



SIXTH FRAMEWORK
PROGRAMME

Challenges and opportunities for Integrated Water Resources Management at the dawn of the new era

*Coping with Drought & Water Deficiency – From
research to policy making
12-13 May 2005, Cyprus*

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The need for IWRM

- ⊠ **Today's water problems are complex and have to be solved in a world with increasing uncertainty**
- ⊠ **Water management should not be limited only to the management of the physical resources but it should be managed in a way of:**
 - 📁 Preventing environmental damages
 - 📁 Ensuring present and future water needs
 - 📁 Ensuring social and economic efficiency



What is IWRM?

- ⊠ **A process which promotes the coordinated development and management of water, land and related resources (GWP)**
- ⊠ **An approach for sifting paradigms in water resources management**
- ⊠ **A necessary framework to help us improve knowledge for better water management**



IWRM Challenges

- ⊠ **The scientific base for IWRM is not yet fully developed and there is a lack of a truly interdisciplinary, integrative and participative research approaches and methodologies in the area of water management**
- ⊠ **There is no consistent/transparent methodology to compare potential IWRM approaches that would allow effective transfer of successful experiences across basins and frontiers**
- ⊠ **IWRP concept is difficult to be translated in operational terms and therefore not easy to be « sold » to politicians, practitioners and the public**



Water Framework Directive

- ✦ Establishes the basic principals for a sustainable water policy in Europe
- ✦ Sets clear environmental objectives (good ecological status)
- ✦ Requires that all partners in a given river basin manage their waters in close co-operation irrespective of administrative borders
- ✦ Includes economic instruments to support the environmental objectives
- ✦ Requires public participation in preparing river basin management plans



WFD

A Common Strategy for Implementation

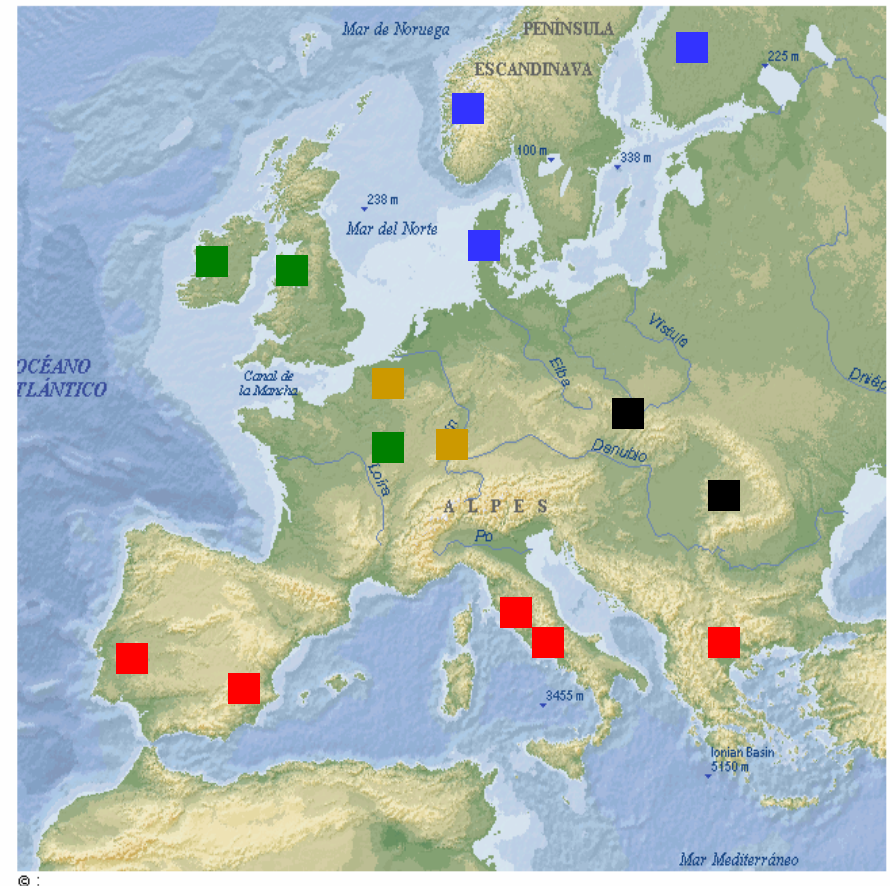
- ✓ **Common understanding** and approach
- ✓ **Capacity building**
 - ✓ Elaboration of **guidance** (14) on **key challenges**, such as environmental and economic analysis, best practices, monitoring, public involvement, wetlands, classification, etc.
 - ✓ Unprecedented **cooperation** of Commission, MS, stakeholders and NGOs – **Establishing expert network**



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Pilot River Basins Network

- B, F, NL (Scheldt),
- D, F, Lux (Moselle-Sarre)
- France (Marne)
- Ireland (Shannon)
- UK (Ribble)
- Denmark (Odense)
- Finland (Oulujoki)
- Norway (Suldals)
- Portugal (Guadiana)
- Spain (Júcar)
- Greece (Pinios)
- Italy (Tevere, Cecina)
- HU/ROM (Somos)
- PL, CZ, D (Neisse)





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EU Water Initiative - A Quick Overview

Johannesburg Summit and Millennium Development Goals

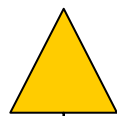
Geographical Components

- AFRICA (sub-Saharan)
 - EECCA
 - MEDITERRANEAN
(North Africa & Middle East)
 - LATIN AMERICA
- others to follow...

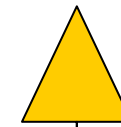
Thematic Areas

- ✓ Water Supply and Sanitation (WSS)
- ✓ Integrated Water Resources Management (IWRM...*including transboundary resources*)
- ✓ *Extreme events*

Horizontal Components



Financing
Research
 Monitoring





Three decades of EU Water Research

- ⊕ Water research was a major component of successive EU environmental research programmes
- ⊕ EU funded research in the field of water covered a wide number of areas (e.g. hydrological and biogeochemical aspects, aquatic ecosystems functioning, etc.)
- ⊕ Earlier programmes were focussed on the development of scientific knowledge to support environmental quality standards and objectives
- ⊕ In FP5 and FP6 emphasis is given on integrated approaches for sustainable water management, support to water policies and global change impact assessment



FP5 - Water Key Action

Creating a forum for interaction and policy support

✦ Establishment of several project clusters and other network activities facilitating the discussion of detailed technical issues from a research point of view and initiating the dialogue between the researchers, policy-makers and water managers

✦ CATCHMOD: Integrated catchment modelling and human aspects

✦ WFD-EQA: Ecological Quality Assessment and Reference Conditions

✦ ARID: Management of scarce water resource

✦ CITY-NET: Integrated Urban Water Management

✦ ACTIF: Flood forecasting and technological innovation



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Water research in FP6

The Global Change and Ecosystem sub-priority has set integrated water resources management approaches in the context of global change and has provided new perspectives with regard to international cooperation



New Approaches to Adaptive Water Management under Uncertainty (NEWATER)

- ⊕ **The major objective is to develop a conceptual framework for research and adaptive management of river basins that integrates natural science, engineering and social science concepts and methodologies and apply it in selected river basins**
 - 📁 analyse current practices and lessons in IWRM, especially uncertainties in integration across scales and distributional conflicts
 - 📁 analyse the key factors for transition to adaptive management, integrating poverty alleviation, gender and health issues
 - 📁 develop appropriate scenarios of future vulnerability and adaptive capacity
 - 📁 develop a toolkit and guidance for practitioners in using innovative tools for adaptive management
 - 📁 share experience and innovation in dialogues, publications and actions world-wide



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European Technological Platforms

- ✦ **Foster the synergy between industry, public sector and all the other relevant stakeholders**
- ✦ **Create a powerful mobilising force to build consensus for research and technology development priority setting in emerging technological areas**
- ✦ **Contribute to increasing investment in research in Europe.**
- ✦ **Arm European companies with knowledge and help them to compete in an increasingly global and increasingly technology-intensive environment.**
- ✦ **High level public/private partnerships to define and implement in common a strategic research agenda**



Technology Platform on Water Supply and Sanitation

(www.wsstp.org)

- ✦ **Development of short-, medium- and long-term visionary research activities to produce step-changes in the water system**
- ✦ **A concerted public-private effort in an area of risk for single groups to invest in**
- ✦ **Establishment of a shared Platform, bringing together all the main actors, with the objective of defining a common research agenda**



IWRM in the context of Technology

Platform on Water Supply and Sanitation

- ⊕ **New technology will be essential in developing a European vision for water supply and sanitation, but technology alone is not sufficient**
- ⊕ **If the European water industry and water profession is successful in addressing these issues, then the capability to offer integrated solutions will provide a competitive advantage**



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**Thank you for your
attention**

