



# EMWIS

EURO-MEDITERRANEAN INFORMATION SYSTEM ON KNOW-HOW IN THE WATER SECTOR



## Towards a common strategy

Barcelona, 4<sup>th</sup> Ministerial conference on water

**J**ust before the next Ministerial Water Conference of the Union for the Mediterranean to be

held in Barcelona on 13 April

2010, it is important to remind the cooperation highlights in this sector since the creation of the Euro-Mediterranean Partnership in Barcelona in 1995.

As an evidence of the importance of water in the region, only one year after the launching of the Barcelona Process, the Water Ministers of the 15 countries of the European Union and 12 Mediterranean partners met in Marseilles in December 1996 to initiate this cooperation. Recommendations for water management for sustainable agriculture, drinking and industrial water uses; for basic and vocational training in the field of water; and for improving the institutions of this sector were proposed to the Ministers. In addition, it was decided to start with better mutual understanding through exchanges of information. After a one-year feasibility study, the 27 Euro-Mediterranean Water Directors, meeting in Naples, approved the structure, work programme and budget of the Euro-Mediterranean



Naples, 1997

Information System on know-how in the Water Sector, EMWIS.

During their 2nd Euro-Mediterranean Ministerial Conference, in October 1999 in Turin, the Water Ministers approved an action plan for local water management and confirmed the importance of EMWIS, whose operational phase started at the same time. This Action Plan promotes six priority actions:

- 1) Integrated management of water, sanitation and sewage utilities;
- 2) Local water resources and demand management (in quantity and quality) within river basins and islands;
- 3) Water scarcity management and combating drought;
- 4) Irrigation water management;
- 5) Use of non-conventional water resources;
- 6) Development of national and local scenarios for 2025.

In Madrid in 2001, the Euro-Mediterranean Water Directors saw EMWIS progress and agreed to launch a second consolidation phase (2003-2008). In 2002, a €40 million programme was started by the European Commission for the implementation of the Turin Action Plan. This MEDA-Water programme will finance about ten regional projects meeting some of the priority topics identified in Turin.

Starting from the Rome conference in 2005, the Euro-Mediterranean Water Directors decided to invite the Balkan countries and Libya and to follow up key regional



Turin, 1999



Madrid, 2001

cooperation programmes such as Med-EUWI, the Med Joint Process between the Water Framework Directive and Water Initiative or the MEDA-Water Programme. Thus, this Forum of the Euro-Mediterranean Water Directors has become a de-facto governance body for regional actions which met annually up to the launching in 2008 of the process of the Union for the Mediterranean: Rome (2005), Athens (2006) Bled (2007) and Athens (2008).

**Towards a common strategy and action plan**



Rome, 2005

The conference in Bled (Slovenia) was marked by the willingness of countries to organize a new ministerial water conference, nearly 10 years after Turin. Accordingly, in 2008, the directors worked on topics to be prioritized and adopted state of play documents during the conference in Athens in September 2008:

- Governance of the water sector
- Adaptation of water management to climate change
- Optimization of the financing of the water sector, including using innovative mechanisms
- Management of the water demand and non-conventional resources



Bled, 2007

Alarming indicators, such as the effects caused by climate change, exponential population growth, water scarcity, drought, pollution, unsound use of the resource, threaten the quality of life, the environment, ecosystems and the economies of the Southern Mediterranean countries.

And yet during the past ten years, the water problem, although representing a critical issue for the social and economic development of Mediterranean countries, did not encouraged them enough to regional dialogue, and was not the subject matter of a practical and effective strategy for the Mediterranean.

The above-mentioned urgent matters require quick and concerted political response which is practically feasible.

The Heads of States Summit which launched the Union for the Mediterranean in July 2008 in Paris gave a new impetus to the Barcelona process. The initiative of the Union for the



Athens, 2006

Mediterranean finally opened up new opportunities for strengthening cooperation between the 43 Member Countries thanks to regional and transnational projects and through effective participation of the Mediterranean Partner Countries in the decision-making process.

Once again water was at the core of discussions and led to the first topical conference of the Union for the Mediterranean in December 2008 at the Dead Sea (Jordan). On this occasion, the Ministers validated priorities and entrusted a Water Expert Group, made up of institutional representatives of their countries, with the drafting of a long term strategy for water in the Mediterranean associated to an action plan and follow-up tools, including an information mechanism.

In 2009 and early 2010, this expert group developed this strategy, considering not only the contributions of countries



Dead Sea, 2008

but also of the civil society and international organizations participating as observers in the work. This strategy is to be submitted to the Ministers for approval in Barcelona in April



2010. The details of the meetings and considerations are gathered on the website of the Union for the Mediterranean dedicated to the water sector: [www.ufm-water.net](http://www.ufm-water.net)



Paris, 2009

#### But above all practical projects

We had enough time during these past years, to affirm and share the principles that should guide future initiatives. The time has come for action with practical projects, without failing to take advantage of experiments already completed positively. The pilot projects carried out by the Turin Action Plan and many initiatives undertaken by various countries, thanks to the support of the European Union and other



Athens, 2009

donors such as the African Water Facility, provide a valuable starting basis to launch a new action plan which will be defined after the Barcelona conference.

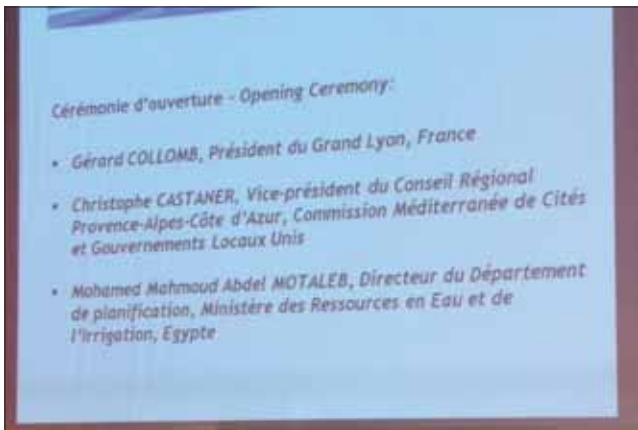
All available technical and financial instruments should be used to kick off quality projects which associate a large number of partners.

By "quality projects", we mean not just a mere list of projects, but projects that could be implemented and that are consistent with other policies and other ongoing activities in the Region. We think about protection of the environment and ecosystems in particular.

However it is also essential that these projects are able to draw the interest of investors. The new principles for improving local water management and the Euro-Mediterranean Partnership itself will not actually be fully completed without effective collaboration between public agencies, the private sector and the civil society.

To ensure the sustainability of investments and service efficiency, it will be necessary to develop strategies for fair, equitable and sustainable cost recovery by pricing services and using taxes on water abstractions and discharges. As stated by the Ministers at the 5th World Water Forum in Istanbul in March 2009:

*"We acknowledge that exclusively economic approaches and tools cannot capture all social and environmental aspects in cost recovery. Financing strategies should be based on the best possible use and mix of tariffs for all forms of water*



Lyon, 2009

*services, taxes and transfers to cover needs related to the development and infrastructure extension, operation and maintenance."*

#### And reliable and lasting tools

During the conference at the Dead Sea, the Ministers also called for *more coordination between initiatives and existing Euro-Mediterranean networks for information and expertise*. They wished for *better policy planning and evaluation, and capacity building*.

They underlined that *information exchange is to be established on the basis of voluntary approaches keeping in mind the objective of seeking comparability, consistency and avoiding duplication of work*.

Networking the potential expressed by the most qualified organizations that have developed high-level skills in the field of water in the Mediterranean will certainly be an effective support. With the help of an observation mechanism for water resources and their uses in the Mediterranean, this new network will develop and maintain the knowledge necessary for strategic planning of the sector, for promoting research and training and to help dissemination of data and information, technology, innovation and know-how within and between countries. These aspects will be cross-cutting objectives in the Strategy.

This is just a first consideration in response to a concern we all share: the need for better coordination of the proliferation



Cairo, 2009

of water sector related initiatives in the Mediterranean region and greater efficiency of their actions.

As we all know, the information system issue is critical. The Mediterranean region suffers from a large deficit in terms of reliable data, information and statistics on water, which are based on internationally recognized definitions and methods. This knowledge on the status of the aquatic environment, on the needs of the different sectors, the pressures and impacts of human activities are essential for the analysis, decision making, definition and monitoring of national and regional action plans. Preliminary work jointly carried out by EMWIS, the Blue Plan and a group of countries resulted in a concept note defining actions to be implemented at country and regional levels to improve the situation permanently.

Tunisia is one of the countries that have expressed their interest in this approach and its willingness to carry out a



Madrid, 2010

pilot activity. Now this has been done, beginning with the development of SINEAU, the National Water Information System which gathers the main institutional stakeholders of the water sector and a coordinated assistance from main international donors.

Finally, the reversal of the trend we are currently under taking will require participation and dialogue on a subject that has been so far ignored by the sector policies: the consumer himself.

Walter MAZZITTI

President of EMWIS Steering Committee

## Main steps

### Barcelona 1995

Euro-Mediterranean Conference of Foreign Affairs Ministers

- Creation of the Euro-Mediterranean Partnership

### Marseille 1996

Euro-Mediterranean Ministerial Conference on local water management

- Creation of EMWIS

### Naples, 1997

Euro-Mediterranean conference of Water Directors

- Approval of EMWIS

### Cagliari, 1999

Drafting group

- Preparation of Turin declaration

### Turin, 1999

Euro-Mediterranean Ministerial Conference on local water management

- Approval of The Action Plan

### Madrid, 2001

Euro-Mediterranean conference of Water Directors

- Validation of EMWIS 2<sup>nd</sup> phase

### Rome, 2005

Euro-Mediterranean conference of Water Directors

- Enlargement to Balkans countries
- Review of regional initiatives
- Launch of a study on a water observation mechanism

### Athens, 2006

Euro-Mediterranean conference of Water Directors

- Proposition to organise a Ministerial Conference
- Review of regional initiatives

### Bled, 2007

Euro-Mediterranean conference of Water Directors

- Decision to organise a Ministerial conference
- Review of regional initiatives

### Marrakech, 2008

Regional Conference of MEDA-Water programme

- Preparation of the Ministerial Conference

### Paris, 2008

Summit of Paris for the Mediterranean

- Creation of the Union for the Mediterranean

### Athens, 2008

Euro-Mediterranean conference of Water Directors

- Definition of priority topics for the Ministerial Conference

### Dead Sea 2008

Ministerial Conference on Water of the Union for the Mediterranean

- Adoption of guidelines for the future strategy

### Paris 2009

Ministerial Conference on sustainable development projects

- Indicative list of projects

### Athens, 2009

1<sup>st</sup> meeting of Water Expert Group

- Creation of a drafting group

### Lyon, 2009

International Conference of local and regional authorities

- Contribution to the water strategy

### Cairo, 2009

2<sup>nd</sup> meeting of Water Expert Group

- Definition of strategy outline

### Madrid, 2010

3<sup>rd</sup> meeting of Water Expert Group

- Discussion on the 1<sup>st</sup> draft version and open contributions

### Barcelona 2010

Ministerial Conference on Water of the Union for the Mediterranean

- Adoption of the Water Strategy

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# Tunisia

## 1<sup>st</sup> National Water information System in the Mediterranean



M. Abdesslem MANSOUR, Minister of Agriculture, water resources and fishery - Walter MAZZITTI

In the build-up to World Water Day on 18 March 2010, Tunisia presented its future National Water Information System during a seminar in Tunis that brought together over 180 people under the auspices of the Minister of Agriculture, Hydraulic Resources and Fisheries (MARHP). The system is already considered as a **Mediterranean Champion**. Indeed, it involves a Tunisian institutions' unifying approach regarding information on water, and takes into account harmonisation at Mediterranean region level.

Tunisia, through SINEAU, is one of the pilot countries involved in applying an approach proposed by EMWIS for strengthening cooperation on water information systems in the Mediterranean. Thus, SINEAU will also be able to provide reliable data for monitoring indicators of international initiatives, like the Union for the Mediterranean's Strategy for Water.

### A consistent vision that fits into a Mediterranean approach

At national level, SINEAU is an instrument of the long-term strategy (2030) for the Tunisian water sector and as such, enters into the frame of the mid-term investment programme, PISEAU II. Thanks to a national committee, involving data producers and users, SINEAU can also respond to the needs of institutions that are not directly involved in the water sector management, such as the National Statistics Institute. Following the technical assistance as part of the European MedStat programme, this institute employs data on water and



M. Abdesslem MANSOUR, Minister - M. Mekki HAMZA, Water Director General

its uses for water accounting based on the United Nations System of Environmental-Economic Accounting for Water –SEEA. EMWIS also adds a regional dimension to the system, notably by incorporating European recommendations on data and services interoperability.

### National partnership

In Tunisia, as in most Mediterranean countries, numerous structures linked to different institutions and ministries are responsible for collecting, managing and disseminating data on water to fulfil their mission. To assure the set-up and running of SINEAU, a national protocol has been put in place between 8 ministries and national institutions and the organisations under them. The objective is to establish a general framework for sharing data on water between stakeholders. Ministries particularly involved are:

- Agriculture, Hydraulic Resources and Fisheries;
  - Environment and Sustainable Development;
  - Development and International Cooperation; Public Health;
  - Higher Education; and Scientific Research and Technology.
- Governance of the system is assured by the National Committee created within the National Water Council. It is responsible for strategic decisions. Monitoring and executive operations are done by the technical committee, which consolidates thematic groups.

### Progressive implementation

SINEAU is a major tool of the 2<sup>nd</sup> Water Sector Investment Plan (PISEAU II) in Tunisia, particularly for monitoring-evaluation. In addition to components related to the national reference data framework, data aggregation and the production of dashboards, its first phase incorporates the reinforcement of three sub-systems on:

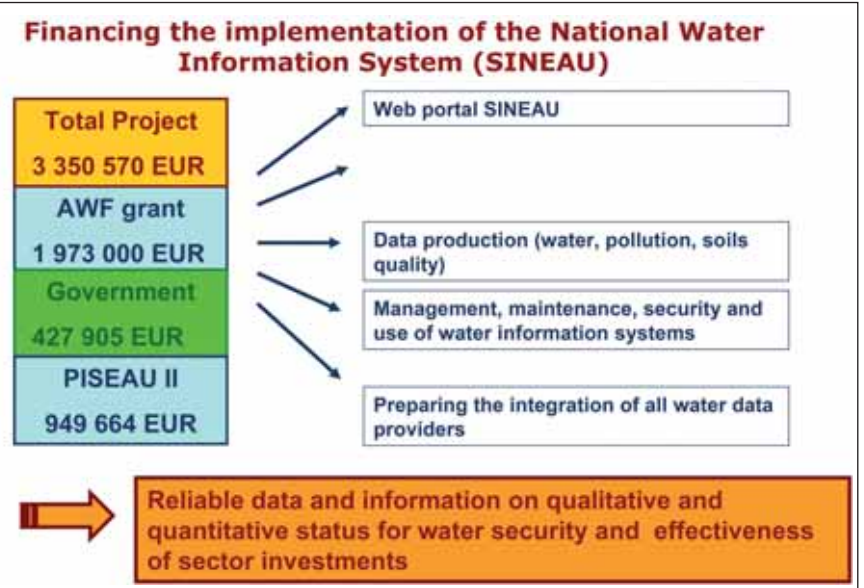
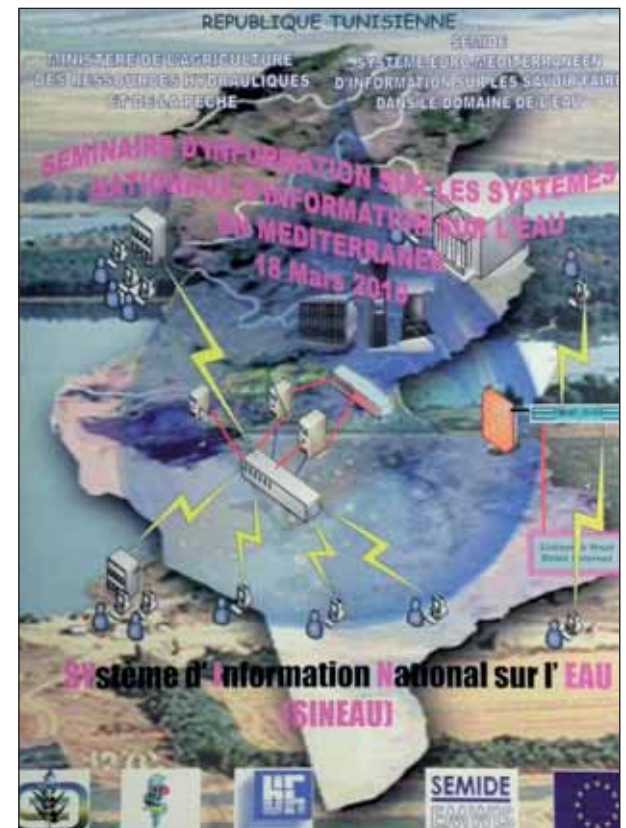
- 1) surface and ground water resources;
- 2) control of hydric pollution;
- 3) monitoring soil quality of irrigated areas.

It is important that all stakeholders are involved during this 1<sup>st</sup> phase, since each can contribute to defining the reference data framework (e.g. the map of water resources) and share certain data. Reinforcement of other sub-systems will occur during the following phases.

### Multi-donor funding

The total budget of this 1<sup>st</sup> SINEAU implementation phase is over 3 M Euro, including a donation from the African Water Facility, joint support from the World Bank, the Agence Française de Développement and the African Development Bank in the frame of PISEAU II, and the Tunisian government. In addition, SINEAU has benefited from assistance of the German cooperation (GTZ) for preparing the terms of reference, and from EMWIS (preliminary audit, interface with water accounting and cooperation with stakeholders). Funding from other donors is also envisaged, like the European Commission, as part of its Water Sector Support Programme in Tunisia.

More information: [www.semide.net/tunisie2010](http://www.semide.net/tunisie2010)



# Tunisia

## Converging interests with the african water facility

Just before the seminar on the Tunisian National Water Information System (SINEAU), held in Tunis on 18 March 2010, the President of the EMWIS Steering Committee, Mr Walter MAZZITTI, met representatives from the African Water Facility (AWF).

The collaboration between EMWIS and AWF was initiated in 2006 to focus on problems relating to information systems and the monitoring & evaluation of the water sector. In the case of Tunisia, this has taken the form of an organisational and technical audit of water information systems refiguring funding for SINEAU and three sub-systems, plus technical support. In this context, the following lines of cooperation have been identified for the future:

- Setting up or improving National Water Information Systems in North African countries (Mauritania, Morocco, Algeria, Tunisia, Libya and Egypt);



- Contributing to a North African mechanism for monitoring-evaluation of the water sector in line with recommendations made by the AMCOW executive committee at their annual meeting in November 2009;
- Improving water sector financing, by looking at how a tailored, innovative mechanism could be set up for North African countries.

The Facility has approved 61 projects since 2006 for a total amount of around 69 million Euro, including 11 projects linked to knowledge issues totalling 11.3 million Euro. It has carried out a pan-African assessment of monitoring-evaluation systems in the water sector, with which EMWIS participated in its capacity as member of the ad hoc working group. The AFW also reiterated its interest in participating in the implementation of the Mediterranean Water Strategy, and especially components linked to adapting to climate change and water sector financing.

# Beirut. Water monitoring networks and programmes



**T**he working group on water monitoring of the Joint Process between the Water Framework Directive (WFD) and the Med component of the EU Water Initiative (Med-EUWI) met in Beirut (Lebanon) on 6 October 2009. The event was part of the international seminar on river basin management in the Euro-Mediterranean region and the General Assembly of the Mediterranean Network of Basin Organisations.

Experts from 12 countries took part in the meeting, which centred on exchanging experiences on monitoring networks and water quality control, and an analysis of the first results of a survey of Mediterranean partner countries' water monitoring programmes and networks. The results of the survey and case studies presented by Algeria, Jordan, Lebanon, Austria and Spain highlighted the main challenges facing Mediterranean partner countries:

- Fragmentation of responsibilities in water quality control, and the need for coordination to improve efficiency and quality of measures;
- The advantages of including water quality targets in addition to water quantity objectives in agreements on transboundary resources, by considering for example approaches developed across Europe;
- Dissemination of information on water resource quality is often very limited, and awareness-raising campaigns are necessary along the lines of communication operations usually done on water savings;
- High cost of water quality monitoring, which therefore remain limited in time and space, and lack of economic analysis to optimise monitoring programmes.

The next working group meeting is scheduled for the last quarter of 2010 and will centre on preparing an initial report on the state of affairs of water monitoring programmes and networks in the region. For more information: <http://www.semide.net/topics/watmon>

# Madrid. Drought and water scarcity

**T**he Mediterranean working group on water scarcity and drought (WS&D) met on 17 February 2010 in Madrid (Spain) in parallel with a meeting of the group of European Water Framework Directive experts working on the same theme, and as a lead-up to an international conference.

The meeting highlighted the effectiveness of the Med Joint Process for exchanging experiences, and the necessity of launching a new phase to cover the next three years. Participants examined different categories of indicators for meeting objectives like planning, day-to-day management, crisis management and impact assessment. A preliminary assessment of the data available for devising these indicators is underway in the Mediterranean partner countries. Concurrently, a data collection process involving quality control and calculation of indicators has been initiated in 2 pilot river basins outside the EU: Sebou (Morocco) and Litani (Lebanon). These river basins were chosen because tests relating to the application of Water Framework Directive principles have already been carried out there during the preceding phase of the Joint Process. This exercise uses the approach and tools prepared by the European Environment Agency and then adapted to the targeted regions. The group will produce a flyer presenting its results. The importance of linking indicators to simulation models and Decision-Making Systems was also discussed, especially when implementing participative processes with final users (e.g. drought or water shortage management plan).

For more information, see the EMWIS website: [www.emwis.net/topics/WaterScarcity](http://www.emwis.net/topics/WaterScarcity)



# Nice. Cataloguing information sources



**W**ith the support from the European Commission and the European Environment Agency, EMWIS has launched a Geo-Catalogue on water data sources in the Mediterranean. Based on an open source software program, the tool was developed in line with international standards (ISO), as well as the more restrictive rules of the European Directive on spatial information, INSPIRE, and the recommendations for geographical information of the Water Information System for Europe, WISE. The main lines of the catalogue were discussed with Mediterranean countries during an expert workshop on metadata management that took place in Nice in June 2009.

Registration is open to all via the Internet portal. Any organisation that collects or manages data relating to the water sector in whatever form (e.g. databases, spatial information, annual reports, websites), and for any spatio-temporal coverage, can register the data and make them widely known. There is also an option to confer public or private access when registering a data source. This repository is a precious tool for building up a shared infrastructure of data on water and will help avoid doubling up data collection.

Searches can be based on thematic or geographical criteria using key words or selection from a map. Access the catalogue at: [www.semide.net/geonetwork](http://www.semide.net/geonetwork)

# Lyon Agreement: Emwis - Ambassade de l'Eau

**T**he "Ambassade de l'Eau" and EMWIS signed a partnership agreement at the conference on the contribution of local and regional authorities to the Union for the Mediterranean's water strategy, which took place in Lyon in November 2009. The focus of the agreement was STRATEAU – a strategic analysis and forecasting tool that centres on the balance between demand and water resources in Mediterranean countries.

STRATEAU can be implemented at highly varied territorial levels: country, region, river basin or



town, ... A prototype has already been developed and tested on three pilot basins: Rhône-Méditerranée (France), Sebou (Morocco) and Nahr El Kalb (Lebanon). The tool will be presented at a technical workshop session on 12 April 2010 in Barcelona, prior to the Union for the

Mediterranean's Ministerial Conference on Water.

The partnership involves in particular: administration of the simulation tool's database by EMWIS, set-up support for pilot basins wishing to use the tool, and promotion of the tool and its use.

## EMWIS Steering Committee

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