

SWAM 6th Network Meeting & 5th Inter-cluster round-table meeting – Murcia (Spain)

| | WEDNESDAY, 7 [™] MARCH 2012 |
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| 09:30h. | Study visit to the WWTP Murcia-ESTE (a plant of urban waste water treatment with production of biogas and cogeneration) |
| 11:30h. | Coffee break |
| 12:00h. | Study visit to the symbiotic waste-water plant in the University of Murcia and short speeches by university professors about details on the engineering, chemical and microbiological aspects of the plant. |
| 14:30h. | Work Lunch |
| 16:30h. | 5 th SWAM Inter-cluster round-table meeting: closing the JAP! |
| | 6 th SWAM Network Meeting : steering the progress of the Project. |

| 6 TH NETWORK MEETING & 5 TH INTER-CLUSTER ROUND TABLE MEETING | |
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| | WP1 "Project Management" Presentation by work-package leader – DGUPC - Results from the Intermediate Report period (FREEM has been included as AFAMUR's third party). IR completed. - Other pending issues. Questions and Suggestions. |
| | WP2 "Competitiveness and Research Analysis of Water-Tech Research-driven Clusters" - Closed. |
| | WP3 "Joint Action Plan Development" Presentation by work-package leader – MIGAL Final review of the Joint Action Plan (see Inter-cluster round table meeting). Pending deliverables and other issues regarding WP3. INTER-CLUSTER ROUND-TABLE MEETING Closing the JAP! Some thoughts about the "real" SWAM Project results focusing on future joint collaborations (Get real!). |
| | WP4 "Collective Learning and Business Platform Development" Presentation by work-package leader – GMA Current status and results about Info-Days and Mentor Trainings events. Pending deliverables, Info-days, Mentor Trainings and other issues regarding WP4. |



6TH NETWORK MEETING & 5TH INTER-CLUSTER ROUND TABLE MEETING

WP5 "Dissemination and Exploitation Activities"

Presentation by work-package leader – AFAMUR (FREMM)

- Final Project meetings in Murcia (26th-28th June 2012). Discussion about objectives and activities. Foreseen Water-Tech fair organised by AFAMUR and attendance of an Israeli companies delegation.
- Current status of the work about promotional materials and Project dissemination.
- Communication & Dissemination Report.
- Pending deliverables, tasks, events and other issues regarding WP5.

As in previous network meetings, each WP leader has to prepare a brief presentation about the status of the work package under its responsibility, **excepting the issues in blue which will be carried out by DGUPC**, Project Coordinator.

Antonio Martinez Nieto

FOUNDATION EURO-MEDITERRANEAN WATER INSTITUTE

SWAM 6th Network Meeting & 5th Inter-cluster round-table meeting MURCIA (Spain) 7 March 2012





IEA FOUNDATION ORIGIN

Resolution Council of Europe 11 April 2001

Recommends the establishment of the Foundation with the aim of collaborating with the study and research of water resources in the Mediterranean basin, with especial consideration to the problems of scarcity and drought.

SCIENTIFIC AND RESEARCH ORIENTATION

Since its creation to the present IEA Foundation has worked together with Spanish and foreign universities:

- (1) Has formalized about 97 cooperation agreements.
- (2) Has developed around 25 research projects.
- (3) Since 2002 has invested around 10 million euros in research activities, which represents most of its annual budget.

IEA FOUNDATION RESEARCH RESULTS

- As a result of these research projects, among other intellectual works, the Foundation IEA has published 16 books and other minor ed formats, aimed at sharing and transferring knowledge and lessons learned.
- The Foundation has created an editorial line and its own thematic library in this sector, being one of the first in Spanish language.

TEACHING ACTIVITIES IN IEA FOUNDATION

- Recommendation 1471 of the Council of Europe which gives rise to the IEA Foundation also states that:
- "... The education sector has an important role fostering environmental awareness among the younger generation, and efficient use of water is a vital aspect of this consciousness."
- Consequently, the IEA Foundation has developed several postgraduate courses in collaboration with various universities, on issues as: water law, hydrology, desalination, water sewage treatment, aquifers, ...

FOUNDATION IEA FIRST STAGE

- IEA Foundation in the early years of its creation and activity (2001-2005) was focused on their geographic area and the focus was reduced to a limited number of subjects.
- This period ends with the organization of the Second National Conference on Water Law (the first was held 20 years earlier) and the publication of the Handbook of Spanish Water Law, the outcome of the Congress.

IEA FOUNDATION SECOND STAGE

- The second period of the Foundation (2005-2010) begins with the new premises in the Campus of Espinardo, being remarkable:
- (1) New cooperation agreements with Spanish, European and American universities.
- (2) Collaboration with international organizations, especially, the EMI (France) which opens our participation in the 6th World Water Forum.
- (3) In this second stage it can also be highlighted the organization of the Hearing in Murcia of the Economic and Social Committee (ESC) and the report: "Facing the challenge of water scarcity and droughts in the European Union" (2008).

THE IEA FOUNDATION "NEW ERA"

- In 2010 begins a new era for the Foundation IEA with greater involvement in European and international projects:
- (1) The ARLEM Report on Local Water Management in the Mediterranean
- (2) Platform for Water Resources Research
- (3) Mediterranean Water Forum
- (4) International Academic Forum for Water Studies

LOCAL WATER MANAGEMENT IN THE MEDITERRANEAN BASIN

- The Foundation has collaborated with ARLEM in preparing the Report on Local Water Management in the Mediterranean (2011), the rapporteur has been the President of the Region of Murcia:
- 1. Recognizes water scarcity as a limiting factor constraining the normal economic development and the proper care of the environment.
- 2. Recommends the role for local authorities in the Strategy for Water in the Mediterranean.
- 3. Emphasizes the role of local measures: demand management, measuring instruments, incentives for grey water systems, improved networks, pricewise rates, local taxes, tax on the production of wastewater to be applied to treatment and recycling.
- 4. Recommended level of governance: incorporation of local bodies in planning and management of rivers and other measures of administrative cooperation.

RESEARCH PLATFORM OF WATER RESOURCES

 The development of the draft Research Platform of Water Resouces in Scarcity Areas (PIRHZE) is the ongoing most important scientific water-related project.

- This ITCS project is promoted by the Ministry of Science and Technology and the Autonomous Community of Murcia.
- With the participation of hydrologists and experts worldwide.

MEDITERRANEAN WATER FORUM

- Launch of the Mediterranean Water Forum (Murcia 2010) as an international initiative to enforce the position of the Mediterranean basin.
- The first meeting of the Forum was set in Marrakesh (December 2011) with the participation of all Mediterranean countries and various organizations / European networks.
- The next contribution is due to be held in Marseille. The IEA Foundation is in charge of the policy on non-conventional water resources (desalination and reuse) at the 6th World Water Forum.

EURO-MEDITERRANEAN ACADEMIC FORUM

- Promoted by EMUNI (Slovenia), Campus Mare Nostrum (Murcia and Cartagena), and the Foundation IEA.
- This Academic Forum already counts with the participation of: CSIC, EMI (France), University of Haifa (Israel), Moulay Ismail University (Marocco), Aristotle University of Thessaloniki (Greece), Hacettepe University (Turkey).
- Objective: Collaborate to ARLEM objectives, the Committee of the Regions of the EU and the Union for the Mediterranean, to establish a Master on Water, promote joint studies and student exchanges.

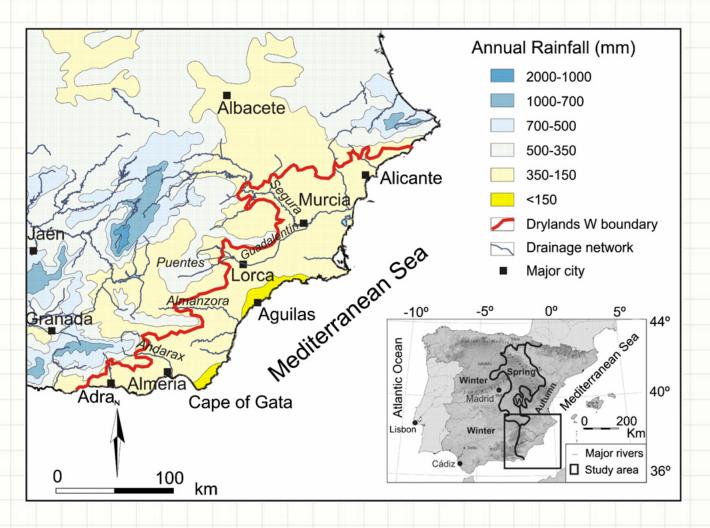
LEGAL FRAMEWORK FOR IEA FOUDATION

- The IEA is a Public Sector Foundation, established under the Spanish Foundations Act and regional related regulations, endowed with legal personality and capacity to act in the international context.
- Thanks to the legal regime of the Foundations (private law and application of principles of governance) IEA Foundation has more flexibility than the administration itself to participate in UE projects and enter into agreements with all types of organizations.

IEA FOUNDATION BOARD AND ORGANIZATION

- Honorary Chairmen
- President
- Patrons
- Scientific Council
- Director General
- Secretary General
- Researchers
- Contributors

THE SPANISH MAP OF WATER-POVERTY The task ahead for the IEA Foundation



THE REGION OF MURCIA APPROACH TO WATER GOVERNANCE

A governance system adapted to semiarid climates conditions

- A model organized to address the problem of scarcity and drought
- How to close the gap: what we have (400 hm3/year) and what we need (1500 hm3/year)
- The water deficit is strangling the normal development of life and economic activities
- Water demand management: this side of the problem has been already done in the Region: agriculture (with 3% of Spanish water allocation, the regions grows 20% of Spanish fruit/vegetables exports) urban supply (the more expensive in Spain)
- With the regional system: from 400 m3/inhabitant/yr, to 65i m3/i/yr, but far away from UN recommendation 1000 m3/p/yr below which lies the threshold of waterpoverty
- Alternative water resources: desalination, reuse of reclaimed water, groundwater (over) abstraction and water transfers from other basins
- Strong involvement of user to water awareness: farmers, tourists and residents

Water resources Spanish legal system: role of the state and regions

- The Spanish Water Law: the supply of water depends on the State (central government)
- The activities that demand water lay on the jurisdiction of the Regions and Local authorities
- Water governance principles: solidarity, regional cooperation, economic sustainability and environmental protection

REGENERATED WATER REUSE IN MURCIA REGION

The most remarkable achievement of the regional water governance system:

- The regeneration of all wastewater produced in the Murcia Region: not a desire but a fact!
- And the subsequent reuse of all that recycled water in agricultural uses an the environment
- We are talking about 100 hm3 of recycling water reused each year: 20% of water budget allocation.
- Number of facilities: 100, half of them small, to reach all regional population.
- Regional Water Sanitation and Reuse Plan: investment 635 Million euros (2001-2010)

Some key ideas to illustrate this side of water governance model:

- All citizens finance the operating system cost (40 M €) with a special tax paid on water bill
- The system is managed by a single administrative entity, no depends on municipalities
- The treatment given to waste water is tertiary, so the recycled water is pre-drinkable.
- The recycled water is allocated to: irrigation and environment (river flow and wetlands)
- Other results: prize awards, the Segura river as the cleaner in Spain, no UE fines.

THE NEW IEA FOUDANTION MAIN ROLE

- Lessons learned from the Region of Murcia water governance:
- 1. Water transfers could be necessary to the Integrated Water Resources Management
- 2. Spain: enough water for all, but unequally distributed, and in some aspects needed of better management (as in other nations).
- 3. It is needed a specific framework for water governance in semiarid regions
- 4. Despite some naïve ideas, water transfers are necessary once not much more can be done on the side of demand-management and climate change is making things even worse
- Motto: We are not facing a crisis of water but a crisis of water governance
- 1. The Region of Murcia can demonstrate the role of good water governance with a real-scale laboratory.
- 2. The Region of Murcia manages in an efficient integrated way (natural surface and groundwater resources, reuse of recycled water, desalination of sea and brackish water and transfer between basins) according to a Segura River Basin Plan in coordination with the National Water Plan
- Region of Murcia is a good case-study on the power of territorial cooperation and solidarity, a real experience in the most water stressed UE region

GRACIAS / THANK YOU

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