



ACQUEAU

An initiative for growth and innovation

Call for Projects on 'Membrane Technologies'

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WssTP / ACQUEAU

What is a EUREKA Label?

- EUREKA Clusters are **industry driven** initiative
- They found market driven projects: prototype / ready to the market products or services
- ACQUEAU is a **new EUREKA Cluster for water**

Why a cluster in water?

- R&D in water is a knowledge and **technology** issue

Need for **applied** R&D

- FP7 is the main European tool for support water R&D

Mainly academic R&D oriented

- WssTP ⁽¹⁾ provides a vision and Strategic Research Agenda (SRA),
Academic but also technology oriented

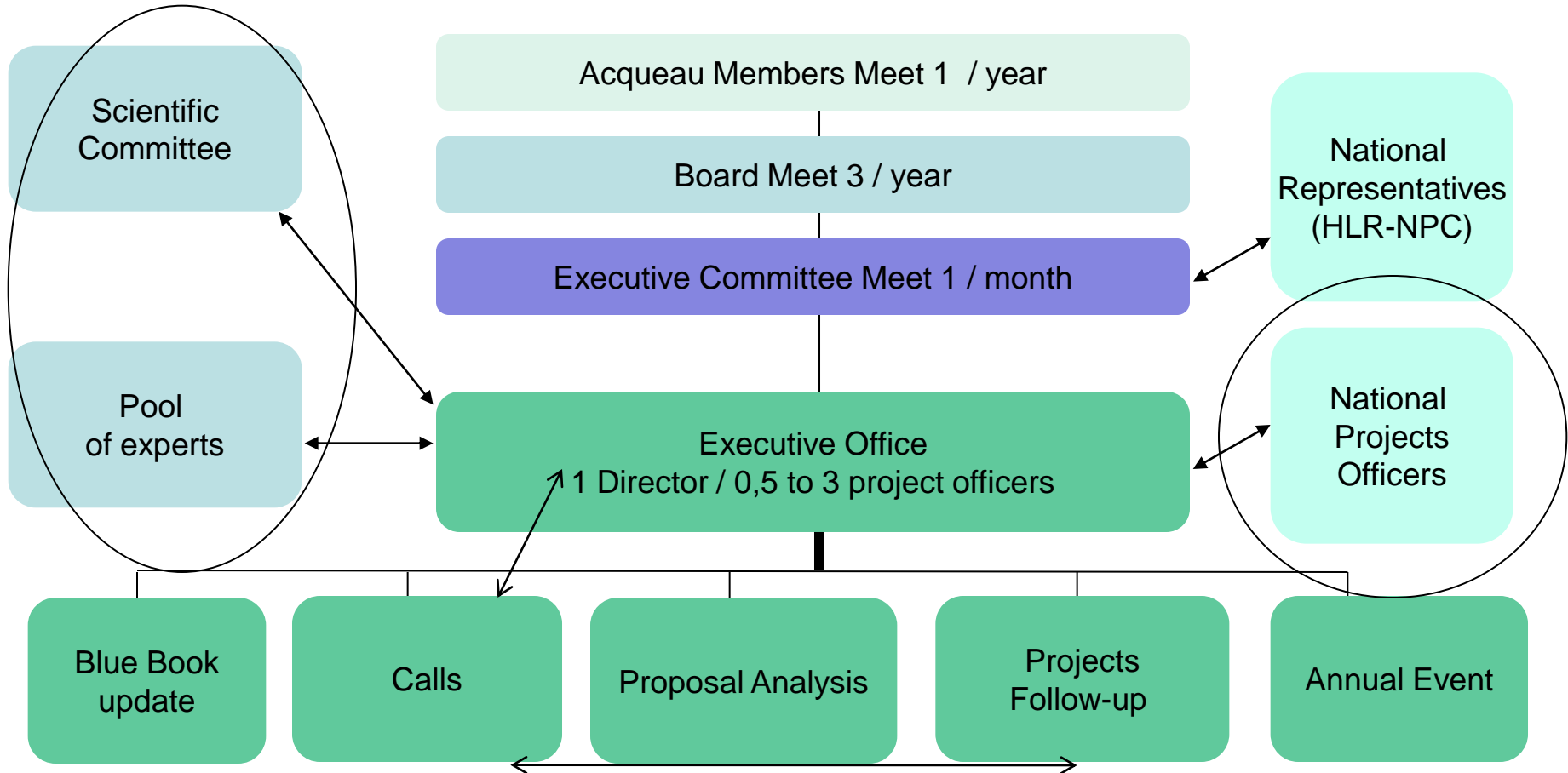
**ACQUEAU: Developing applied Research
and boosting technology developments**

(1) WssTP: Water supply and sanitation Technology Platform

Added value for projects

- More flexibility (two calls a year – two partners from two countries)
- Open (but scope of Blue Book based on SRA and water cycle)
- National funds (direct contact with programme officer)
- Address a wide spectrum of enterprises and technologies
- ‘EUREKA Label’

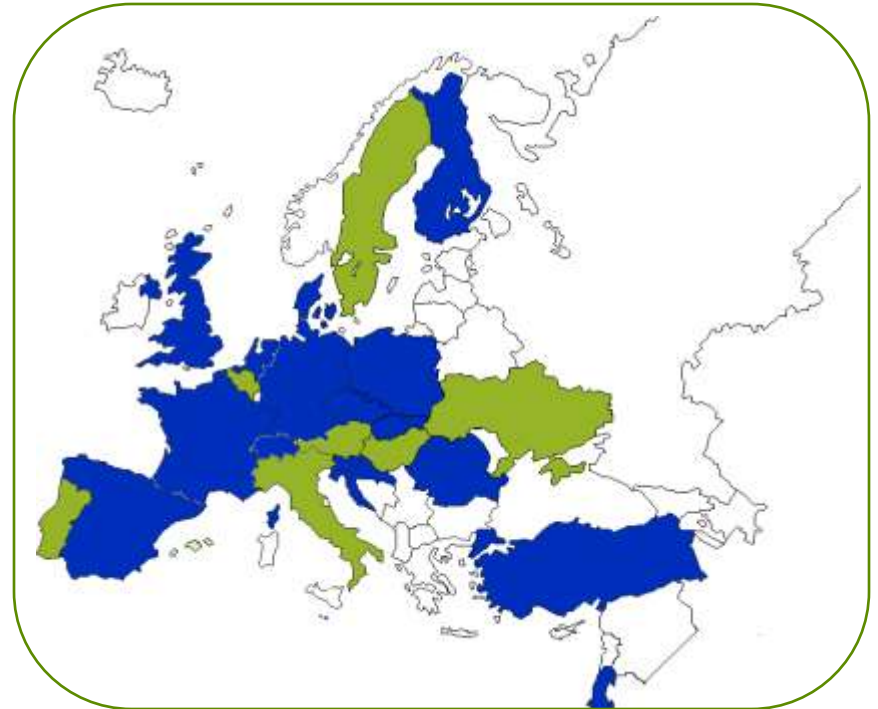
Organisation of ACQUEAU



Countries that support ACQUEAU (for application)

- United Kingdom (leader);
- Austria; Croatia; Czech Republic; Denmark; France; Finland; Germany; Israel; Malta; Norway; Portugal; Romania; Spain; Slovenia; Slovakia; Switzerland; Turkey; The Netherlands; The European Union

In discussion with
Belgium (Flanders & Wallonia);
Hungary; Italy; Portugal; Sweden;
Ukraine



Agenda of the first Call for Proposal

- Call information day
- Call launch by Web / Email
- Submission of Project outlines (3 pages)
- Selection – Adjustments
Executive Committee – National Project Officer
- Feedback to consortium (Green - Yellow - Red)
- Full proposal
- Discussion - adjustments
- Labelling (Board level)

Info Day 31/05

Networking

Publication 7/07

Consortium

Deadline for
Submission 20/08

Project Outline

Selection



Full Proposal
29/10

Adjustments

LABELLING
14/12

5 Main programmes



- **Promote better environment and health**
 - ⇒ Membrane technologies
- **Protect water resources, the environment & boost competitiveness**
 - ⇒ Real-time system management
- **Preserve the planet & increase energy efficiency**
 - ⇒ Low-energy wastewater treatment
- **Design the future of water supply**
 - ⇒ Materials for pipes and coating
- **Develop new processes with better environmental footprint**
 - ⇒ Low environmental impact for disinfection & oxidation



Real-time System Management



RTSM through online sensor networks, data management systems, wireless communication systems, pro-active models

- **Market:** drinking water & wastewater networks, water & wastewater plants
- Management of water resources, waterworks & wastewater works, water & wastewater networks
- Secure quality for end users (physico-chemical, toxicity, biological parameters).
- Improve network operation (leaks, quality control, flow, overflow) and reduce design and laying costs
- **Develop new services**
- Companies potentially involved: sensor companies, telecommunication networks operators, pipe manufacturers, IT companies (data systems, software, architecture), end users (water companies)

Membrane Technologies (1/2)



Develop low-energy membrane technologies to exploit alternative water sources (saline, industrial and municipal wastewater)

- **Market:** desalination and water reuse
- Technology breakthrough (structure & material) targeting 30% (or more) reduction in energy consumption
- **Develop a European alternative to US and Japanese suppliers**
- Companies potentially involved: polymer suppliers (petro-chemical industry), module manufacturers (membrane suppliers), engineering companies, end users (water companies)



Membrane Technologies (2/2)



Develop alternative non-RO processes

- **Market:** desalination and water reuse
- **Specific Energy ratio** < 1.5 kWh/m^3
- **Technical breakthrough:** carbon nanotubes, membrane distillation, bio-mimetic membranes, forward osmosis, electrodeionisation,...
- **Companies potentially involved :** polymer suppliers (petro-chemical industry), start-up process companies (production of the system), engineering companies, end users (water companies)

Technical criteria: Membrane Technologies

- Water quality should meet European standards as a priority, including the Water Framework Directive
- Energy requirements are independent on sources: global energy requirements should be taken into account
- Applicants should refer to the Blue Book 1 and 2 in particular p. 44 on “Membrane Technologies”.

Evaluation criteria

- **Administrative requirements**
 1. SMEs and start-up are encouraged to get involved
 2. Promote European based know-how and equipment
 3. Carry technical patents
- **Technical added value of the project**
 4. Innovative character of the project: potential of technological breakthrough
 5. Contribution to the protection of public health
 6. Contribution to sustainable development (including environmental protection)
 7. Likelihood of achievement
- **Market and Business criteria**
 8. Coherence of the project
 9. Capacity to boost the local market
 10. Capacity to address specific needs of the European water sector
 11. Cost reduction for construction and /or operation
 12. Likelihood to be available on the market

PO / FP

- PO/ 1 – 10 pages
- FP / 10 – 30 pages

General goals, Strategic relevance for ACQUEAU, State-of-the-art, Market relevance, Exploitation plan, Dissemination of results, Expected impact, Consortium description, short description of the work plan, Preliminary Budget Information, Project duration and Contact persons.

WHO CAN APPLY?

- Large Enterprise
- SME
- University
- Research Centre (Public / Private)

**Please contact your National Project Officer:
funding opportunities and allocation
have to be adapted to your country**

THANK YOU FOR YOUR KIND ATTENTION

www.acqueau.eu