA/QC system.
- To check the applicability and validity by means of case studies.
- To derive a communication system to efficiently link scientific and policy-making communities.
- To derive a sustainable dissemination mechanism of reliable training appropriate to laboratories engaged in the analysis of matrices associated with WFD implementation.

✓ **<u>In the long term</u>** (beyond 2008)
- To suggest a quality control system, which would coordinate tailor-made proficiency testing activities, reference material production, research and training at the EU level in support of water and soil policies, with regular exchanges of good practices.
- The ultimate objective beyond 2008: a sustainable pan-EU QA/QC system for water monitoring.

## *Methodology and first results*




The project focuses on **<u>four main activities</u>**:
- AQC systems and tools (WP1).
- Knowledge in underpinning research and standardisation for reliable QA/QC tools (WP2).
- QA/QC system awareness and methodologies in the water framework directive information chain (WP3).
- Training and educational services appropriate to laboratories engaged in the environmental analysis associated with WFD implementation (WP4).

The **<u>work methodology</u>** is similar for each WPs and is as follows:
- An assessment of the current situation and a gap analysis has been carried out in each WP.
- A recommendation for a future system will be developed based on this previous work.
- The use of case studies to exemplify the recommended approach using available data and experiences.
- An impact assessment of the system.

The **<u>first year</u>** was dedicated to the evaluation of the current status of AQC tools and systems in the frame of the WFD implementation, of standardization and research needs, of current practices within the WFD information chain and of current practices within training services.

An **enquiry** was performed by means of questionnaires for collection of information from stakeholders to identify the current status of the knowledge and to identify the gaps.
In addition, **specific questionnaires** were also developed for proficiency testing, research and standardization needs and training and educational needs. The target groups were identified (monitoring labs, competent authorities including PRB authorities and accreditation bodies) and information was collected through face-to-face interviews or by telephone interviews conducted by the partners of the project. The resulting data was collected in a database with more than 3000 answers for 20 different countries. Furthermore, surveys on different AQC tools (reference materials, proficiency testing validated methods) have been conducted using various information sources.
This state of the art allowed the formulation of **<u>preliminary recommendations</u>** on gaps to be filled.

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