

"Water Challenges for a Changing World" Joint Programming Initiative

Fact Sheet – 7 April 2016

Introduction

The "Water Challenges for a Changing World" Joint Programming Initiative (Water JPI) is one of the <u>ten JPIs</u> tackling relevant societal challenges, which aim to strengthen research coordination and cooperation among EU Member States and Associated Countries, in themes that represent urgent and farreaching problems which are better solved by joining energies at European and International level.

The Water JPI is harmonizing national Research, Development and Innovation (RDI) agendas and developing joint actions (funding projects, disseminating knowledge, strengthening mobility and infrastructure) in the water sector.

After four years of leadership by the <u>Spanish Ministry for Economy</u> and <u>Competitiveness (MINECO)</u>, the <u>French National Agency for</u> <u>Research (ANR)</u> is now leading the Water JPI. The Water JPI has developed strong cooperation with <u>Horizon 2020</u> (the Framework Programme for Research and Innovation) and with stakeholders such as the <u>European Innovation Partnership on Water (EIP</u> <u>Water</u>).

Water in Europe and the World

Figures on water abstraction in Europe/for which uses?

The total abstraction of freshwater across Europe (excluding Turkey) is around 182 billion m³ (182 km³) per year. Overall, 39% of the total abstracted is for energy production, 22.5% for agriculture, 26.5% for the public water supply and 12% for industry (Eurostat, 2012).

According to the <u>Strategic Research Agenda</u> of the <u>Water Supply</u> and <u>Sanitation Technology Platform (WssTP)</u>, the European water sector is a major economic player (1% of GDP) with an annual turnover of about 80 billion Euro and an average growth rate of 5% per year compared to 2.5% per year average growth rate for the EU economy (WssTP, 2005); sustains 600,000 jobs; manages a network of 5.7 M km (drinking water and wastewater); and operates 70,000 wastewater treatment plants (WssTP, 2010).

There are 9,000 SMEs active in the water domain (COM(2012) 216 final) and annual European investments currently exceed €33 G in this field. The water world market is growing each year and is estimated to be one trillion US dollars by 2020, due to a compounding effect of failing infrastructures, urbanization, industry development and climate change (Bank of America Merril Lynch, 2012).

Water JPI Partnership

A total of twenty countries are partners of this intergovernmental initiative; four additional countries play the role of observers, whilst the European Commission acts as an extra, non-voting partner. Four Horizon 2020 Associated Countries are partners of this JPI (Israel, Moldova, Norway and Turkey).

Governance

The <u>Water JPI Governance</u> structure is based on a Governing Board, a Management Board and two Advisory Boards (the Scientific and Technological Board and the Stakeholder Advisory Group).

The <u>Governing</u> and <u>Management</u> Boards are led by France, with the support of Spain, Ireland and Italy.

The Scientific and Technological Board is composed of prominent scientists, from any part of the world, who are expert in some aspect of water quantity and quality.

The Stakeholder <u>Advisory</u> Group is made up of representatives from water industry, water users, non-governmental organisations and local or national authorities.

A vision for water Research, Development and Innovation

The <u>Vision Document</u>, published in April 2011, presents the grand challenge of the Water JPI: "Achieving Sustainable Water Systems for a Sustainable Economy in Europe and Abroad". The document identifies specific challenges in the economic, ecological, societal and technological domains.

The following objectives were set for 2020:

- Involving water end-users for effective RDI results uptake;
- Attaining critical mass of research programmes;
- Reaching effective, sustainable coordination of European water RDI;
- Harmonising National water RDI agendas in Partner Countries;
- Harmonising National water RDI activities in Partner Countries; and
- Supporting European leadership in science and technology.

A Strategic Research and Innovation Agenda (SRIA)

The Water JPI launched its first SRIA on May 30th 2013 and released version 1.0 on June 30th 2014. The release of version 1.0 was followed by a comprehensive review of national RDI agendas, the strategic agendas of partnering initiatives, policy documents and foresight studies. A consultative stakeholder workshop in Orleans in October 2015 provided further information on scientific and technological outputs, trends, gaps and priorities in the water RDI domain. The 2nd version of the SRIA will be launched at the 2016 Water JPI Conference in Rome on the 19th May 2016.

The Water JPI SRIA is structured around five core themes:

- 1. Improving Ecosystem Sustainability and Human Wellbeing;
- 2. Developing Safe Water Systems for Citizens;
- 3. Promoting Competitiveness in the Water Industry;
- 4. Implementing a Water-Wise Bio-Based Economy; and
- 5. Closing the Water Cycle Gap Improving Sustainable Water Resources Management

The SRIA focuses on providing effective solutions to key water challenges, thus contributing to the promotion of societal wellbeing and to boost competitiveness and growth in the European water sector.

An Implementation Plan for 2014-2016

The Water JPI Implementation Plan for the period 2014-2016 was adopted on October 2nd 2014. The Implementation Plan presents Water RDI priority themes to be implemented, permits to plan ahead joint activities; lists specific goals; and outlines the efforts to be deployed.

It also informs policy makers, RDI programme owners and managers, water RDI performers and society at large on how the Water JPI will tackle water challenges in the period 2014-2016 and acts as a guide for researchers and innovators who are interested in participating in Water JPI activities.

The new Implementation Plan 2017-2019 is currently under preparation and will lay out a roadmap to implement the water RDI needs identified in the Water JPI SRIA 2.0.

A Pilot Call for proposals in Water RDI

Eleven Water RDI funding organisations from the Water JPI partnership launched a Pilot Call for proposals in November 2013.

The aim was to set up multi-national, collaborative RDI projects, addressing the topic "Emerging water contaminants – anthropogenic pollutants and pathogens". The total budget was of c. \notin 9 million.

<u>Seven transnational collaborative research projects</u> in the field of water quality were selected for funding. The projects, which will run for about three years, had their kick-off meetings on 11th March 2015.

The second Call for proposals

The second Call for proposals of the Water JPI, cofunded with the European Commission, was published on 2nd March 2015 on a topic related to: "Developing technological solutions and *services for water distribution and measurement, waste water treatment and reuse, desalination, floods and droughts*". The Call counts on a budget of €16 million plus €1 million as loan. <u>16 projects</u> were recommended for funding and will have their Kick-off meeting on the 18th May 2016 in Rome.

The third Call for proposals

The third Transnational Joint Call for proposals of the Water JPI and FACCE JPI on the topic "Sustainable management of water

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resources in agriculture, forestry and fresh aquaculture sectors" is currently open with a closing date for the submission of preproposals on 19th April 2016. A webinar was organised the 15 March 2016 for providing detailed information on this call (see presentation and FAQ at this <u>link</u>). A discussion forum on Linkedin "<u>Water JPI - Researchers Forum</u>" was set up to facilitate networking and collaboration between applicants.

Communication and dissemination

The Water JPI website - <u>www.waterjpi.eu</u> - is continuously updated to present the latest information on the Water JPI and its activities.

A monthly <u>newsletter</u> is also published to energise internal and external communication.

The Water JPI will host its 2016 conference in Rome on the 19th May 2016. This international event is targeted to a wide range of stakeholders and will present the new version of the Water JPI SRIA, and discuss on how to implement it and the benefits from international cooperation. Following keynotes from the European Commission, and the Food and Agriculture Organization of the United Nations, round-table discussions will cover the identified water research priorities in the SRIA, its implementation, and the benefits of international cooperation to jointly tackle the grand challenge of achieving sustainable water systems in the world. A poster session presenting the transnational water-related projects funded to-date by the Water JPI and by the European Commission will also take place during the conference.

Task Forces

Task Forces are ad hoc teams that consist of voluntary delegates of JPI members to deals with specific long-term activities. These are: alignment, interactions with Horizon 2020 and international cooperation. Success of the Water JPI is dependent upon willingness to share and to proactively encourage alignment of national research agendas and increased coordination and collaboration. Interaction with Horizon 2020 provides feedback or contributions to the European Commission on the contents of the Work Programme for Horizon 2020 Societal Challenge 5 (Climate action, environment, resource efficiency and raw materials). With the increased awareness on water challenges the Water JPI plays a more important role in providing and steering research and innovation in the water sector, in close cooperation with upcoming international conventions/ policies and international research organisations with the objectives of i) building the critical mass needed to provide an effective response to major societal challenges; and, ii) enabling Europe to participate more effectively in agenda setting in international water fora.

Communication & Media

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