INTERNATIONAL OFFICE FOR WATER

Capacity building for better water management

Discussion paper for IPEMed

Long term strategy for water in the Mediterranean

Towards a Mediterranean Information and Resource Network in the water sector

(Mediterranean water knowledge hub)

Draft working document

Version 8 of 29 May 2008

Working document and proposal

Facing an increasingly scarcer freshwater resource and an increasing demand, the Mediterranean countries should initiate reforms and significant investment projects for mobilising the resource, transferring water, developing non-conventional resources, controlling pollution, rehabilitating networks, or even modernising irrigation and its management methods, safeguarding and restoring the aquatic ecosystems.

The success of water policies and related investments is conditioned by the implementation of good governance in each country, involving the various stakeholders concerned and being based on a quality follow-up/assessment system, mechanisms for sharing the necessary knowledge, and on increased training on water professions and strengthened research and development actions.

It is obvious that the adapted tools and means necessary for this good governance should be developed or reinforced in each country.

The development of these various national tools - data system, documentation centre, training, research programmes - in the South and Eastern Mediterranean countries attract interest because of the expected benefits in terms of better effectiveness and quality of operational management, of support to planning and resource allocation, of participative management, follow-up-evaluation of international initiatives, etc.

Most of these countries wish to increase their means in this direction - harmonisation of data and indicators, modernisation of the data gathering systems and organisation of a shared data management, reinforcement of the national focal points of information and documentation, definition of a training strategy, etc.

Helping the national stakeholders concerned with these tools is advisable and most of the countries wish a support to and a harmonisation of the efforts and a consistency of the tools at the regional level.

This working paper deals with lines of thought and proposes to identify the potential contributions of the various existing stakeholders to a better synergy, in relation with the creation of the Mediterranean Union in particular:

- at the level of the EU Mediterranean countries: France, Spain, Italy, Greece, Cyprus, Malta, Slovenia and Portugal;
- at the level of the Mediterranean countries outside the EU: Maghreb, Machrek, Turkey and the Balkans;

- at the Mediterranean regional level : EMWIS (Euro-Mediterranean Water Information and Documentation System), the Mediterranean Network of Basin Organisations (MENBO), the Mediterranean component of the European Water Initiative (Med – EUWI), the Mediterranean Water Institute (IME), the Mediterranean Action Plan, etc.

Several structuring « projects » can also provide significant contributions, such as the Monitoring of the transnational programme on local water management « Meda-Water » (RMSU), the SPI-Water project on the transferability of European know-how to Mediterranean third countries and various other tools that can be mobilised for co-operation.

It is quite obvious that the inventory of the Mediterranean resource centres should be pursued with an inclusive and partnership approach.

It is sure that there is, in the Mediterranean countries, a very high potential for organisations having developed abilities and projects that can contribute to the proposed Network, and that it is less a question of creating new bodies than having synergies and better collaboration on common objectives and programmes between these various existing institutions and developing the means they have for a coordinated and joint approach.

1. A Resource and knowledge network

The development of a **« Mediterranean Information and Resource Network in the Water Sector »** should be equivalent to the Anglo-Saxon « **Knowledge Hubs** »; those are based on the principle of partnership between the stakeholders working in complementary fields: each stakeholder, recognized as leader in its field, facilitates a network, collects and disseminates knowledge; self-sufficiency of each stakeholder is required to guarantee the sustainability of the resource centre.

The development of such a **« Mediterranean Information and Resource Network in the Water Sector (Mediterranean water knowledge hub) »** could start with very diverse bodies having different statutes and nationalities, since each stakeholder has its own development and management logic; the Network is a means of sharing objectives and results, of developing synergies, of being controlled by the same client or orientation committee, and of sharing common tools and available means, especially human ones.

This small steering body will have to be guided by the representatives of the States' governments and of the donors (Forum of the Mediterranean Water Directors and Forum of the Donors).

The first objective of the **« Mediterranean Information and Resource Network in the Water Sector »** could be to facilitate the implementation of some large Mediterranean projects developing actions for observation, disseminating information, research, training, prospective, etc.

The evaluation of the Network success could start with the outcomes of the projects.

The "core body" of this future « Mediterranean Information and Resource Network in the Water Sector » could be, for example, a European Economic Interest Group (EEIG), inspired by the current light and effective support of EMWIS - Euro-Mediterranean Water Information and Documentation System-, which has been operational for 10 years, or failing this a new ad-hoc body under European law or, if necessary, under international law, to be defined:

- A flexible European legal statute with variable geometry: for example, there are currently 3 countries members of « EMWIS » EEIG (France, Spain and Italy) through their operators (IOWater, CEDEX, SOGESID); the new countries contributing to the future EEIG supporting the **« Mediterranean Information and Resource Network in the Water Sector »** can easily be integrated in this kind of light body.
- The EEIG governance is simple: a Management Board made up of the Euro-Mediterranean Water Directors, a bureau made up of the EEIG members, a Presidency revolving between the Member States, a Secretariat General.
- Bi or multilateral objective-oriented conventions between the EEIG and the operators would allow a precise definition of the responsibilities of each, of the objectives and results to achieve.
- Financing by the EEIG member countries (central co-ordination unit) and by regional projects carried out by the EEIG in its various topical components.

The **« Mediterranean Information and Resource Network in the Water Sector »** will have at least to be developed from the existing and perennialised bodies, working in the following sectors:

a. Water Stakeholder Partnership, by regrouping the various existing networks: Med-EUWI, GWP-Med, MENBO, Water Operator Partnership, etc.

b. Regional Data System and documentation exchange system: EMWIS, national bodies (National Focal Points), European Environment Agency, etc.

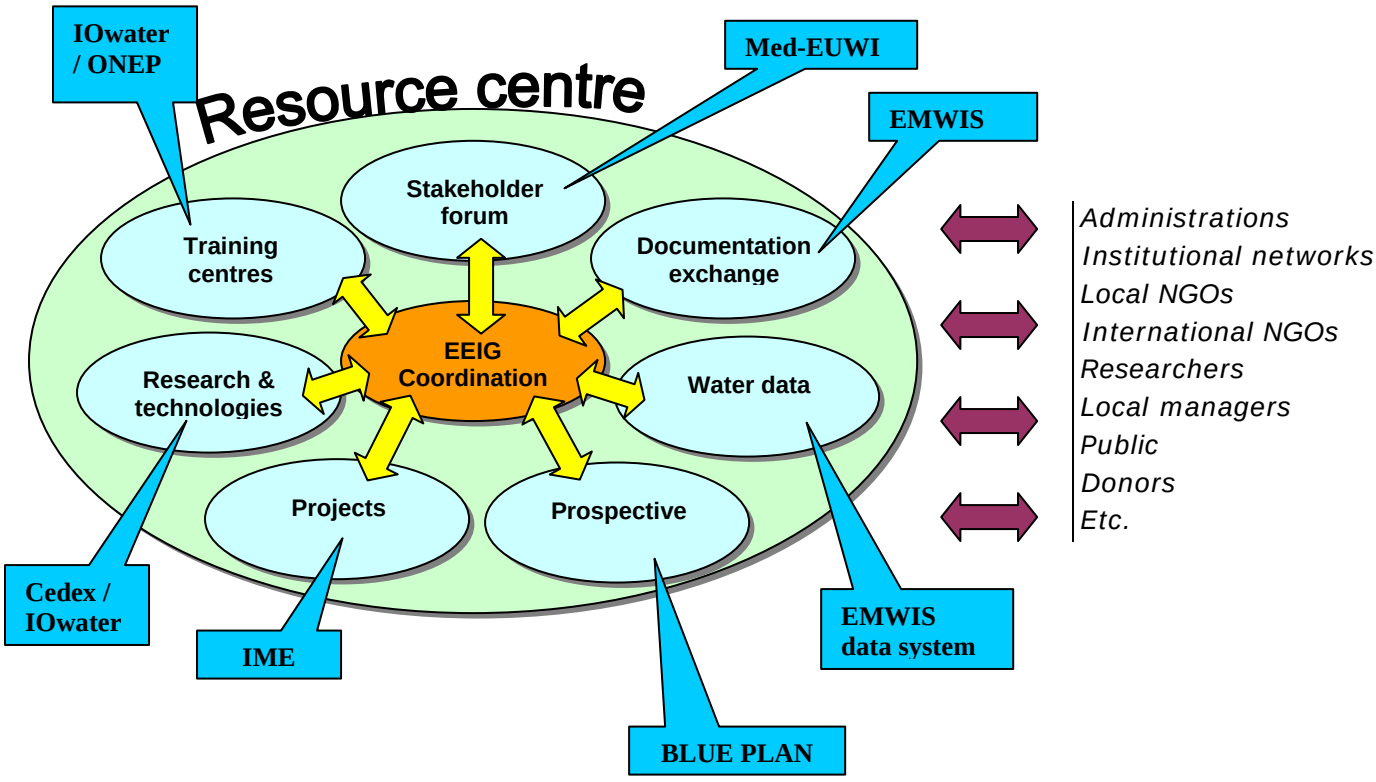
c. Network of the professional training centres on water: International Office for Water, National Office for Drinking Water Supply (Office National de l'Eau Potable - Morocco), Algerian Water Company, CITET, etc.

d. Network of the Universities and higher technical schools developing post-graduate training on water management, etc.

e. Increase and enhancement of research in the water sector: CEDEX, IOWater-IWRM - Net, IME, EMWIS, European initiatives (ERA-Net, WSSTP, etc.).

f. Task force: the Mediterranean Water Institute, etc.

g. Prospective: the MAP RAC and Blue Plan, etc.



Simplified organisational diagram

2. The Stakeholders' Forum

The Stakeholders' Forum should be a federator of the existing initiatives to allow dialogue and better coordination. **It could be under the responsibility of the Greek authorities through the Greek operator GWP-Med, managing the Med-EUWI initiative.**

This component of the resource centre will facilitate the forum through the representatives of the donors, civil society (local and international NGOs, universities/research, private sector), ministries involved in water management (Environment, water, housing, agriculture, etc.), national planning departments (Ministries for Planning) and of basin organisations (MENBO).

The forum should take place at regional (Mediterranean) and national levels and rely on the other components of the « Mediterranean Information and Resource Network in the water sector ». At the national level, the « National Country Dialogues », initiated by Med-EUWI, could continue for supporting the development of national IWRM plans with a participative approach.

At regional level, the main objective should be co-ordination and exchanges between the networks, international NGOs, donors and co-operation organisations to increase the added value of the field activities carried out at the regional level.

The aim is to have transparency between the actions of NGOs and (regional, bilateral and decentralised) co-operation organisations as the projects overlap and lack co-ordination, and exchanges between projects are limited, and their added value is often low.

The resource network could also support twinning agreements between Mediterranean organisations to promote their staff's mobility, and thus support exchanges between counterparts at all levels, especially on the experience gained in the TWINBASIN project (6th FPRD) between basin organisations, and institutional twinning arrangements for the transfer of the 'community acquis' (Malta, Morocco, Turkey, Egypt, etc.).

3. The Mediterranean Water Information and Documentation System

The Mediterranean documentation exchange system is already made up thanks to the Euro-Mediterranean Water Information and Documentation System (EMWIS), created at the ministerial Conference of Marseilles. **Since more than 10 years, EMWIS has become the main regional tool for the exchange of information and knowledge on water in the Mediterranean Area**. It is also an operational tool for co-operation within the Barcelona Process. It aims to:

- Structure the National Focal Points of Information on water in all the Mediterranean Countries.
- Facilitate access to the existing information on know-how in the water field, prioritising the institutions, documentation, training, research and development programmes and data administration, technologies adapted to the Mediterranean characteristics.
- Develop the pooling of useful information and the coherence of the systems.
- Develop common products and to promote the co-operation programmes needed.

At the operational level, the national teams are mobilised in **the 20 existing National Focal Points (NFPs)** under the respective authority of the Water Directors of the 20 countries of the Partnership.

These National Focal Points work in a network with **a Central Technical Unit (EMWIS CTU),** which has been financed for 10 years in a tripartite way, by the three Governments of Spain, France and Italy.

Structuring co-operation agreements were signed with the European Environment Agency, the International Network of Basin Organisations, the Mediterranean Component of the European Union Water Initiative, etc.

EMWIS directs topical working groups, in co-ordination with the water departments of the Mediterranean countries, to promote the exchange of institutional and technical know-how and to validate it in pilot projects.

The Water Directors recognised EMWIS success many times and its exemplary approach inspires similar initiatives in other areas of the World: South America, Central America, Sub-Saharan Africa (AWIS).

The new four-year Development Plan of EMWIS was approved by the conference of the Euro-Mediterranean Water Directors for a total amount of **€ 3,362,000.**

This EMWIS management body is a good example of operating in a network, which mobilise and develop the stakeholders qualified in their field in each country.

4. The Mediterranean Information (Observation) System on Water Resources (water data)

The feasibility study of such a system has been carried out by **EMWIS** for 30 months, with the support of the International Office for Water, within the mandate given by the Euro-Mediterranean Water Directors at their conference in Rome in November 2005.

In the Mediterranean area, many stakeholders gather data and produce indicators related to this sector in order to follow-up global or regional objectives (Millennium Development Goals; national IWRM plans and efficiency plans, Mediterranean Strategy for Sustainable Development, Horizon 2020) or to orientate and support assistance or co-operation policies (FAO, UNEP, OECD/Eurostat, the World Bank). These stakeholders often act on the basis of sectoral agreements (health, agriculture, statistics, environment, etc) and are encountering problems of access to the water data at the national and local levels.

Great efforts are needed to harmonise the data and indicators, to develop data gathering systems and shared data management. Assistance to the national institutions managing water data is essential.

Significant progress can be made to:

- more easily identify the existing data and information on the various topics related to water management and to obtain information on the methods used for producing these data;
- establish common basic data, especially for the calculation of the indicators requested by the regional institutions;
- solve organisational problems (insufficient or different definitions, lack of an organisation responsible for the production/regular dissemination of synthetic data) which often cause the difficulties of obtaining these indicators.

At country level, the creation or reinforcement of true National Integrated Water Data Systems (NWDS) is the main challenge for defining, implementing and evaluating the policy in this sector. This requires:

- gathering, validating and storing the necessary (physical and socio-economic) data on water resources, their uses and water quality,
- sharing these data between the concerned stakeholders,
- developing relevant and harmonised indicators, internationally accepted, to ensure a follow-up at various degrees of geographical aggregation,
- informing the civil society (users' associations) and allowing it to fully participate in the management of water and of its uses.

The project priority is initially to help the Southern and Eastern countries of the Mediterranean basin to develop their own National Water Data Systems.

The development of a **regional tool facilitating access to the quantified and harmonised data** coming from the national and local levels would give access to reliable and relevant data, which cruelly lack today at the regional level, to support any policy of integrated water resources management and of risk prevention. Using voluntary contributions of the countries, it would deal with (renewable, non-renewable, non-conventional) water resources; their uses (domestic: water and sanitation utilities; producers: agriculture and industry; and environmental) in terms of demand, loss and efficiency; pressures on the resources and the environment (abstraction, overexploitation, degradation) and with risks (drought, floods, silting of dam reservoirs, shortages). These data could be compared with those related to sustainable development in the Mediterranean area.

The development of such a tool, taking into account both the needs of the international initiatives and the field reality of IWRM, would allow:

- having quality basic data so that the national and international institutions can follow-up their strategy in the water sector,
- better coherence of the indicators produced by various organisations,
- greater effectiveness of the assistance to the implementation of harmonised national water information systems,
- promoting South/South transfers of good practices and stimulating the countries, thanks to the comparison of results,
- contributing to the consistency of regional policies (e.g. UNEP Mediterranean Action Plan and Euro-Mediterranean Partnership with the European Neighbourhood Policy),

- having an essential component both for a regional environmental information system and for a global information mechanism on water and sanitation.

The table below summarises the expected objectives, products and the concerned stakeholders.

Objectives	**Products**	**Stakeholders**
Facilitating identification and access to quantified data	Web portal allowing the identification and access to national and regional information sources	Providers of data and indicators
Having comparable data allowing the production of quality indicators	Methodological guidelines (harmonisation, interoperability, sharing)	Organisations defining/gathering indicators Data providers
Helping the countries in the management of quantified water data	National Water Information Systems NWIS	National data providers/users International organisations providing technical assistance Donors
Carrying out additional regional analyses	Sectoral analyses upon request	National and international institutions in the sector concerned

EMWIS, which carried out this feasibility study on the development of a regional water information (observation) mechanism in the Mediterranean area, with IOWater's technical support, has all necessary competences to coordinate this mechanism.

It already has, as reminded above, an adapted governance, a technical co-ordination body, agreements with various regional organisations (European Environment Agency, Med-EUWI, World Water Council, International and Mediterranean Networks of Basin Organisations, UNEP/MAP, International Office for Water, SOGESID, CEDEX, etc.) and a suited geographic coverage (Euro-Med countries, the Balkans and Libya).

This implies, in a first step, to officialise the extension of EMWIS field of action to the management of data (quantified information) on water resources and their uses (the initially targeted field being that of information on know-how).

5. The Mediterranean network of professional training centres

Professional training of the personnel in charge, at all levels, of managing, operating and maintaining infrastructures is still not enough taken into account in the projects for the development of infrastructures in the fields of drinking water supply, sanitation or irrigation. To ensure a long-life span to the infrastructures and the effectiveness of the services, the skills needed for management, operation and maintenance should always be reinforced and vocational training has not yet reached a sufficient level to meet these stakes and needs.

It is necessary to take into account both the needs:
- for basic and graduating training, to provide the sector with the qualified young professionals it greatly needs,
- for continuing training of the employed personnel in order to allow true professional qualification, which usually remains insufficient - even non-existent - and to facilitate the evolution of their career, essential to motivate the employees.

The needs are huge: several hundred thousands of employees, at all levels, must work in water management in the Mediterranean basin. It is necessary to ensure work effectiveness with a considerable effort for basic and continuing vocational training in various fields:

- **design and study of investments,** planning and follow-up of work and implementation,
- **operation and maintenance of production plants,** networks, treatment plants,
- **administration and organisation of the services,** industrial and commercial management, accountancy, human resources management, relations with the users and clients.

Two of the main « missing links » in abilities are:

1 - **The "engineers - higher technicians" for operation and maintenance (supervisors**), able to really make the treatment plants and the distribution or collection systems working and to lead the teams of operators, for:

- reaching the expected nominal performances of the equipment,
- avoiding a too fast degradation of the equipment for lack of true professional maintenance, and very heavy overcosts for repeated rehabilitations.

2 - **The "management executives and employees"** who must enable to reach a balanced management of the services, to organise human resources, to meet the users' needs with suitable pricing.

In addition, it is necessary to develop a high level of regional expert's knowledge to meet the specific needs of the Mediterranean basin, such as hydrometeorology, desalinisation of sea water, re-use of treated waste water, aquifer recharge, use of technologies either non-conventional or adapted to the local contexts of the basin as well as prevention of water-related diseases.

It is necessary to create or build local training capacities in the countries themselves to meet the needs, in quantitative terms in particular, in an appropriate manner adapted to the diverse situations, and in the language spoken by the employees concerned.

However, the existing institutions, some of which having reached a very good level, do not yet meet all the needs, for lack of means to accommodate sufficient manpower, for lack of skills in some technical and economic fields, or because the training equipment do not yet suitably address all the categories of additional personnel essential for the good operation of the water utilities. In addition, the efforts needed to build local training capacities and to create new capacities are usually too specific and dispersed.
Moreover, the needs of the countries in this field are rather similar and can justify a common approach.

It is thus necessary to plan the implementation of a true « regional training programme on water resources management in the Mediterranean area » within a system (either existing or to be created) for exchange between the centres:
- to optimise the resources to gather,
- to consistently meet the common needs of the countries, at a sufficient qualification level,
- to allow experience sharing between the basin countries for developing a Mediterranean teaching expertise adapted to the specificity of the problems encountered in the basin.

The International Office for Water, which leads the feasibility study of the Network, with financing from the French Ministry for Foreign Affairs, could jointly manage this network of training centres with the National Office for Drinking Water Supply (Morocco)?

New needs have emerged with the increase in experience and in the field implementation of training activities. They can address **technical matters,** but also the **management of training centres** in the water sector. Most often, the requirements for assistance concern the assessment of training needs, the adaptation of the training offer, but also the centres' development of internal abilities through the training of trainers and the development of adapted training kits.

The great development of communication technologies also implies changes in the « traditional aspects » of the organisation of training programmes and courses. Thanks to the new communication means and the Internet, basic training institutions and universities considerably extended their exchange and networking capacities worldwide, and online training (e-Learning) has very strongly developed.

In order to apprehend and adapt to these changes in the training sector, an increase in exchanges between training institutions and, if possible, the development of common tools are necessary to meet the unceasingly changing needs.

The core of the network activity should be the **development of experience sharing between the partner centres.** Brain storming on the promotion of the role of training in human resources development in the sector (impact on human resources management, validation of abilities, lasting financing of training, etc.) would allow providing tools adapted to the organisations (water utilities, basin organisations, administrations).

This could also be done using a technical basis, the training methods and teaching tools for example, but also the aspects which concern the management of the centres themselves. This co-operation would help the existing training centres to remain updated on the state-of-the-art, but also would enable the emergent centres to benefit from the experience feedback of long-established centres.

These exchanges could lead to the regular organisation of seminars and workshops in which representatives of training centres would participate as well as the various institutions involved in water management, including donors. The organisation of technical visits and study tours between the personnel of the training centres participating in the Network could also be considered, in order to share field experiments in continuing professional training.

The second possible benefit is the **development of common tools** to aim at economies of scale. On the basis of preliminary exchanges between centres and identified common needs, several centres could thus develop training kits or courses with a common base. Using the same principle, programmes for the training of trainers could be jointly organised.

In addition, the framework offered by a Network could, to a significant degree, increase the possibilities of communication, thanks to tools such as a Web portal, a Network newsletter providing links and summarising the activities and contacts of the Network members, presenting and disseminating their information on products, courses, successes, and regular news on the Network activities.

6. Information (Observation) system on research, knowledge and technologies

Research in the water sector is an important component for knowledge development and sharing. The European Commission already made many efforts in this direction with the Mediterranean co-operation component of the FPRD (INCO-Med). About 90 projects were thus carried out.

But the interface between science and policy still remains little developed in the Mediterranean countries, therefore there is a small transfer of results of these pilot projects to the decision makers. The problem of technology transfer arises outside the research world, indeed there are similar concerns in more applied programmes launched by the EC, such as MEDA-Water (9 projects), LIFE third countries (12 projects related to water in the Mediterranean area) or Interreg III (9 projects related to water in the Mediterranean area). Many other projects, initiated at the national or basin level, can be added to this list.

In particular, the transfer of knowledge inputs of research on the impacts of climate change, and on the adaptations necessary to alleviate water scarcity and extreme phenomena should be amplified to support the managers' decision-making.

In order to benefit more from financed projects, either completed or ongoing or future, a mechanism for interfacing between Science and Policy (Science-Policy interface - SPi) and for technology transfer is necessary.

CEDEX (Spain) and IOWater (which manages, at the level of 18 countries of the EU, the large **IWRM-Net** project, jointly financed by the European Commission and France) **could facilitate this interfacing with one of their counterparts from the Southern and Eastern countries of the basin.**

It could thus be based on complementary activities:

- networking of the national systems for financing research, as a continuation of the European ERA-Net initiative, by especially gathering the lessons learned from ongoing projects (SPLASH and IWRM.Net), for, on the one hand, enhancing the obtained knowledge, and, on the other, sharing financial resources on issues of regional interest;
- using the European tool for enhancement of the WISE-RTD research results, to promote project results to water managers, by creating a Mediterranean entry to the system for example;
- supporting the networking of Mediterranean researchers, based on the principle of the European Euraqua network, and of INWEB or BALWOIS for researchers of the Balkans;
- creating bridges with the various European initiatives, especially the Water Supply and Sanitation Technology Platform (WSSTP);
- organising meetings and discussions between managers and researchers to facilitate dialogue and exchanges of knowledge and needs (systematic promotion of SPi in local events);
- contributing to the design of research and demonstration projects, by facilitating the identification of partners, of supporting programmes, financial in particular, and the drafting of the projects (training).

A system for exchange of good practices, knowledge and technologies will have to accompany the above-mentioned actions; it should allow, with a voluntary contribution of the countries, access to the information on the policies, good practices, equipment and infrastructures… they have developed on the varied and coherent topics prioritised by the regional strategy (mobilisation of conventional and non-conventional resources, efficiency of uses, governance of water supply and sanitation utilities, Public-Private Partnerships, security of long-term investments, etc.).

This system will also seek to increase the interface between research and policy by enhancing the research results useful for Mediterranean water policies and to help technology transfer (modern irrigation technologies, waste water treatment and re-use, recovery of rainwater, desalination, socio-economic studies, tools for users' participation, etc.).

7. The task force

In order to propose projects, corresponding to the good practices identified by the Resource Centre, to donors' financing, **the Mediterranean Water Institute (IME) could lead a task force made up of the North and South correspondents of its professionals' network.**

For more than thirty years, IME has been made up of very active members in all the basin countries and this organisation is defined as a « virtual institute » composed of active voluntary field members; IME is a pragmatic organisation able to identify, in the field, the innovating water-related projects. Its focal points are represented in all the countries of the Mediterranean area.

The method for project identification and feedback could be traditional: use of calls for projects at local level, examination by a jury of professionals then by a selection committee of the resource centre.

This component of the Resource Centre will give an operational dimension and should constitute the link with the financial sector, particularly on the following topics:

- Governance of drinking water supply, sanitation and irrigation utilities,
- New techniques, such as the recycling of waste and industrial water,
- Drafting of local strategies for controlling crises: floods and drought.

8. The prospective centre

The production of prospective studies in the Mediterranean water sector is essential to alert the regional and national decision makers and stakeholders on the related stakes and to draw up scenarios of the future to support their decisions. These studies are based on experts' work and should be fed by information and data coming from the above-mentioned systems and network for the other functions to be created at the regional level. These prospective studies should be undertaken in relation with those on sustainable development in the Mediterranean area. **The Blue Plan (UNEP - MAP) should develop this component**, by increasing prospective work on inland fresh water, which remains very insufficient, account taking of the stakes that this resource represents in the Mediterranean specific context.

The Blue Plan aims to develop regional co-operation for facilitating a constant development which is respectful of the environment. It produces prospective analyses on the environment and development, has the function of a Mediterranean information (observation) system on sustainable development.

This « prospective » component of the Mediterranean Resource Centre on water could rely on the Blue Plan assets: its international vocation and the definition of its actions within a regional co-operation framework, supervised by the United Nations Environment Programme (UNEP). With a statute of association under French law, it is already serving the Mediterranean countries and the European Community, which evaluate and orientate its action every two years.

The Blue Plan has the function of an information system on the environment and sustainable development in the Mediterranean area and draws up scenarios for the future. It has a transverse vocation and is serving all the Mediterranean decision makers and stakeholders.

The Blue Plan is the main promoter of sustainable development within the Mediterranean Action Plan. For this reason, it gives particular importance to the follow-up of the Mediterranean Strategy for Sustainable Development (MSSD) and to the work of the Mediterranean Commission on Sustainable Development (MCSD).

It pursues four main strategic goals for this reason:

- Continuously identifying, gathering and processing environmental, economic and social information, useful for the stakeholders and decision makers.
- Evaluating the interactions between the environment and economic and social development to measure the progress made towards sustainable development.
- Carrying out analyses and prospective studies to help building visions of the future and to support decision-making on public environmental policies.
- Disseminating and communicating products and results.

9. Summary of the proposal

The **« Mediterranean Information and Resource Network in the Water Sector » (Mediterranean water knowledge hub**) is an opportunity of creating, through a small body of the EEIG type, a true co-ordination of regional actions in the water sector: the existing organisations could be involved through better distribution of responsibilities and an evaluation of results.

Strategic management and evaluation would be taken care of by the Water Directors' Forum; co-ordination of the central unit could be entrusted to a EEIG, starting from the agreements which already bind Mediterranean partners and with the idea of opening them to others which would be interested, as it is already the case with EMWIS.

The main development fields would be covered by equally sharing the responsibilities between qualified stakeholders from the Northern, Southern and Eastern parts of the basin, for example, and with a spirit of broad opening.

A preliminary designing task could be entrusted to:

- The Stakeholders' Forum: entrusted to Med-EUWI (Greece),
- The Mediterranean Documentation Exchange System already managed by EMWIS (20 National Focal Points already exist),
- The regional information system on water resources to be set up using the feasibility study carried out by EMWIS,
- The Mediterranean network of training centres: preliminary designers: IOWater and ONEP (France, Morocco),
- The information system on knowledge and technologies: preliminary designers: CEDEX and the European IWRM–Net consortium in co-operation with ERA-Net,
- The task force, in charge of inciting innovation, preliminary designer: the Mediterranean Water Institute (IME),
- The prospective centre already managed by the Blue Plan (MAP - UNEP).
- Others, to be specified.....

EMWIS,
EURO – MEDITERRANEAN WATER INFORMATION SYSTEM
AN EFFICIENT NETWORK WITH 20 NATIONAL FOCAL POINTS
TO SHARE WATER INFORMATION IN THE MEDITERRANEAN AREA

The Marseilles Euro-Mediterranean Conference on Local Water Management (November 1996) initiated EMWIS with, as main objective, the provision, in all the partner countries, of large and depth knowledge, especially as regards the actors, the available documentation, techniques and methods, programs and results of research activities, training opportunities, etc.

The declaration of the **ministerial conference on Local Water Management (Turin - Oct. 1999)** emphasized the importance of EMWIS (Euro-Mediterranean Water Information System) as the first operational system of integration and cooperation under the **Euro-Mediterranean Partnership (Barcelona Process, 1995).**

Today, EMWIS became the main tool for regional water information and knowledge exchange in the Mediterranean region.

It is also an operational tool for cooperation within the framework of the Barcelona Process.

It aims at:

- Structuring the National Water Information Focal Points in all Mediterranean countries
- Facilitating the access to the existing information on know-how in the water sector, while prioritising the following topics : institutions, documentation, training, research and development programmes and data management ;
- Developing the sharing of useful information and systems consistency ,
- Preparing common outputs and promote the necessary co-operation programmes.

EMWIS governance is based on the participation of member countries, directed by a **Steering Committee of 13 countries** (Under a French presidency and Moroccan and Lebanese Vice Presidency), it is made up of Algeria, Cyprus, Egypt, France, Israel, Italy, Jordan, Lebanon, Malta, Morocco, Turkey and the Palestinian Authority) and a Technical Committee made up of representatives from the 20 National Focal Points.

At the operational level, the national teams are mobilized in the **National Focal Points** (NFPs) under the respective authority of the Water Directors of the 20 Partnership countries.

These focal points are working in network with a **Central Technical Unit (EMWIS CTU)** funded since 10 years on a tripartite base by the three Governments of Spain, France and Italy. The Technical Unit has a legal status of **European Economic Interest Group** that was created in 1998 specifically for the project by the three national operators (CEDEX in Spain, IOWater for France and SOGESID for Italy) designated by the Governments of their respective countries which directly provide common supports to the EMWIS EEIG but also ongoing support of their large pools of experts.

The success of EMWIS was repeatedly recognized by the Euro-med Water Directors and its exemplary approach inspires similar initiatives in other parts of the world (South America, Central America, sub-Saharan Africa).

The main following results are recognized by the water community in the Mediterranean:

- **Creation of an active network of 20 National Focal Points** in the Euro-Med countries working with common approaches and standards (annual coordination meetings and exchange of experience).
- **Development of 16 national information web sites and one international web site**, working in network, and which are references in the Mediterranean water sector.
- **Etude de faisabilité de la mise en œuvre de Systèmes Nationaux d'Information sur l'Eau** permettant la gestion partagée de données chiffrées indispensables à la GIRE et au suivi de la politique sur l'eau et initiation de tels systèmes dans les pays méditerranéens.
- **Feasibility study on the implementation of National Water Information System** for a shared data management that is essential for IWRM and for water policy monitoring and introduction of such systems in the Mediterranean countries.
- **Initiation of a Water Observation Mechanism in the Mediterranean**.
- **Creation of the Mediterranean Countries Water Directors Conference - MCWDC**
- **Signatures of structuring cooperation agreements**: European Environment Agency, International Network of Basin Organizations, Mediterranean component of the European Union Water Initiative…
- **Animation of thematic working groups**, in coordination with the water directions of the Mediterranean countries, to promote the exchange of institutional know-how validated in the form of pilot projects

A strategy of development for the next ten years was adopted by the Euro-Med water Directors at their conference in Rome in November 2005, including the opening of EMWIS to countries around the Mediterranean not signatories of the Euro-Med agreements (Libya, Balkan countries).

This strategy should lead to the progressive establishment of a "hub" of knowledge on water in the Mediterranean (Mediterranean Water Knowledge Hub) consortium network centres of excellence contributing to the emergence and dissemination of knowledge and useful data to improve the Integrated Management of water resources in the region: EMWIS current National Focal Points, National Water Information Systems, research centres and universities, "experimental and pilot projects" developed by the Countries with the eventual support of European Cooperation's ....

An efficient Network of 20 EMWIS National Focal Points organized by the Water Directions of the Euro-Med. countries.

Algeria	**Agence de bassin Constantinois-Seybouse-Mellègue** Mr Khatim KHERRAZ, Directeur www.semide.dz	
Austria	**Federal Ministry of Agriculture, Forestry, Environment and Water Management** Mr. Wolfgang STALZER, Water Director www.semide-at.org	
Belgium	**Aminal - Afdeling Europa en Milieu** Mr. Kon DE SMET www.semide-be.org	
Cyprus	**Ministry of Agriculture - Water Development Department (WDD)** Mrs. Artemis ACHILLEOS NICOLAOU, Executive Engineer. www.semide-cy.org	
Egypt	**Ministry of Water Resources and Irrigation** **Main Information Center (MIC)** Mr. Mohamed Rami MAHMOUD, General Supervisor of MIC (Main Information Centre) www.semide-eg.org	
Spain	**Centro de Estudios y Experimentación de Obras Publicas (CEDEX)** Mrs. Leticia MARTINEZ ETAYO, Documentación y Bases de Datos www.semide-es.org	
France	**Office International de l'Eau - Centre National d'Information et de Documentation sur l'Eau (CNIDE)** Jean Antoine FABY www.semide-fr.org	
Greece	**Hellenic Ministry of the Environment Physical Planning and Public Works – Water Central Agency** Mr. Pantelopoulos, Director www.semide-gr.org	
Israël	**The Hydrological Service of Israel** Mr. Michael EYAL www.semide-il.org	
Italy	**SOGESID** Mr. Fausto MELLI, Director General www.semide-it.org	

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Jordania	**Ministry of Water and Irrigation** Mr. Mohammad BANY-MUSTAFA, Director of MIS (Management Information Systems) **www.semide-jo.org**	
Lebanon	**Ministère de l'Eau et de l'Energie** Mr. Hassan HACHEM, Directeur Général de l'Exploitation Mr Fadi COMAIR, Directeur Général des Ressources Hydrauliques **www.semide-lb.org**	
Luxembourg	**Ministere de l'Interieur - Services de la Gestion de l'Eau** Mr. Jean-Marie RIES **www.semide-lu.org**	
Malta	**Malta Resources Authority** Mr. George CASSAR **www.semide-mt.org**	
Morocco	**Secrétariat d'État auprès du Ministère de l'Energie, des mines, de l'eau et de l'environnement, chargé de l'Eau** Mr. Ahmed SKIM, Chef de Division Organisation & Méthodes **www.semide-ma.org**	
Palestine	**Palestinian Water Authority** Mr. Yousef Anwar Fouad AWAYES, GD Public Relation & International Coordination Unit **www.semide-ps.org**	
Portugal	**Instituto de Agua (INAG)** Mr. Orlando BORGES **www.semide-pt.org**	
Syria	**Ministry of Irrigation** Mr. Hussain MAKHLOUF, General Director of the General Organization for Water Resources	
Tunisia	**Ministère de l'Agriculture – BIRH - Direction Générale des Ressources en Eau** Mr. Mohamed Nejib KACHOURI, Directeur du Bureau de l'Inventaire et des Recherches Hydrauliques **www.semide-tn.org**	
Turkey	**General Directorate of State Hydraulic Works (DSI)** Mr. Murat HATIPOGLU **www.semide-tr.org**