



ACQUEA 



**A Eureka initiative
for**

GROWTH AND INNOVATION IN WATER

What is ACQUEAU?

The EUREKA Cluster ACQUEAU is an 'Industry and Business led water network'. The ultimate aim is to facilitate the generation of market driven, pan-European collaborative water research and technological development RTD projects for the benefit of the European Water Industry.

Through the Water Supply and Sanitation Technology Platform (WssTP) employing the principle of Integrated Water Resources Management (IWRM), a 'water vision' for Europe has been identified by using knowledge from stakeholders, innovators, researchers, etc, involved in the water industry. This vision, supported by a Strategic Research Agenda (SRA) outlines the future scenario for the water industry. By employing the SRA the water cycle has been further examined and a 'technology roadmap' has been produced which 'leads the way' so that all players 'flow' in the right direction.

In order to facilitate the innovation of products, processes and systems needed on this roadmap the ACQUEAU Cluster will initiate R&TD calls on a regular basis identifying key 'technology needs'. Successful projects resulting from these ACQUEAU R&TD Project calls will strengthen the technological base of the European Water industry. This in time will enable the sector to become more efficient and effective in serving the citizens of Europe and more competitive in the global markets for water services and related technologies.

Why do we need ACQUEAU?

ACQUEAU will complement other water programmes in the following ways:

- **More projects to fund applied research**
ACQUEAU collaborates with the WssTP to identify Research and Development Technology needs. ACQUEAU aims to fill up gaps for applied research defined by the WssTP and the major industries related to the water sector.

Based on the pilot programmes activities of the WssTP, ACQUEAU will enforce the development of applied research and product/services oriented initiatives in order to boost the European market and export potential. Compared to the EU Framework Programme, ACQUEAU is much more focused on water technologies and applications at all levels of the water sector.

- **Boost competitiveness & innovation through SMEs**
ACQUEAU is based on good co-operation with small and medium-sized enterprises (SMEs). This key partnership is needed to exploit fully the possibilities created by ACQUEAU in order to strengthen markets and develop

innovation. In the water sector, SMEs are essential to develop a "green economy" and to enforce "eco-innovation".

- **Encourage collaboration to unleash the expertise of the water sector**

ACQUEAU emphasizes the collaboration with universities and research institutions. They are natural partners both to develop the required initial know-how base and to ensure the dissemination of acquired results. The strong cooperation between industries and research institutions is part of the fundamental purpose of ACQUEAU.

- **Strengthen the European competitiveness of the water industries**

Beyond the industrial scope of the ACQUEAU partners, there are several reference sectors with which cooperation is mandatory.

ACQUEAU supports the setting up of general industrial cooperation using the competitiveness of the European water sector to set the standards of tomorrow.

- **More flexibility**

The EU Framework Programme is very open, oriented to the long term and is generally non competitive. It's a long term process to set up proposals and it can be difficult when there are too many partners. The JTI tries to combine some of the flexibilities of the EUREKA programme with extra funding from the Framework Programme but needs to be launched by the EU and will be submitted to the EU treaty.

- **Beyond EU, national and regional agendas**

National and regional programmes – including "pôles de compétitivité" – may be flexible but they are mainly defined by each state's own calendar whereas ACQUEAU is synchronised funding – a key feature in achieving partnership agreement.

To develop a strong vision for the water sector, ACQUEAU is based on both short and long term visions and technological road mapping. Also, the Eureka membership is wider than the EU, incorporating 39 full members in extended Europe.



Five Key Programmes to boost competitiveness

ACQUEAU has identified five key challenges to boost the competitiveness of the water sector in Europe and to develop a bottom-up solution for the market.



Low environmental impacts for disinfection and oxidation

This programme is intended to develop new disinfection or other oxidation processes for the removal of microbiological activity or other harmful compounds. This targets all new processes for disinfection that will 1/ consume less energy, less chemical products; 2/ reduce environmental impacts of water treatment processes and 3/ guarantee the best safety for the human health. Disinfection is widely used:

- To reduce or eliminate microbiological activity in water.
- To ensure drinking water safety at point of use.
- To guarantee the safety of bathing waters near waste water discharges.
- To reduce harmful compounds.

Low energy wastewater treatment

To target low energy waste water implies the development of the municipal waste water plant of the future (2020). It aims to promote worldwide municipal waste water treatment based on different objectives:

- To develop energy self-sufficient plant with energy recovery and energy in situ production.
- To guarantee the complete removal of pollutant of effluent as phosphorus, nitrogen...
- To transform all effluents solid or liquid as co-product (biorefinery concept).

The main goal is to ensure the protection of water resources and the preservation of the environment.

Membrane Technologies

Membrane technologies include any process for water or wastewater treatment achieving filtration through a porous or permeable media made of polymeric, mineral or composite material.

The global membrane market for water applications will grow by 8.6% to over €10,5 billion in 2012. The objective is to foster the emergence of European champions with new technologies to secure a market essentially dominated today by US and Japanese equipment suppliers; and to develop European know-how and equipment in order to propose competitive European technologies for various applications including:

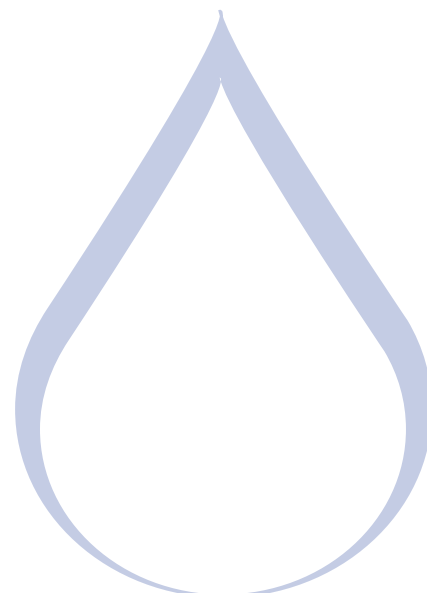
- seawater and brackish water desalination,
- waste water treatment and reuse,
- water softening or removal of organic substances
- disinfection for drinking water production.

Real-Time system Management

Real time system management through online sensors networks, data management system, representation (map, link with GIS, etc.) and modeling, and wireless communication system. The goal is to enforce the European know-how and equipments in order to secure the management of water resources, water and wastewater works, secure the quality of the product delivered to end-users, improve the operation of networks and reduce the cost of construction...

Materials for pipes and coating

Water distribution and storage are based on a comprehensive infrastructure for water delivery to private or industrial consumers. They are responsible for about two thirds of the total cost of water supply in developed regions. The objective is to improve durability, safety and cost of "environmental friendly" materials.





Who supports ACQUEAU?

Supporting Countries

- United Kingdom (Leader)
- Croatia
- Czech Republic
- Denmark
- Finland
- France
- Germany
- Israel
- Poland
- Turkey
- Switzerland
- The European Union



Interested countries:

- Austria
- Belgium (Flanders and Wallonie)
- Hungary
- Italy
- Malta
- Norway
- Portugal
- Spain
- The Netherlands
- Ukraine

ACQUEAU

is the EUREKA Cluster for Water

ACQUEAU is the first industry driven initiative to fund innovation and RTD projects in the water sector.

ACQUEAU is an industry driven EUREKA initiative dedicated to water related technologies and innovation. It aims at promoting innovation and market driven solutions to develop new technologies in the European water sector.

The major goal is to facilitate the generation of market driven, pan-European collaborative water research and technological development projects for the benefit of the European Water Industry.

It is a non-profit association under Belgian law, it was founded by industrial companies.

ACQUEAU addresses industries that develop and sell their products or services dedicated to water catchment, production, distribution, collection and treatment, that use water in manufacturing processes and that have an interest in developing technologies related to the water cycle.



Contact us:

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