

## EMWIS: Towards the establishment of a Mediterranean Water Information Partnership (MedWIP)

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### Abstract

The principle of a global observation mechanism on water and sanitation has been brought up in international bodies. The European Union presented its vision at the Commission for Sustainable Development –CSD- of the United Nations in New York, April 2005. The final document published by the CSD integrates the key measures proposed by the EU to continue the progress made towards the objectives fixed by the international community: a global mechanism based on national and regional mechanisms, the improvement of data collection and the comparison of information.

On the basis of the mandate assigned to EMWIS by the Euro-Mediterranean Ministers at the Turin conference of Local Water Management, the Euro-Mediterranean water directors agreed in the resolution of the conference held in Rome, 24-25 November 2005, to “Study, with interested countries, the objectives and the feasibility of building up within EMWIS a regional water observation mechanism to monitor the indicators towards the achievements of the Millennium Development Goals related to water and sanitation (MDG 7) in the Mediterranean, as well as the implementation of the water related section of the Mediterranean Strategy of Sustainable Development, based on the information provided by the National Water Information Systems, whenever they exist.”

In each country various Water Information Systems are available, data are usually heterogeneous, dispersed and not very accessible at the national level. A very few countries have a National Water Data Management System but most of them wish, or are on the way to develop their own National water Information System.

The regional level is showing a large multiplicity of the actors, each one having its own objectives and logics of intervention linked to its own political framework. These organizations often developed bilateral/multilateral partnerships to undertake their activities. Many processes of monitoring and information systems already exist to meet the specific aims of each initiative (e.g. WISE2, Eurowaternet, EIONET, INFO/MAP, EMWIS, Joint Monitoring Program, Water Monitoring Alliance, AQUASTAT, IBnet, Geonetwork FAO, etc.). In parallel various think-tank groups were initiated (UN-WATER, EEA/JRC/DG-ENV on Wise, EEA/UNEP/MAP, etc), in particular, to improve the data collection processes and data harmonization.

In all the cases the used data are coming from the national level and are collected through various mechanisms (e.g. field survey, bibliographical analysis, existing data bases, etc). The priority objectives could be expressed as follows:

- To consolidate the capacities of the Mediterranean countries in order to better meet the needs of the regional level, while leaving the autonomy of each country for the organization of its national water information system (NWIS)
- To develop a framework for dialogue and concertation between regional and national organizations in order to better meet the needs for reliable, comparable and quality information that is necessary to an effective management of the water resources in the Mediterranean.

To achieve these priority objectives, it is proposed to launch a “Mediterranean water data and information partnership” which would be a tool of consultation and collaboration between voluntary organizations either regional or national working in the field of water data.

## 1 INTRODUCTION

On the basis of the mandate assigned to EMWIS by the Euro-Mediterranean Ministers at the Turin conference of Local Water Management, the concept of creating a Mediterranean regional observation mechanism was introduced to the Steering Committee of EMWIS, on 23 June 2005 in Athens. The Euro-Mediterranean water directors agreed in the resolution of the conference held in Rome, 24-25 November 2005, to “*Study, with interested countries, the objectives and the feasibility of building up within EMWIS a regional water observation mechanism to monitor the indicators towards the achievements of the Millennium Development Goals related to water and sanitation (MDG 7) in the Mediterranean, as well as the implementation of the water related section of the Mediterranean Strategy of Sustainable Development, based on the information provided by the National Water Information Systems, whenever they exist.*”

The figure below depicts the overall approach with vertical and horizontal priorities selected by the members of the Steering Committee in May 2006:



Four vertical topics associated with operational objectives for the 2007-2010 period have been defined through dialogue with the water authorities of the Mediterranean Partner Countries (MPCs), by considering national priorities, the existence of know-how in the Euro-Med area, the National Action Plans of the European Neighbourhood Policy, and of priorities defined at the regional level (Millennium Development Goals, Mediterranean Strategy for Sustainable Development, Pollution Control in the Mediterranean). These themes are:

- **Participative approaches** in Integrated Water Resources Management
- Prevention and management of extreme phenomena (in particular the **water scarcity and floods**)
- Non conventional water resources with two sub-topics: the **desalination** and the **re-use of waste water**
- The local management of sanitation services and the prevention of **domestic pollution**

The following activities could be undertaken regarding each topic:

- Creating a working group made up of country representatives and experts:
  - State of the art and analysis of major problems
  - Identification of good practices and formulation of lessons learned
  - Recommendations for implementation in the voluntary countries (including expected impact and follow-up indicators)
- Supporting experiments in voluntary countries
- Evaluation and experience sharing

The “water scarcity” and “waste water reuse” working groups will be carried out together with the Mediterranean Joint Process between the EUWI and the Water Framework Directive.

## **2 CONTEXT**

### ***Beneficiary countries***

In a first stage, this regional mechanism could cover:

- 10 Mediterranean Partner countries: Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Syria, Tunisia, Turkey and Palestine
- And the 7 EU Mediterranean countries: Cyprus, Malta, Greece, Italy, France; Spain and Portugal

### ***Regional priorities in the Mediterranean***

Regional priority issues for the sustainability of water supply and demand management have been jointly identified by all Euro-Mediterranean partners in the Turin Declaration and Action Plan with six areas of actions and four horizontal themes.

Areas of Action

- I. Integrated management of local drinking water supply, sanitation and sewage;
- II. Local water resources and water demand management (quantity and quality) within catchments' areas and islands;
- III. Prevention and mitigation of the negative effects of drought and equitable management of water scarcity;
- IV. Irrigation water management;
- V. Use of non-conventional water resources;
- VI. Preparation of national and local scenarios for the period until 2025 that enable precise objectives to be set and actions to be taken for sustainable water management.

Horizontal Themes

- A. Strengthening institutional capacities and training;
- B. Exchange of information and know-how;
- C. Transfer of know-how and technology;
- D. Awareness raising, mobilisation and promotion of commitment of the population.

Complementary regional priorities for the water sector have been included in the Mediterranean Strategy of Sustainable Development are as follows:

- to halve, by 2015, the percentage of the population without sustainable access to safe drinking water and sanitation (MDG 7 for this region),
- to define Integrated Water Resources Management and Efficiency Plans (World Summit on Sustainable Development, Johannesburg, 2002)
- to promote a rational management of water based on the demand management and not just on increasing supply, by reducing losses and inefficient uses and by creating more added value for a greater efficiency of irrigations, of industrial and urban water (water related section of the Mediterranean Strategy of Sustainable Development – MSSD-, see annex)

These priorities fall under the prospect to reinforce the commitment of the countries in the field of drinking water and the sanitation for the reduction of poverty. They are also integrated with an aim of promoting better water governance such as participatory approach to contribute to an effective management of the resource.

### ***Taking into account national priorities***

Each country has its own policy, strategic objectives and priorities such as Rational use of natural resources, Prevent pollution of waters, water reuse, institutional reform, combat desertification, etc.. But the Med countries are facing some common problems in the water sector and have jointly taken some international commitments in various frameworks (see regional priorities above).

The feasibility studies of National Water Information Systems carried in 2005 by EMWIS in 10 Mediterranean countries have shown the interest of the institutional water stakeholders in countries for such system that could support a water observatory mechanism. The feasibility study of the observatory mechanism will have to consider the requirements of a broader group of significant water stakeholders for accessing information provided by the water authorities and EMWIS public web sites in each country.

The expected benefits for the countries are:

- Better quantitative and qualitative monitoring of water resources
- better evaluation of needs
- Periodic observation (examination) of the progress made towards the national objectives (yearly, if possible)
- Better planning of the achievement of national objectives
- Better mapping of investment requirements with real needs
- Better water management and communication with the public
- Improved efficiency of international financial supports

### ***National, regional and global added value***

A regional mechanism of this kind in the Mediterranean could complete the overall observatory mechanism alongside the United Nations' agencies and programs, and the United Nations Advisory Board on Water and Sanitation.

The objective of this mechanism, as presented at the Euromed conference of water directors on 24-25 November 2005, would be to observe and evaluate progress towards the achievement of the MDG 7 and the water component of the MSSD. This process could also contribute to the monitoring of the progress towards the depollution of the Mediterranean Sea (Horizon 2020) and to the implementation of the European Neighbourhood policy in the water sector at both regional and national levels. It would help countries to improve their national systems, in particular by translating international goals into regional and national goals.

The translation of objectives (e.g. MDG7) into indicators does, however, vary greatly between countries. To guarantee the objectivity and equity of observations/evaluations, it will be necessary to establish a common set of objectives, references and indicators in coherency with international indicators set (e.g. Joint Monitoring Program for access to water and sanitation, IBNet for water services performance indicators), and benchmarking procedures prior to the observation process.

Finally, benchmarking and sharing their experiences should stimulate countries' progress and support the development of regional programs such as the future phases of the Euro-Mediterranean programme for local water management –so-called MEDA-Water-.

### **3 STUDY OBJECTIVES AND EXPECTED RESULTS**

The objective of the study is to define a vision and an implementation scenario for this regional water observatory mechanism and the related national mechanism, including their organisational and technical structures and their links, the services provided, the potential funding, and to prepare a programme for its implementation to be approved by interested countries.

The expected results are:

- An analysis of expectations regarding such a mechanism
- A synthesis of the various existing observatory mechanisms at national and regional levels
- The vision and definition of the main orientations proposed by this observatory mechanism, including:
  - Its missions, targeted users, geographical and thematic scopes
  - Outline description of its organisational and technical architecture
- Proposal for an implementation scenario, including:
  - Description and recommendations for its organisational structure, including: its different components, partnerships to be established and complementary actions to be carried out at the regional and national levels
  - Description of its technical architecture, including access to basic (raw) data sources, common standards to be used for data exchanges and the production of thematic synthesis, production of review and dissemination
  - Provisional planning
  - Detailed budget including implementation and running costs

### **4 SCOPE AND ORGANISATION OF WORK**

#### ***General***

#### **4.1.1 Target groups**

The beneficiaries could be grouped according to their expectations and profile, for example: national organisations involved in water management and territory planning (ministers, heads of water management, health, statistics, planning, etc.), representatives of local organisations responsible for providing water and sanitation services, representatives of civil society, operators and users of water (NGOs, consumer associations, local private operators, etc.), international organisations, ....

#### **4.1.2 Potential functionalities of the observatory mechanism**

Among the potential functionalities to be studied, the activities carried out by the water observatory mechanisms could take the following forms (to be validated by the study):

- a) **Production of indicators and water information** for the various concerned partners. To this end, it will be necessary to define, in agreement with the water authority of each country, the potential use of expected information such as: management support, standardisation, awareness raising, training, evaluation benchmarking, prospective, etc. It must be noticed that to date, the data are fragmented or scattered when they exist, that there are no data for some areas and that the aggregation of the data available is difficult or even impossible on a Mediterranean or country scale,
- b) **Periodical examination of regional progress towards:**
  - the objectives laid down by the international community as regards access to water and the sanitation (MDG 7),

- the application of the recommendations resulting from the water priorities of the Mediterranean Strategy for Sustainable Development (including the observation of irrigation water in particular),
- Priority issues of the the Euro-Mediterranean regional programme for local water management

These periodical review mechanisms will be carried out on the basis of the data collected and terms of reference promoted and authorised by the a representative regional body (to be defined by the study); in agreement with the water authorities of each country.

- c) **Support for the reviews of various national achievements / progress and indicators**, particularly at the request of the countries concerned. Such review may lead to proposals, which may in turn be considered in the context of funding for institutional consolidation;
- d) **Review of water services**, especially at the request of local organisations, civil society (NGOs) or the relevant ministry. These reviews may lead to proposals (to be approved by the countries' water authority), which may then be considered in the context of decentralised funding for increasing the capacity, size and density of supply networks.

So, the mechanism could be able to both observe and carry out evaluations in rural and urban environments by:

- a) measuring by country the progress made in terms of supplying the population (level of supply, quality of service, charges for the service, operating costs, respect of the rules in terms of public service obligations),
- b) encouraging the countries concerned to promote good practice and to support South to south co-operation
- c) helping them to implement and review industrial and agricultural policies,
- d) improving performance in the “water and sanitation” and sustainable development sectors,

This mechanism could be based on the reinforcement of:

- Existing and recognized structures and networks (Plan Bleu, EMWIS, Med-EUWI, Mediterranean Institute of Water, Med-INBO, monitoring working group of the EUWI, European Environment Agency, etc....). It does not aim to the creation of new institutions.
- And the improvement of the national systems of information.

Based on the periodical reviews, it could

- foster south-south transfers of good practices, and stimulate countries thanks to comparison of the results/performance and benchmarking
- contribute to the coherence of the policies of the UNEP Mediterranean Action Plan and of the Euro-Mediterranean Partnership (and the European Neighbourhood Policy),
- to ensure coherence between the implementation of this mechanism and that of a more general observation system to follow the progress towards Mediterranean sustainable development,

### ***Study organisation***

The study will be structured in two phase:

- The first phase aims at preparing the vision of the main orientations of the water observation mechanism. This vision will be based on:
  - A study of the potential demand, needs and expectations of regional and national organisations concerned (4 pilot countries)

- A diagnostic study of existing systems for data collections and information production at regional and national levels (4 pilot countries)

The propositions and general orientations will be presented to the Euro-Med water directors for approval before launching the second phase of the study (meeting planned in Athens 6-7 November 2006)

- After validation by the water directors, the 2<sup>nd</sup> phase will allow detailed propositions for the implementation of this mechanism, including: its organisation, its structure, its connection with numerous initiatives at national and international levels, the technical issues related to the production and diffusion of information, its funding and an implementation programme over 2 years. During this 2<sup>nd</sup> phase, additional national studies will be carried out with voluntary countries in order to complement the diagnostic study while validating the general vision.

#### **4.1.3 Diagnostic Study and proposal of a vision**

The analysis of expectations and existing systems will be carried out in parallel at the regional level and on 4 countries (or part of country) of the Mediterranean area, including 2 country of the South of the Mediterranean and 2 countries of the north of the Mediterranean.

In each case, the studies will include an analysis of current and proposed initiatives for monitoring the water sector in the Mediterranean as well as an analysis of the needs/requirements related to such a regional water observatory mechanism.

The analysis will in particular cover:

- all water stakeholders,
- their centres of interest,
- the relevant levels of observation,
- the existing data sources including their quality and accessibility
- the most appropriate way to collect raw information and data.
- the follow-up actions necessary to take full benefit from the observatory mechanism
- An identification of the most appropriate organisations to contribute in the implementation and operation of the observatory mechanism at the national level (in collaboration with the water authority of each country) and at the regional level. The potential role of the various stakeholders will be proposed (collection/validation of data, provision of indicators and the analysis/evaluation, etc.)..

On the basis of the diagnoses established at the regional level and in the 4 countries, a global vision of the observation mechanism will be elaborated. This vision will present in particular the assignments of the mechanism, its targeted public, its topics and fields of action, as well as the main organisational and technical principles for its implementation and operation.

#### **4.1.4 Additional national studies and recommendations**

On the basis of this diagnostic study the consultant will propose a vision for the observatory mechanism.

Once the global vision will have been validated by the Euromed water directors, additional national studies will be carried out with other voluntary Mediterranean countries a full set of recommendations for the implementation of the regional observatory mechanism will be formulated, including:

- Proposals for possible operational procedures for the regional mechanism as well as its cost and funding: the setting up of a scientific committee or committee of experts, of a technical office; role of the different entities, the collection of information/data from national observatories, including when necessary the measurements and field surveys,

- Proposals for possible operational procedures for the national observatory mechanisms
- Proposals of co-ordination of the mechanism with other national, regional (i.e. Mediterranean) and international initiatives for monitoring and funding for the achievement of MDG7 and with the MSSD
- A programme of concrete actions for the next 2 years with expected results
- A detailed budget of implementation and operation over 2 years

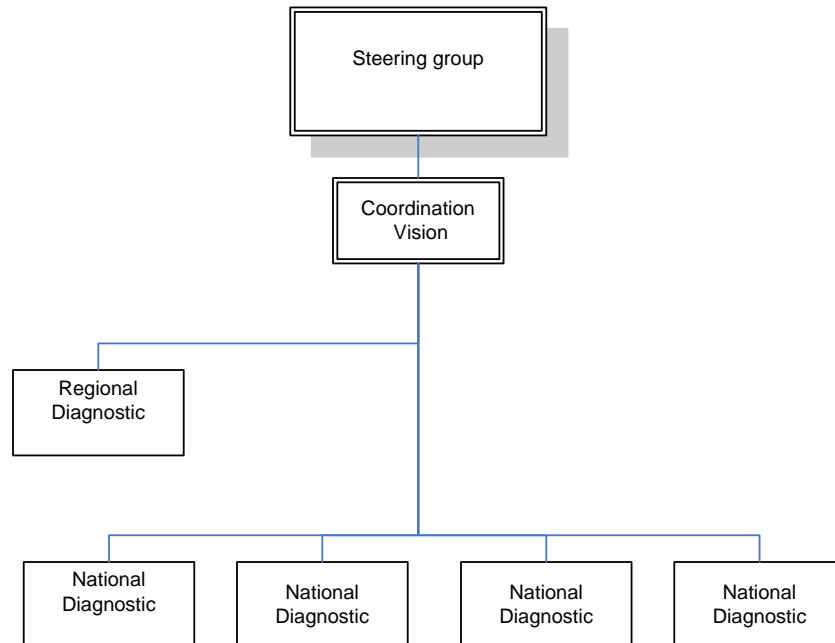
## **Study management**

### **4.1.5 Responsible body**

EEIG EMWIS Technical Unit

### **4.1.6 Management structure**

The diagram below presents the structure suggested with a set of consultants (one by national study and one for the regional study) coordinated by a consultant in charge of preparing the general vision and to present it at the Euro-Med Water Director meeting.



The result of the study will be validated by the Study Steering Group that will include representatives of the pilot counties involved in the study, the EMWIS Technical Unit, regional relevant organisation and networks (e.g. MAP-Blue Plan, Med-EUWI, IME, REMOB, EUWI monitoring working group, European Environment Agency, MAP-Med-Pol, Rhone-Mediterranean-Corsica basin Agency, etc.) and the European Commission.

Mediterranean Water Information Partnership (MedWIP) final report will be presented during the Euromed water ministers' conference to be held in 2008.

## **5 REFERENCES**

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