

A Joint Programming Initiative

Water Challenges for a Changing World



**Joint Programming –
Coordinating Research
in Europe.**

**New opportunities for
the Austrian Research
Community**

September 28, 2011



Where we stand



**A few ideas
and facts to
make a
long story
short**



Where we stand today

- This JPI is coordinated by Spain and co-coordinated by The Netherlands
- A Template containing a preliminary definition of this JPI was presented to the GPC in Brussels in May 4th 2010.
- The kick-off meeting was held in September 29th, 2010:
 - Agreed upon a Governance model (GB/EB/AB)
 - Designed a plan to implement an interim Governing structure
- Meetings of the EB and GB have taken place
- The JPI has recently been informed that a Commission Recommendation for EC adoption will be issued no later than the fourth quarter of 2011.



And we have also...

- Established an internal communication routine:
 - A web-based document repository
 - A monthly newsletter
- Disseminated the JPI in a number of events
 - Nationally in Partner states
 - In Europe: Dublin, Madrid, Brussels...
 - To Stakeholders: WssTP, CIS-SPI...
 - To the water ERA-NETs: IWRMNET, CRUE
 - Outside of Europe: India Conference & Workshop

2 Current JPI Partners and Observers

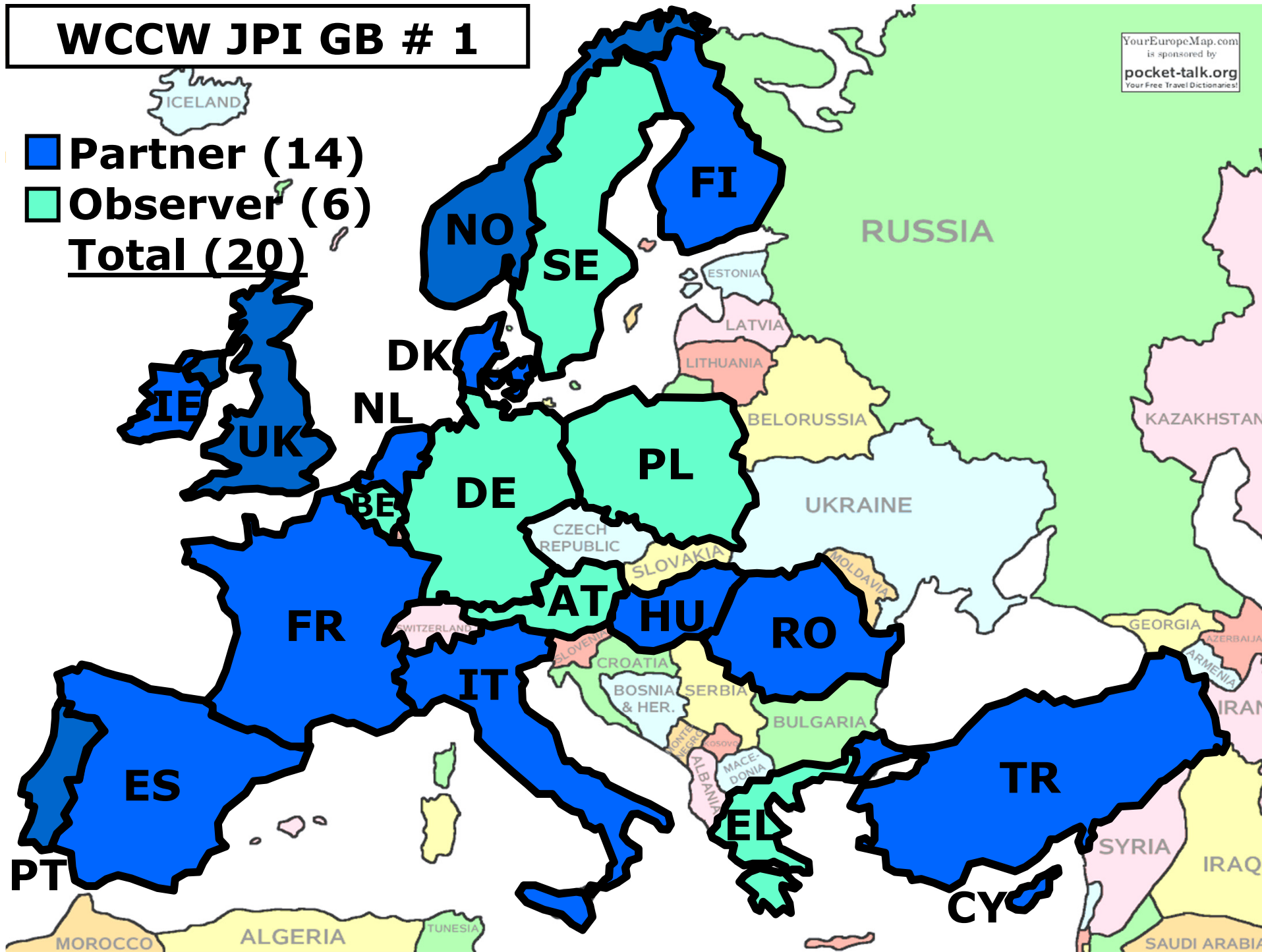


**A group of
committed and
motivated
research
managers**

WCCW JPI GB # 1

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- Partner (14)
- Observer (6)
- Total (20)**



JPI Partners: the Programme Logo Gallery

Cyprus



MINISTRY OF AGRICULTURE
NATURAL RESOURCES AND ENVIRONMENT



PLANNING BUREAU

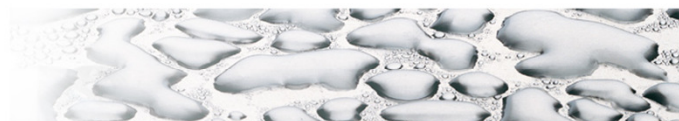
Denmark



Danish Ministry
of the Environment

Finland

AKVA GROUP



METLA



Ministry of Education and Culture
Opetus- ja kulttuuriministeriö Undervisnings- och kulturministeriet



JPI Partners: the Programme Logo Gallery

France



Hungary



Ireland



JPI Partners: the Programme Logo Gallery

Italy



The Netherlands



Norway



JPI Partners: the Programme Logo Gallery

Portugal



MCTES MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR
Ministry of Science, Technology and Higher Education

Romania



Spain



Turkey



United Kingdom



Centre for Ecology & Hydrology
NATURAL ENVIRONMENT RESEARCH COUNCIL



Department for Environment
Food and Rural Affairs

3 Highlights on the Vision Document



**Distilled
information
obtained
through
consensus**



The Vision Document

- The grand challenge: “Achieving Sustainable Water Systems for a Sustainable Economy in Europe and Abroad”
- Calls for the alignment of publicly funded **RDI** (Research, Development and Innovation) programmes

The Vision Document





Objectives

- The 2020 vision for the European Research Area claims for implementation of the “fifth freedom” across the ERA: free circulation of researchers, knowledge and technology.
- It also calls for attractive conditions and effective and efficient governance for carrying out research and investing in RDI intensive sectors in Europe.
- This JPI has designed a set of objectives representing a contribution to the 2020 vision for the ERA.
- These objectives will be achieved by 2020
- Objectives and address JPI performance through internal performance indicators:



Objectives

- Involving water end-users for effective RDI results uptake.
 - Solving societal problems through dynamic interaction with end-users.
 - Europe is the natural domain of this initiative, global impact will also be targeted.
- Attaining critical mass of research programmes.
 - Involve at least two-thirds of the public National water RDI investment in Europe.
 - Current JPI partners fund RDI activities for an estimated amount of 225 M€/yr
 - This represents 61 % of the 371 M€/yr estimated for EU Member States and Framework Programme Associated Countries.
- Reaching effective, sustainable coordination of European water RDI.
 - A permanent dialogue will be established between Member States, Associated Countries and the European Commission.
 - This dialogue will accelerate progress towards the ERA objectives



Objectives

- Harmonising National water RDI agendas in Partner Countries.
 - No interference with individual programme owners and managers
 - by 2020 the water RDI agendas of Partner Countries and the JPI Strategic Agenda will show effective harmonization.
- Harmonising National water RDI activities in Partner Countries.
 - Develop a catalogue of jointly programmed activities whose global budget amounts to at least 20 % of the total water RDI budget of partner Programmes.
 - Activities may include joint calls for proposals, mobility schemes and infrastructure actions.
 - All activities will be performed under the principle of variable geometry
- Supporting European leadership in science and technology.
 - Maintain the current European world leadership in water related scientific publications (29 %) and PCT patents (35 %).
 - In both aspects Europe is followed by the USA and by Japan
 - Doubling multinational European authorship of scientific publications (from the current 5 % to 10 %).



Research Questions

- **Maintaining Ecosystem Sustainability**
 - Integrated, trans-disciplinary research approach
 - Analyse the influence of external factors on the water cycle.
 - New ecological engineering approaches
 - Indicators and models for monitoring, risk assessment and early warning.
 - Enhance ecosystem resilience to stress with regards to human pressures.
- **Developing safe water systems for the citizens**
 - Emerging pollutants and pathogens.
 - Protecting the citizens' life and property from the devastating effects of natural hazards (also resulting in ecosystem degradation)
 - New water management approaches will be required



Research Questions

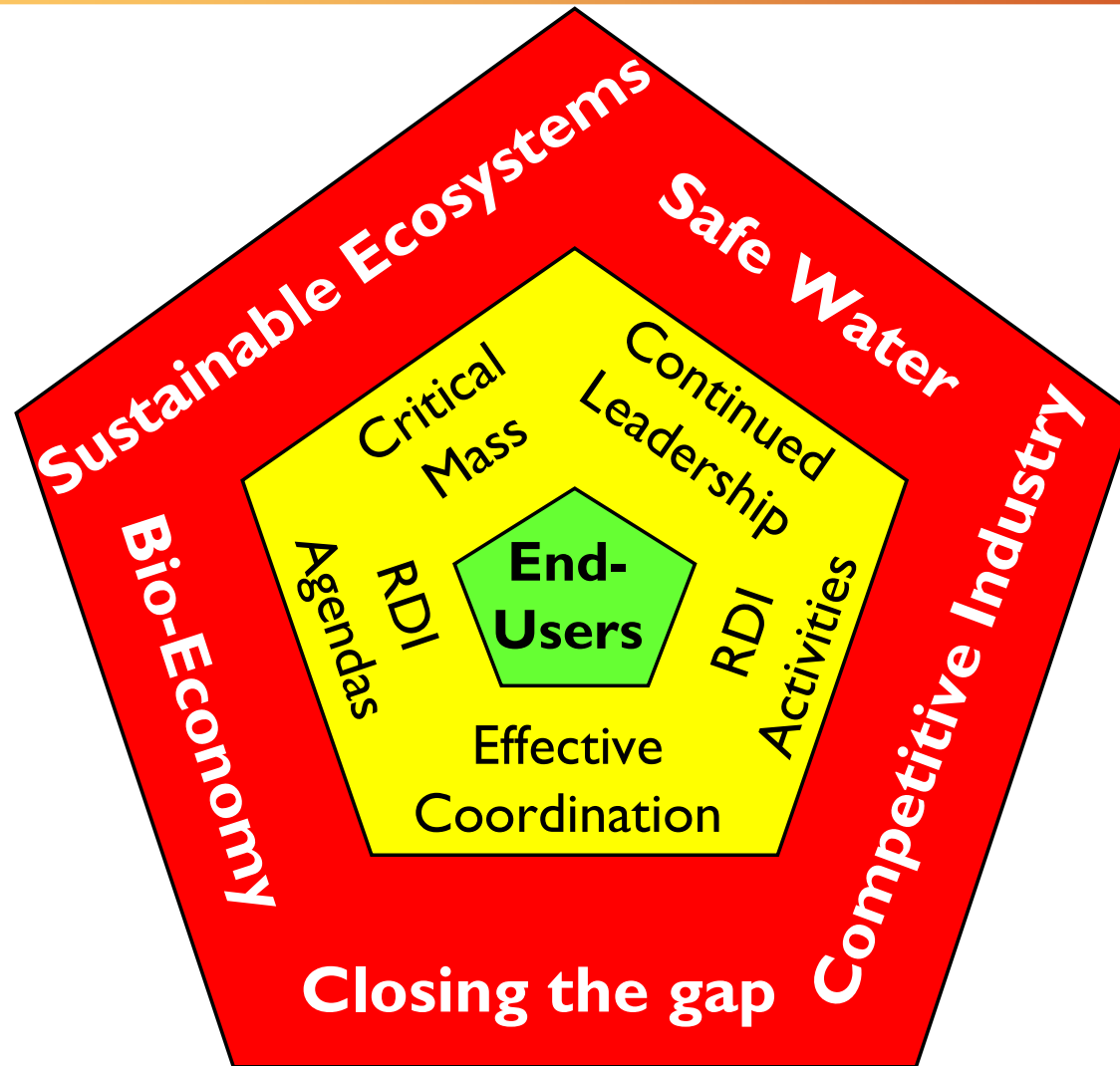
- Promoting competitiveness in the water industry
 - Production of problem-solving knowledge leading to the development of market oriented solutions.
 - Focus on new materials, processes, management tools, ICT, energy input and environmental profile.
- Implementing a water-wise bio-based economy
 - More pressure will be exerted on natural resources to increase production of food and biomass, intensifying the use of water and agrochemicals.
 - Science and technology will be required to develop more efficient agricultural systems.
 - New techniques and plant materials resulting in increased irrigation efficiency and reduced consumptive use and water pollution



Research Questions

- Closing the water cycle gap
 - Reconciling water supply and demand.
 - Financial water issues need to be analysed for different uses and regions.
 - Demand for closed water systems is obvious in arid areas
 - New integrated concepts related to water re-use, energy, recovery of valuable substances, monitoring and control, decentralized systems, and the interaction with natural resources.
 - Combine with a socio-economic approach

Objectives and research questions



4 A summary of intense mapping



Identifying agents, procedures, funding and mechanisms



Methodological notes

- An on-line survey was prepared addressing:
 - Information on **RDI** Programmes & Programme Owners
 - Water **RDI** Priorities covered by each programme
 - Funding information on the programmes
 - Information on International Cooperation
- We gathered 45 surveys from 15 countries (50 % of total info)
 - JPI Partners and observers: excellent coverage
 - Other MS + AC: very partial coverage
- Info was completed with Internet Sources: Programme web pages (40 % of total info), Cordis/ERAWatch (5 %), WssTP (5%)
- Funding was estimated for non surveyed countries using statistical information (IMF, OECD, EuroStat...)

Outcome

- Country summary reports were produced for all countries (30 = JPI + rest of MS + some AC)
- Mobilization of resources through the JPI:

Study Target	Group of Countries	National Public Water RDI funding (M€)	Percentage of funding respect to MS+AC (%)
Europe	Member States	351	94
	Associated Countries	21	6
	Members + Assoc.	371	100
JPI	Partners	225	61
	Observers	123	33
	Partners + Obser.	348	94

5 Setting up the Governance



**Steps taken
within 2011 to
reach effective
governance**



Executive Board (EB)

- **Purpose:**

- To implement the strategy defined and issued by the GB, to which the Executive Board is subordinated.

- **Membership:**

- A limited number of members elected by the GB. It comprises a President, a Vice-president and members.
- The EC, acting as a non-voting member.
- The President of the EB is the JPI Coordinator.

- **Met for the first time in January 29, 2011**

- **Second meeting, October 20, 2011**



Governing Board (GB)

■ Purpose:

- Deals with water-related JPI policy issues; its strategic decisions are based on advice provided by the Stakeholders Advisory Group and the Scientific Board.

■ Membership:

- One representative of each country participating to the JPI, acting as National Delegate. It comprises a President, a Vice-president and members.
- The EC, acting as a non-voting member.

■ Met for the first time in April 14th, 2011

■ Second meeting scheduled for April, 2012



Advisory Boards (AB)

- **Two bodies**

- The Scientific and Technological Board (STB)
- The Stakeholders Advisory Group (SAG)



Sci. and Tech. Board (STB)

- **Purpose:**

- Provide input to the GB from a scientific and technological perspective.
- Define scientific topics
- Propose these topics to the GB for approval, in close relation with the Strategic Research Agendas (SRA) defined at the Partners States and at the EU.
- Organize the evaluation procedures.

- **Membership:**

- Academia and Industry experts conducting RTD in water
 - Comprises a President, a Vice-president and members.
- Will meet for the first time in October 18, 2011



Sci. and Tech. Board (STB)

- Ten members today:
 - Dr. Cees Buisman
 - Dr. Damiá Barceló
 - Dr. Eric Servat
 - Dr. Jens Christian Refsgaard
 - Dr. João Santos Pereira
 - Dr. Luc Abbadie
 - Dr. Marc F.P. Bierkens
 - Dr. Merete Johannessen Ulstein
 - Dr. Michele Vurro
 - Dr. Sveinung Sægrov
- Number of members to grow in 2012



Stakeholders Adv. Group (SAG)

■ **Purpose:**

- Provide input to the GB from the user perspective. Stakeholders will represent the water industry, local/national policy makers, users, NGOs, etc.
- Define urgent RTD needs in synergy with those mentioned by the European Commission within each Working Program of the Framework Programme and by the Member States and the Associated countries.

■ **Membership:**

- One representative per institution.
- ## ■ Will meet for the first time in October 19, 2011



Stakeholders Adv. Group (SAG)

- Six members today:
 - the **WssTP**
 - Acqueau
 - the CIS-SPI Group
 - FAO Land and Water
 - the Finnish Environmental Institute
 - the Júcar River Basin Organization
- Number of members to grow in 2012



2012

- Will be used to produce a Strategic Agenda,
- Will design the first pilot actions of the JPI
- Expected specific CSA call
- Integrated in candidate EIP “Water Efficient Europe”, cooperating in its development
 - Expected member of High-level group
 - Expected member of Sherpa group
- Will be the year of consolidation of the JPI, and will gather the energy and tools to start regular operations by 2013



Thanks!