

Preannouncement

ERA-Net IWRM-Net 2d joint Call for research proposals

IWRM-Net (towards a European wide exchange Network for integrating research efforts on Integrated Water Resources Management) is a network composed of national and regional research programmes managers and funders. 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 within the context of the Water Directive Framework implementation.

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, proposals addressing economical and social issues for IWRM are welcomed.

Funding of the call is granted according to countries. This means **consortium** can be made from researchers based within the eight funding countries participating to the call (see table p5). If a research team from outside these countries wishes to participate, it needs to bring its own funds.

Opening date: 1st July 2009

Closing date: 15th October 2009

Contacts: you can either contact the national funding organisation (see table p5) or the call secretariat: iwrn-net@ptka.fzk.de

All the documents related to the call will be available from the 1st July 2009 on <http://www.iwrn-net.eu/spip.php?rubrique43>

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1. RESEARCH THEMES

1.1 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...);
- 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

1.2. 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...
- 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

1.3 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

2. CONTACT INFORMATION OF THE NATIONAL FUNDING ORGANISATIONS AND LINKS TO NATIONAL CALLS

In advance of writing a proposal **all applicants must contact their national help desk** in order to ensure target-oriented proposals.

Country	Budget €	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 iris.bernhardt@ptka.fzk.de ; +49 351 463 31437 Irene Huber irene.huber@ptka.fzk.de +49 7247 82 3594
ES	150.000	Fundación para el Conocimiento madri+d	Arturo Menéndez amenendez@madrimasd.org +34 91 781.65.70
ES	300.000	Ministerio de Ciencia e Innovación	Lucila Candela Lucila.Candela@upc.edu +34 93 401 6868
FR	500.000	ONEMA- Office National de l'Eau et des Milieux Aquatiques	Marie-Perrine Durot marie-perrine.durot@onema.fr 33 1 45 14 36 32
FR	1.000.000	Ministère de l'Ecologie, du Développement et de l'Aménagement Durables	Marie Cugny-Seguín marie.cugny-seguin@developpement-durable.gouv.fr +33 1 40 81 33 44
IT	200.000	ISPRA - Istituto Superiore per la Protezione e la Ricerca Ambientale	Elena Giusta elena.giusta@isprambiente.it 0039 06 5007 4172 Giuseppina Monacelli giuseppina.monacelli@isprambiente.it 0039 06 5007 4471
NL	please refer to your national help desk	Ministry of Water Management and Public Works/Rijkswaterstaat: will not be an official partner in the 2nd IWRM-NET Call but may support a very specific subtopic of the Call	Horst Senkhorst henk.senhorst@rws.nl +31 6-51275950
PT	200.000	Foundation for Science and Technology/ Fundação para a Ciência e Tecnologia	José Bonfim Jose.Bonfim@fct.mctes.pt +351 21 391 15 28 and +351 21 392 13 81
RO	100.000	Ministry of Environment and Sustainable Development/ Ministerul Mediului și Dezvoltării Durabile	Mihail Costache mihai.costache@mmediu.ro +40 21 31 92 591
SE	please refer to your national help desk	Swedish Environment Protection Agency: will not be an official partner in the 2nd IWRM-NET Call but may support a very specific subtopic of the Call	Catarina Johansson Catarina.Johansson@naturvardsverket.se +46-8-698 1245