# FEASIBILITY STUDY ON THE DEVELOPMENT OF A REGIONAL OBSERVATION MECHANISM FOR WATER IN THE MEDITERRANEAN REGION

# TERMS OF REFERENCES VERSION: 14 JUNE 2006

#### 1 INTRODUCTION

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.

The implementation of these measures has been launched by the African Regional Committee for Monitoring and Evaluation at the international conference on water supply and sanitation in the rural environment, organised in Paris on 1 April 2005 by the African Development Bank. A preliminary study has been carried out in December 2005 and January 2006 for the African Minister's Council on Water – AMCOW-

Following the African example, and 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."

These Terms of Reference are related to the feasibility of this mechanism in order to specify the expectations, functions and means of operation associated with such a regional mechanism.

#### 2 CONTEXT

#### 2.1 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

# 2.2 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.

# 2.3 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

#### 2.4 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:
  - o Its missions, targeted users, geographical and thematic scopes
  - o 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 sued for data exchanges and the production of thematic synthesis, production of review and dissemination
  - o Provisional planning
  - o Detailed budget including implementation and running costs

#### 4 SCOPE AND ORGANISATION OF WORK

#### 4.1 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,

# 4.2 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:
  - o A study of the potential demand, needs and expectations of regional and national organisations concerned (4 pilot countries)
  - o 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.

# 4.2.1 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.

#### 4.2.2 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

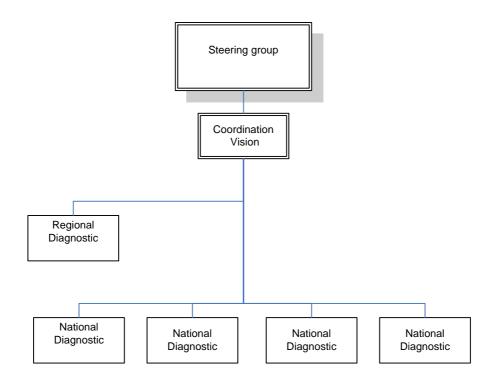
#### 4.3 Study management

4.3.1 Responsible body

**EEIG EMWIS Technical Unit** 

# 4.3.2 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 consultants will be in permanent contact with the responsible body. 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.

For its final report the consultant will have to take into account the peer review comments from steering group members.

# 5 BUDGET AND TIMING

Due to budget constraints, it is proposed to carry-out one part of the study in 2006 and one part in 2007. Funding for 2007 is not yet defined. In order to save time, it is proposed that different consultants work on each step with a strong overall coordination:

Steps	Period	Minimum person- days	Total Budget	Fees (€)	Travel and perdiem (€)
			(€)		
Analysis of expectations and monitoring activities at the regional level	June-Sept. 2006	20	12 600	9 000	3 600
2. Diagnostic studies in 4 countries	June-Sept.				
2.1 North Africa	2006	15	10 750	6 750	4 000
2.2 Middle-East		15	10 750	6 750	4 000
2.3 EU		15	10 750	6 750	4 000
2.4 EU		15	10 750	6 750	4 000
3. Coordination 2006 and presentation of preliminary findings and recommendations for 2007 (to Euromed water directors)	October 2006	24	14 800	10 800	4 000
4. Diagnostic studies in other (voluntary) countries (max 8)	2007	120	63 000	54 000	9 000
5. Diagnostic studies in EU Mediterranean countries (5)	2007	25	16 850	11 250	5 600
6. Draft recommendations and presentation	2007	10	6 900	4 500	2 400
7. Coordination 2007 and final report	2007	5	3 850	2 250	1 600

Maximum budget for 2006: 70 400 EUR
Maximum budget for 2007: 90 600 EUR
Total maximum budget: 161 000 EUR

#### Annex: Water priorities of the Mediterranean Strategy for Sustainable Development

Abstract of the **M**editerranean **S**trategy for **S**ustainable **D**evelopment –MSDD- adopted in November 2005 during "the 14th Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols" in Portoroz (Slovenia).

The underlying principle of the Mediterranean Strategy is that sustainability has to be based on the interdependence of its three pillars: economic development, social equity and environmental protection, as well as on improved governance.

The Strategy is based on a long-term vision of a "sustainable" Mediterranean that is politically stable, prosperous and peaceful.

#### The four main objectives are:

- i) Contribute to economic development by enhancing Mediterranean assets
- ii) Reduce social disparities by implementing the UN Millennium Development Goals and strengthening cultural identities
- iii) Change unsustainable production and consumption patterns and ensure the sustainable management of natural resources
  - iv) Improve governance at the local, national, and regional levels.

# Seven interdependent priority fields of action and synergy are indetified below in which it is essential to make real progress:

- better management of water resources and demand;
- improved rational use of energy, increased renewable energy use and mitigation of and adaptation to climate change;
- sustainable mobility through appropriate transport management;
- sustainable tourism as a leading economic sector;
- sustainable agriculture and rural development;
- sustainable urban development; and
- sustainable management of the sea, coastal areas and marine resources.

# Priority on Improving integrated water resource and water demand management

#### • Objectives

Stabilize water demand through the reduction of water losses and the wasteful use of water (a reduction in demand in the North and a controlled increase in the South and East) and a significant increase in the water efficiency of agriculture and the added value per cubic metre of water used.

Promote the integrated management of hydrographic catchment areas and wetlands ecosystems.

Achieve the Millennium Development Goals concerning access to safe drinking water and sanitation and the reduction of water pollution.

Promote participation, partnership and active association in the sustainable management of water.

#### • Orientations and actions

# Water demand management

- 1. Determine precise global and sectoral efficiency goals in national strategies. Reorient water policies to integrate water demand management in agriculture and other sectoral policies and encourage demand-side approaches with the aim of improving water use efficiency, reducing unnecessary losses, implementing water saving techniques in irrigation and involving industry, tourism and cities in controlling waste water.
- 2. Establish appropriate fiscal and pricing systems and encourage investment in demand-side management and the development of financial mechanisms for the internalization of profits from water-saving measures; to that end, a regional framework will be prepared.

# *Integrated water resource management*

- 3. Encourage the establishment, particularly in developing countries, of appropriate bodies/ organizations for integrated surface and groundwater resource management.
- 4. Preserve and increase water resources through soil and water conservation measures, agricultural and forestry practices, small-scale irrigation, run off and spate irrigation, the recycling of drainage water and the mobilization of non-conventional sources of water.
- 5. Strengthen regulations, where appropriate, reduce the over-exploitation of groundwater and non-renewable water sources and promote the artificial replenishment of groundwater, where necessary.
- 6. Protect aquatic ecosystems and restore their regulating role.

# Access to water and sanitation

- 7. Support investment to halve by 2015 the share of the population without access to safe drinking water and sanitation compared to 1990.
- 8. Promote the Mediterranean component of the European Union Water Initiative as a means of strengthening dialogue between countries of the two shores and cooperation with donors to support investments.
- 9. Strengthen regulations, where appropriate, and promote investment in waste water treatment plants to prevent and reduce pollution from urban and industrial sources.

#### Water management governance

- 10. Promote schemes for the integrated participatory management of water resources, including partnerships with local authorities, the private sector and NGOs.
- 11. Take action to educate the people on the need to save water.