

# CALL FOR RESEARCH PROPOSALS

**2<sup>nd</sup> Joint Call** Closing Date: 15/10/2009



Closing Date: 15/10/2009

#### 1. General Information

The 2<sup>nd</sup> IWRM-NET joint Call will be published by the funding institutions mentioned below between July 1st and October 15, 2009 in their respective countries. It is intended to establish trans-national collaborative research projects that link research with policy needs and promote transdisciplinary approaches to improve IWRM across Europe.

Funding is granted according to countries. This means that each European funding organisation involved will fund its own national research institutions or companies collaborating in the joint research projects according to national funding rules. Applicants from other European countries may join project consortia when securing their own budget or if supported by one of the partners via subcontracting (dependent on the national rules).

To meet the different national regulations, the Call text is divided into two parts:

- (A) **Common section**, published in all partner countries participating in the pilot Call in the same form ("Preamble" and "Common Regulations")
- (B) **National regulations**, individually published by the funding institutions only in their countries (part B, "Specific Regulations").

### 2. Preamble and Common Regulations

Funding within the 2<sup>nd</sup> IWRM-NET Call is offered under the coordination of the FP6 IWRM-NET ERA-NET (ERAC-CT-2005-026025), "Towards a European-wide exchange Network for integrating research efforts on Integrated Water Resources Management".

Research participants are required to recognise the coordinating role of <a href="IWRM-NET">IWRM-NET</a> during the application & evaluation phase. After funding decision has been taken, coordination will be taken over by the Scientific Coordination Project (SCP) and national funders throughout the duration of funded research projects.

IWRM-NET is working on research programmes related to integrated water resources management (IWRM) and the European Union has published the Directive setting out a framework for community action in the field of water policy (WFD) as a means of implementing integrated water resources management across Europe. By improving the knowledge transfer amongst stakeholders in charge of IWRM, the IWRM network enables partners to work on synergies between research needs and policy, and promotes interdisciplinary activities concerning IWRM across Europe. The information created by IWRM-NET funded research will be expected to be disseminated across the network to the appropriate audience, in this instance the river basin managers, in the most effective way possible.

Common regulations can be downloaded using the following link: <a href="http://www.iwrm-net.eu/spip.php?rubrique43">http://www.iwrm-net.eu/spip.php?rubrique43</a>

#### 3. Aims of the Call

With reference to the opening statements IWRM-NET would like to invite research that links scientific advances to policy and/or practice in order to

 support the Water Framework Directive (WFD) implementation and integrate with other water related policies (agriculture, industry, energy),

Page 2 of 8



Closing Date: 15/10/2009

- develop a common framework for integrated water resources management with multiple tools that can be applied at the local level,
- generate added value to national research projects across Europe by sharing expertise and efforts across national teams.

Research has to meet internationally high standards of scientific quality. Transdisciplinary approaches will be encouraged to generate practice-relevant knowledge and insights. Therefore, involvement of the practitioners of water resource management in the research projects and transfer of knowledge to the relevant groups is mandatory. Special attention should be paid to providing knowledge relevant to upcoming deadlines of EU relevant water policies.

The focus for this 2nd Call is on developing strategies and solutions to meet the various challenges connected to climate change, droughts and water scarcity as such. Moreover, a special interest will be on assessing and further development of suitable instruments and methodologies for an economic and social embedding of IWRM measures in general.

The maximum duration for collaborative projects is 36 months.

#### 4. Research Themes

### 4.1 Economics and social values for integrated water management

#### Scope

Economic and social values are key aspects in integrated water resources management and governance. In particular, economic instruments are required to support the Water Framework Directive implementation by providing tools to assess costs/benefits of measures and to balance water uses fairly.

A challenge is to assess the broad range of values related to water ecosystems services. These values are enhanced by social perceptions and the environmental, political and institutional contexts. It is a difficult task to integrate these values into a decision-making process in order to make water policies more transparent and acceptable.

A better understanding of the contributions of ecosystem services to economic and social well-being would help to raise awareness of public and stakeholders for a better acceptance of water management measures and related costs.

Another challenge is to design incentive economic tools (such as pricing policies or market based instruments) to manage pressures on water resources.

#### **Expected outputs**

Further knowledge, methodology, operational and harmonized economic tools are needed by water managers. Proposed projects should focus on:

- Non-market values related to water, considering the social values and the ecosystems services;
- Social values: perception of the value of ecosystem services, representation...
- Conditions of efficiency for economic instruments (financial and fiscal instruments, pricing policies, subsidies, permit trading, conservation easements...);

Page 3 of 8



Closing Date: 15/10/2009

- Potential benefits of combined economic instruments;
- Integration of the wish for social fairness into economic incentive measures (polluter-pays principle, cost recovery, etc...);
- Methodology to justify the costs of measures to reach good ecological status of water bodies and to balance water uses (agriculture, industry, energy, tourism...).

#### **Key issues**

- Economics as a tool to support decision making (values of water)
- Economics as a regulatory tool to provide effective incentives
- Economics as an instrument for social fairness
- Integrated approaches combining environment, economic and sociological dimensions of the water system

### 4.2. Climate Change impacts and adaptation for IWRM

#### Scope

Changes in the climate have an immediate impact on our water bodies because the hydrological cycle is intrinsically tied to our climate. Water management needs to consider and be able to adapt to these impacts. The following trends are expected in Europe (IPCC 2008): temperature increase, increase in precipitation in northern Europe, decrease in precipitation in Southern Europe, seasonal shift of precipitation from summer to winter.

There is now clear evidence that climate change will affect water bodies in most parts of Europe due to increased evapotranspiration, increased and/or decreased runoff, shifts in seasonality, and shifts in socio-economic pressures. Therefore, climate change will influence the quantity and mode of water uses.

### **Expected outputs**

We need an improved knowledge on climate change and its impacts in order to adapt water management. We seek proposals that will examine:

- Quantitative projections of changes in river flows and their consequences;
- Effects of climate change on reference conditions (and definition of Good Ecological Status...) and on key variables for surface water and groundwater, ecosystem processes and services; disentangling effects of climate change and local anthropogenic pressures;
- Development of integrated scenarios (hydrology, ecology, usability of water bodies, socio-economics, management, governance...) and integrated models;
- Development of decision support tools to integrate management of supply and demand for water resources in the context of global changes;
- Adaptation measures that enforce robustness and resilience of natural and/or societal systems;
- Management of uncertainties of climate change scenarios and impacts in designing river basin management plans.

### **Key issues**

- Climate impacts on hydrology and ecological structure, functions, processes and services
- Typology, reference conditions and biological assessment
- Integrated modelling of rivers, lakes, estuaries, coastal waters, groundwater...

Page 4 of 8



Closing Date: 15/10/2009

- Long-term adaptation measures for water quality and quantity
- Prospective changes in water uses and management
- Integrated approaches combining environment, economic and sociological dimensions of the water system

#### 4.3 Water scarcity and drought

#### **Scope**

Over the past thirty years, droughts have dramatically increased in number and intensity in the EU.

Drought means a temporary decrease in water availability. It is a normal, recurrent feature of climate related to natural variability. Scarcity means that water demand exceeds the water resources exploitable under sustainable conditions.

Access to good quality water in sufficient quantity, with a quality suited for the considered uses, is fundamental to human daily life and to most economic activities. Unsustainable consumption and production patterns are degrading ecosystems and reducing their ability to provide essential goods and services to humankind.

Therefore, the challenge is to find alternative approaches to reverse this threat and achieve sustainability.

#### **Expected outputs**

We need to set appropriate measures (socio-economic, technical, legal, incentives....) to allow adaptive management of water supply and other uses. We seek proposals that will examine:

- Understanding hydrological and ecological mechanisms in times of scarcity and droughts;
- Understanding of drought climatology (frequency, intensity and spatial extent) and of drought patterns, enabling operational forecasting;
- Understanding the impacts of water scarcity and drought on activities, public awareness, well-being, ecological functioning, water quality...
- Understanding the impacts of uses (activities, domestic use, abstraction, non-conventional water resources, land use...) on water scarcity;
- Strategy and decision support tools (models, scenario, indicators, threshold, economic incentives...) towards a shared and sustainable management of water resources and of water uses, at short, mid and long terms, consideration will be given to demand management;
- Trans-national comparisons based on agreed indicators, definition of harmonised system of surveillance, compilation of harmonised historical, spatial and temporal data, ...

#### **Key issues**

- Water scarcity and drought impacts assessment
- Balanced decision making for water scarcity and drought
- Drought and scarcity management
- Knowledge and data management
- Integrated approaches by combining environment, economic and sociological dimensions of the water system

Page 5 of 8 5



Closing Date: 15/10/2009

### 5. Scientific coordination project

It is intended to establish scientific coordination of the second IWRM-NET funding initiative by a separate project. This Scientific Coordination Project will perform accompanying research and networking activities. It will support IWRM-NET in fulfilling their higher-level coordination tasks associated with the implementation of the 2<sup>nd</sup> Join Call.

Proposals for the SCP are not to be submitted by international consortia, but by a **single institution** from one of the PARTNER countries which executes the project in case of approval. Funding will have to be provided by the country of its origin (check at the national help desk).

The Scientific Coordination Project will be selected in a separate evaluation process. The following criteria have been agreed:

- Scientific qualification and expertise related to IWRM research
- Qualification and expertise related to research coordination and programme management
- Relevance of the proposal to the tasks expected by IWRM-NET (cf. below)
- Adequacy of estimated costs
- Prospects for success with regard to the work and financial plan including time schedule

A separate specific application form is to be used which can be found on the IWRM-NET website (<a href="http://www.iwrm-net.eu">http://www.iwrm-net.eu</a>). Similarly to the joint research projects, application is to be carried out in a one-step procedure, i.e. applicants will submit a full proposal. The general deadline for submission is October 15, 2009.

The tasks of the coordination project are related to the scientific monitoring and organisational management of the funding initiative. These tasks will include for example

- scrutinising the European Research Area and worldwide scientific community for research related to the 2 funding initiative in order to ensure a broader view and the scientific embedding of the individual funded projects into the research field
- monitoring of the 2 funding initiative (e. g., support for joint projects' reporting (interim and final reports) and evaluation of project results
- organisation, support and documentation of 3 meetings for the projects of the funding initiative (kick-off meeting, mid-term seminar, final symposium; note: no travel expenses/ accommodation for participants will be covered by the SCP)
- overall evaluation of the funding initiative and dissemination of its results.

These tasks will be fulfilled in close coordination with the IWRM-NET Core Group. This means that the project is accountable not only to its national funding body, but to the IWRM-NET Core Group as well, which will be in regular contact with the SCP.

The Scientific Coordination Project will be approved for up to 40 months (will be finally decided dependent on the duration of the joint research projects funded). It is assumed that the tasks described above can be carried out by a scientist who has expertise in the scientific fields addressed and skills in project management, and is working half time on the project.

# 6. Contact Information of the National Funding Organisations and Links to National Calls

Please, find the contact information of the participating funding organisations and the links to the national help desks of the 2<sup>nd</sup> Call below.

Page 6 of 8 6



Closing Date: 15/10/2009

In advance of writing a proposal all applicants <u>must</u> contact their national help desk in order to ensure target-oriented proposals. The contact persons for the national helpdesk facility (named below) will answer questions and resolve problems raised by their national applicants.

The national funding bodies involved in the 2<sup>nd</sup> IWRM-NET Call are:

Country	Budget in EURO	Funders	National help desk contact
DE	1.000.000	Project Management Agency, Research Centre Karlsruhe on behalf of the Federal Ministry of Education and Research (BMBF)	Iris Bernhardt, Irene Huber
ES	150.000	Fundación para el Conocimiento madri+d	Arturo Menéndez
ES	300.000	Ministerio de Ciencia e Innovación	Lucila Candela
FR	500.000	ONEMA- Office National de l'Eau et des Milieux Aquatiques	Marie-Perrine Durot
FR	700.000	Ministère de l'Ecologie, du Développement et de l'Aménagement Durables	Marie Cugny- Seguin
IT	200.000	ISPRA - Istituto Superiore per la Protezione e la Ricerca Ambientale	Elena Giusta; Giuseppina Monacelli
LV	150.000	Latvian Council of Science	Ilga Kokorite
NL	please refer to your national help desk	Ministry of Water Management and Public Works/Rijkswaterstaat: will not be an official partner in the 2 <sup>nd</sup> IWRM-NET Call but may support a very specific subtopic of the Call	Horst Senkhorst
PT	200.000	Foundation for Science and Technology/ Fundação para a Ciência e Tecnologia	José Bonfim
RO	100.000	Ministry of Environment and Sustainable Development/ Ministerul Mediului si Dezvoltarii Durabile	Mihail Costache
SE	please refer to your national help desk	Swedish Environment Protection Agency: will not be an official partner in the 2 <sup>nd</sup> IWRM-NET Call but may support a very specific subtopic of the Call	<u>Catarina</u> <u>Johansson</u>

### 7. Application

For the submission of project proposals, the *Common Application Form* (<u>Download: http://www.iwrmnet.eu/spip.php?rubrique43</u>) is to be completed in English. It requires information on administrative details, a summary of the proposal, a list of work packages, calculated costs per partner and requested funding,

Page 7 of 8 7



Closing Date: 15/10/2009

time schedule and a detailed project description. The coordinators of project consortia have to send the joint proposals of all partners to the Call Secretariat until October 15, 2009:

1) one signed paper copy to:

Forschungszentrum Karlsruhe PTKA-WTE PO Box 36 40 D-76021 Karlsruhe Germany

#### <u>and</u>

2) electronically: E-mail: iwrm-net[at]ptka.fzk.

Where an additional national Application Form is required, the individual project partners additionally have to submit a complementary proposal according to their national funding rules. For details, please see the national "Specific Regulations" or consult your national help desk (table above).

Page 8 of 8 8