NEWSLETTER

EMWIS

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

Editorial

The Paris Summit in July 2008 provided new political impetus to the Barcelona Process. The Union of the Mediterranean renders the Euro-Mediterranean Partnership initiated in Barcelona in 1995 more geographically coherent, in particular by including the Balkan countries that border the Mediterranean Sea. We cannot help congratulating ourselves on this willingness for concrete and visible cooperation through great unifying projects.

Despite the water sector's crucial role in the economic and social development of Mediterranean countries, it has not been witness to sufficient regional coordination, nor to the adoption of a true Mediterranean strategy. The need for cooperation in this sector was highlighted long before the Barcelona Process was launched. Governments initiated the first debates back in 1990 in Algiers, and then in Rome in 1992. In Marseilles in 1996, the Water Ministers decided to set up EMWIS, and then in Turin in 1999, they launched an action plan on the local water management that led to a European Commission programme that financed around ten regional projects. It is now vital to go one step further and work towards the adoption of a common strategy committing countries, international organisations and all the water community to taking coordinated, large-scale actions on fresh water in the region.

At EMWIS, we have been working for nearly ten years with water ministries in Euro-Mediterranean countries to encourage the exchange of knowledge and expertise in the fresh water domain. Today, EMWIS National Focal Points, of which there are around 20, work together to gather, organise and disseminate information on water resources management, on ways to improve skills and training for technicians, managers and decision-makers. The existence of a common electronic network dedicated to water has become a reality.

The collaborative management of water data within each country, using harmonised national systems, is vital for guaranteeing sustainable integrated water resources management and for providing an efficient response to outside requests, in particular those from international bodies. EMWIS provides support for the development of such national systems and their networking, notably drawing from European experiences in setting up the water information system for European, WISE, and the approach of a shared environment information system, SEIS, which encourages information to be networked rather than centralised.

A number of cooperation themes have been identified with the water authorities, mainly: participative approaches in Integrated Water Resource Management; the prevention and management of droughts and water scarcity in a changing climate; non-conventional water resources (desalination and waste water re-use); sanitation and fight against household pollution. These themes will almost certainly be discussed during the preparation of a Mediterranean strategy on water.

EMWIS's success has been recognised at the highest levels. It has served as an example in Latin America and Sub-Saharan Africa because it responds to the common need for improving water management and sharing information more efficiently. EMWIS gave an affirmative answer to the call made by the Ministers in Turin in 1999: during the ten years that separate the Turin and Dead Sea conferences, EMWIS has enabled a dialogue to be upheld between Mediterranean countries and has encouraged cooperation in the water sector. With such a successful past, we can envisage the future with pride and we believe that EMWIS could be an essential instrument of the future Mediterranean strategy on water, working at the service of the secretariat of the Barcelona Process: a Union of the Mediterranean.

Walter MAZZITTI
President of the EMWIS Steering Committee

Towards a Mediterranean Resources and knowledge Network

Contribution to the development and follow up of a regional strategy for water

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.

Asprokremos, Cyprus

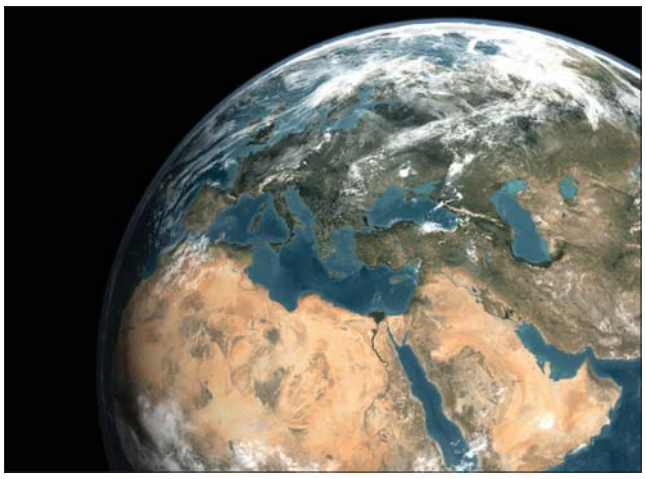

Image Nasa Terra-MODIS

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.

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

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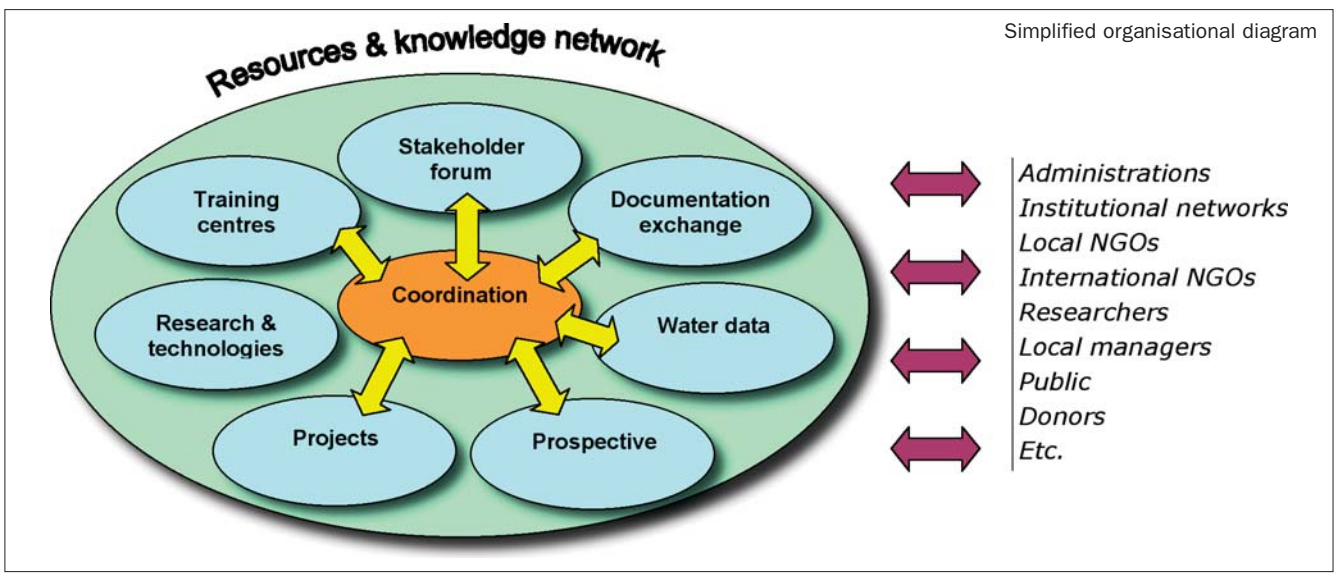
Simplified organisational diagram



programmes between these various existing institutions and developing the means they have for a coordinated and joint approach.

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 «**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:

Water Stakeholder Partnership, by regrouping the various existing networks: Med-EUWI, GWP-Med, MENBO, Water Operator Partnership, etc.
Regional Data System and documentation exchange system: EMWIS, national bodies (National Focal Points), European Environment Agency, etc.

Network of the professional training centres on water: International Office for Water, National Office for Drinking Water Supply (ONEP - Morocco), Algerian Water Company, CITET, etc.

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

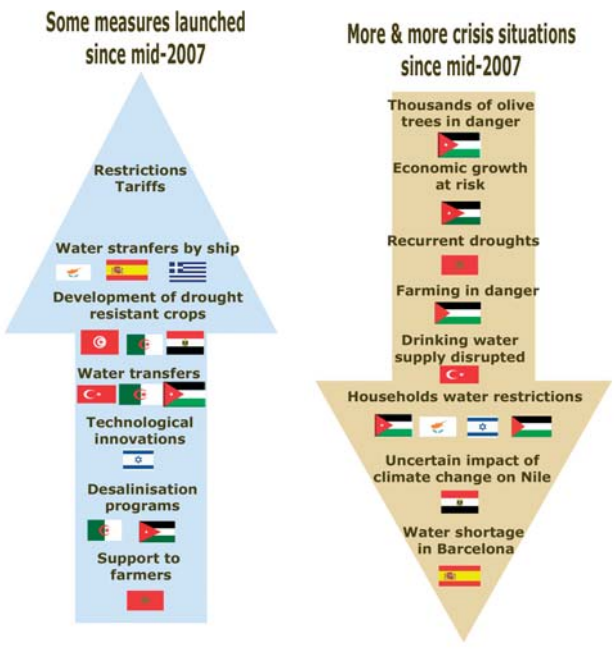
Increase and enhancement of research in the water sector: CEDEX, IOWater-IWRM - Net, IME, EMWIS, European initiatives (ERA-Net, WSSTP, MELIA, etc.).

Task force: the Mediterranean Water Institute (IME), etc.

Prospective: the MAP RAC and Blue Plan, etc.

Mediteranean countries face the worst water shortages in history

Specialists have announced that if nothing changes, in less than one generation, most Mediterranean countries will experience genuine scarcity of continental fresh water supplies. The availability of sufficient quantities of quality fresh water is likely to become one of the main issues for economic and social development, and in some countries, this is already the case. A quick review of some of the announcements published on the EMWIS website over the last 18 months show that critical situations are multiplying and do not just affect the Middle East, even though the water stress is greater there.



Drought is a serious problem in the Mediterranean. The high growth of populations, often concentrated in urban areas, the development of irrigated farming and the tourist industry (it is the world's most popular holiday destination) all create enormous pressure on water resources, and conflicts of use between irrigation, tourism and the major towns are already occurring.


Asprokremos, Cyprus

Water wastage is unacceptable in such a context, and so before looking for new resources, the priority must be the more efficient use of existing resources. Traditional irrigation undergoes an estimated 70% of loss through evaporation and infiltration. In towns, around 50% of drinking water is wasted through leaks in the networks.

To modify often age-old practices, all stakeholders need to make great efforts to reduce their water consumption. The most critical water shortages are located in the Middle East, affecting the region's social and economic potential and raising the risk of political conflict. The situation also makes land increasingly vulnerable to salinisation and desertification.

Over the last few months, several Mediterranean countries have suffered from severe crises linked to water shortages. According to the former Spanish water director, Jaime Palop, Spain is currently suffering from its worst drought since 1912. The media have often reported on these situations and their impacts, like forest fires, the abandon of farming zones, increased water tariffs, wet zones in danger, contaminated water and biodiversity at risk. And Mediterranean trees such as the cork oak, Aleppo pine and maritime pine are under threat.

European Union countries are also affected by this phenomenon. The economies and landscapes of alpine regions are becoming vulnerable, and the United Kingdom and Sweden have faced water shortage problems too. To face up to these challenges, in July 2007 the European Commission adopted a Communication on water scarcity and drought, and experts groups are working on a set of common indicators to make a full quantitative assessment of the situation and on the measures to lessen the effects of drought and combat shortages.

At Mediterranean level, a working group has been set up on this theme within the joint process between the EU Water Framework Directive (WFD) and the Mediterranean component of the EU Water Initiative. The group has produced a report providing an overview of information available on the region, and in particular each country's measures for combating water scarcity. The report's conclusions highlight the main issues and the need for reliable data to evaluate the situation and the impact of measures undertaken. The report is available on the EMWIS website at www.emwis.net/topics/WaterScarcity


Turkish dam

A Mediterranean water observation system

The success of water policies and associated investments depends on the implementation, in each country, of good governance involving the various stakeholders concerned and based on a quality follow-up / evaluation system and on suitable training for water professionals.
During these last years, the fast development of the information and communication technologies and the first experiments in electronic government - e-Gov- strongly modified the "traditional" approaches which still prevail in several countries.

National water data systems

In such a situation, a National Water Data System (NWDS) is a paramount stake to define, implement and evaluate policy in this sector in each country. This requires:

- gathering (monitoring networks), validating and storing the necessary data (physical and socio-economic) in terms of water resources, their uses and water quality,
- organising data management between the relevant stakeholders (e.g. legislative text or protocol),
- defining relevant, standardised and internationally approved indicators to ensure a follow-up at various levels of geographical aggregation,
- informing the civil society (users' associations, etc.) and allowing it to fully participate in the management of water and of its uses.

A regional tool for centralised access to standardised information

The implementation of a regional tool based on NWDS will give access to reliable, standardised and relevant data from the national and local levels, which are sorely lacking today at the regional level to support any policy for integrated resources management and risk prevention. These data, provided through voluntary contribution of the countries, could, in particular, be linked to those concerning sustainable development in the Mediterranean area.
The main stakeholders concerned by the implementation of such systems are the ministries in charge of water in the Euro-Mediterranean countries. Twenty of them already created National Focal Points (NFPs), which have been successfully co-operating for ten years within EMWIS. The studies carried out in the countries demonstrate the stakeholders' interest in working with the existing NFPs to set up their own national system, should they be data suppliers or users (statistics institutes, weather forecast, ministries for health, local authorities, environment, agriculture, etc.)
At the regional level, the implementation of such a tool, taking into account both the needs of international initiatives and the reality of field management, would allow:

- having an essential component for both a shared environmental information system and a global water and sanitation observation mechanism,
- improved consistency of the indicators produced by various organisations,
- having quality data so that the national and international institutions can follow up their strategy,
- greater effectiveness of assistance to the water sector in the countries,
- promoting South/South transfers of good practices and motivating the countries thanks to the comparison of results,
- contributing to the consistency of regional policies (Mediterranean Action Plan, Euro-Mediterranean Partnership, European Neighbourhood Policy, etc.).

For further information, please consult the web site of the Feasibility study on a Mediterranean water observation mechanism at www.semide.net/medwip


Tilesdit dam, Algeria

Romania

Great success for the 6th “EUROPE-INBO 2008” conference

The annual “EUROPE-INBO 2008” conference of the European Basin Organizations on the implementation of the Water Framework Directive (WFD) took place in Sibiu, Romania, from 1st to 3 October 2008, at the invitation of the Romanian Authorities. It gathered 195 participants coming from 26 countries. This conference was an important step before the World Water Forum of Istanbul. A workshop on the IWRM-Net (European network of research programmes on IWRM) project was organized as a side event. Three workshops presented many case studies and exchanges were particularly fruitful. The EU-non-member countries were very present, proof of their growing interest in the WFD.

Workshop 1 - Preparation of the programmes of measures
Much work has been done. Experience shows that the preparation of programmes of measures requires multidisciplinary work and an in-depth study of the economic methods. The programmes of measures should be developed on relevant scales, not only catchment areas (basin, sub-basin), but also administrative scales (municipalities, provinces, districts, departments, regions), to guarantee the involvement of the local politico-administrative levels in the choice and the implementation of the measures. Discussions on financing (who will pay and how much?) are difficult… but impossible to circumvent. The effectiveness of the Programmes of Measures is conditioned by the recognition of its added value by the managers of the areas. Governmental services are the first to be involved in the Programmes of Measures (follow-up of the application of regulations, support to the project managers) and as the deadline of 2015 will come very quickly, it is necessary to launch the measures now, without waiting for their formal adoption at the end of 2009. Making for lost time is now urgent (agriculture, sanitation, groundwater) and the functional restoration of aquatic environments is of prime importance for achieving good ecological status (importance of hydromorphology). It is probable that a significant percentage of the Water Bodies will not reach good status in 2015 and that the implementation of the Programmes of Measures will require significant additional incomes.

Workshop 2 – Implementation of the Flood Directive
The Flood Directive provides an essential European framework. It gives a strong signal: it is not only a question of building defence infrastructures, but of adopting an integrated prevention policy. If dams and dikes are still needed, it is necessary to reduce their environmental impacts and they induce a false sense of security. The implementation of the Flood Directive and WFD should be closely coordinated, especially at the level of the Management Plans. The presentations showed the advantage of a proactive and integrated prevention policy: protection of wetlands and floodplains, good maintenance of rivers, integrated management of sediment transport, coordination between the riparian States of transboundary rivers, as well as the education of the populations are essential components of the protection of the people and properties. On the whole, the amounts invested in effective prevention are lower than avoided damage. It is necessary to foresee exceptional floods… the frequency of which should increase with climate change.
Attention should be paid to the coordination of the administration managers of risks and IWRM, who are sometimes different and on distinct territories.

Workshop 3 – Analysis of implementation in transboundary basins
The WFD gives real added value in transboundary basins, by providing a common reference framework (objectives, methods, deadlines, common planning documents). It increases exchanges of information and coordination between riparian States. It thus contributes to European integration. The role of the international commissions was underlined. But huge work is still needed and the basin organizations emphasized specific needs: providing more means to basin organizations and international commissions; harmonizing the economic analyses; developing common systems for monitoring and data management; giving more ambition to the roof section of the management plan; developing public consultation on an international district scale; organizing joint management of transboundary aquifers; better coordinating the management of floods/droughts and climate change; increasing support to neighbourhood countries (the Mediterranean, Eastern Europe, Balkans). The work completed in the international districts shared by EU and non-EU countries is encouraging. The WFD can also inspire other areas in the world, because its approach is transferable.
The “roof” sections of Management Plans and Programmes of Measures are still too much national “arrangements”, the Member States being responsible before the Commission for the WFD implementation in what concerns them.

The participants wished that INBO plays a more important role in the WFD Common Implementation Strategy (CIS). Mr. Alfredo DI DOMENICANTONIO, Director of the Tiber Basin Authority was congratulated for the 2007-2008 Italian Presidency. He handed the Presidency to Mr. Marius POSTELNICESCU, Director General of the National Administration of Romanian Waters (Apele Romane) who was thanked for the organization of the conference and his warm welcome. The next conference will be held in the Ukraine in autumn 2009. The final resolutions, presentations and photographs are available on the website: www.inbo-news.org.

Tunisia

Information systems on water and soil resources

The water sector constitutes a priority among Tunisia’s objectives for economic and social development. Although 83% of total exploitable water resources are put into use (thanks to 27 dams, 200 retention dams, 766 retention lakes, over 3000 boreholes and 151 000 wells), the steep rise in demand means that there is a risk of shortages in the near future. Tunisia is fully aware of this situation and has committed itself to making strategic changes to develop its water resources and ensure better control of demand in the various socio-economic sectors.

Thus, the 2nd phase of its Water Sector Investment Programme (PISEAU 2009-2013) is set to receive around EUR 110M from a combination of funding institutions (the World Bank, the French Development Agency, the African Development Bank and the African Water Facility – AWF). In partnership with the AWF, the EMWIS Technical Unit has drawn up an outline of the “information systems on water and soil resources” component. The project took the form of an organisational, technical and financial audit of the systems planned by the relevant Tunisian services, and enabled, among other things, a definition of how the various information systems could work coherently, a schedule of activities and a budget

that would make it possible to achieve an initial operational system within three years. A subsidy amounting to EUR 2M should be granted by the funders for this activity, and a financial top-up may be added at the end of the three years. The approach is based on:
- SINEAU, the National Water Information System, which unites thematic systems, and provides services such as the joint definition of common references, the production of water status reports based on data supplied by the other systems, validation of data quality, etc.;
- an information system on surface and ground water resources (pluviometry, hydrometry, and ground water);
- a system for monitoring hydric pollution on 206 sites at risk (77 sites for monitoring groundwater and 129 sites for monitoring surface water) and on activities that can cause pollution (deep boreholes, large irrigated perimeters and the re-use of waste water);
- a monitoring and evaluation system on the quality of soil in irrigated perimeters to avoid their deterioration (salinifiction, hydromorphy, urbanisation, flooding, erosion and pollution).

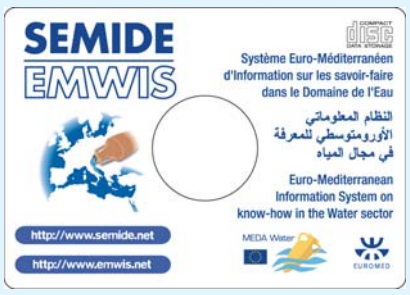
Spain

Coordination Committee

The 8th meeting of the EMWIS Coordonation Committee took place in Madrid (Spain) from 25 to 26 June 2008, involving representatives from 11 countries. The meeting provided the occasion for an overview of the countries’ actions, an analysis of progress made in implementing National Water Information Systems, and an introduction of the first steps towards harmonisation with the Water Information System for Europe, WISE.

The National Focal Points emphasised the main ways in which EMWIS had contributed to their countries, which were: improved cooperation between actors involved in managing information on water; the possibility of creating a reference website on water for each country; and reinforced human and material capacities. The management of water data remains the future priority for these countries. For future know-how exchanges between Mediterranean countries, an important theme appears to be how to educate water users on water savings and to increase their awareness.

New publication

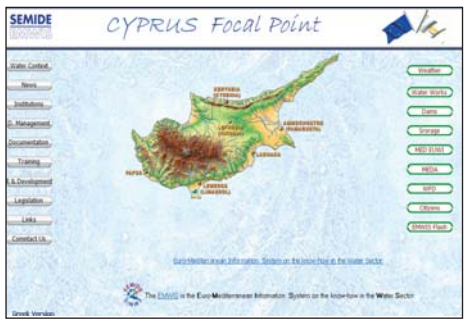


EMWIS has just re-issued a CD-ROM in cybercard format, providing an animated presentation of its approach, the various services available online (news, forthcoming events, terminology in 7 languages, projects, initiatives, etc.) and the main studies carried out since 2004 in the Mediterranean basin: The relevance of EU Water Framework Directive concepts for partner countries, Management of water and sanitation services, Irrigation management, Non-conventional water resources, National Water Information Systems feasibility studies, Feasibility study of a water observation mechanism for the Mediterranean region, and Overview and perspectives of cooperation in the water sector.
The cybercard comes with a more traditional paper publication that gives a summary of the National Focal Points and outlines institutional water management in those countries in the Mediterranean basin covered by the initiative: legislation, right to water, competences and coordination of the main institutions, territorial water management, tariff administration and cost recovery, etc.

16 countries online - EMWIS National Focal Points

Algeria - **Agence de bassin Constantinois-Seybouse- Mellègue**
M. Khatim KHERRAZ, Directeur www.semide.dz

Cyprus - **Ministry of Agriculture - Water Development Department (WDD)** Mme. Artemis ACHILLEOS NICOLAOU, Executive Engineer. www.semide-cy.org



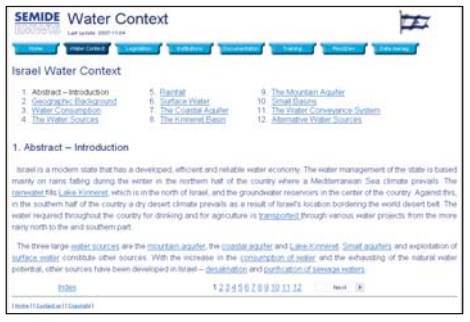
Egypt - **Ministry of Water Resources and Irrigation Main Information Center (MIC)** M. Mohamed Rami MAHMOUD, General Supervisor of MIC (Main Information Centre) www.semide-eg.org

Sapin - Centro de Estudios y Experimentación de Obras Publicas (CEDEX) Mme. 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)**
MIle. Stéphanie LARONDE www.semide-fr.org

Greece - **Hellenic Ministry of the Environment Physical Planning and Public Works – Water Central Agency**
M. Pantelis PANTELOPOULOS, Director www.semide-gr.org

Israel - The Hydrological Service of Israel
M. Michael EYAL www.semide-il.org

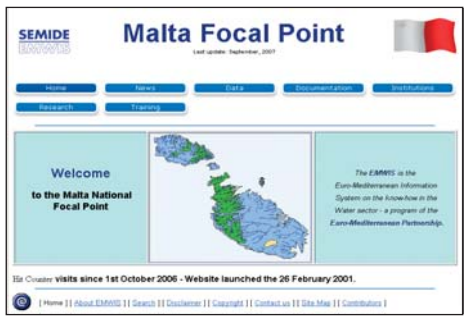


Italy - **SOGESID** M. Fausto MELLI, Director General
www.semide-it.org

Jordan - Ministry of Water and Irrigation
M. Mohammad BANY-MUSTAFA, Director of MIS (Management Information Systems) www.semide-jo.org

Lebanon - **Ministère de l'Eau et de l'Energie** M. Mahmoud BAROUD, Directeur Général par interim de l'Exploitation Mr Fadi COMAIR, Directeur Général des Ressources Hydrauliques www.semide-lb.org

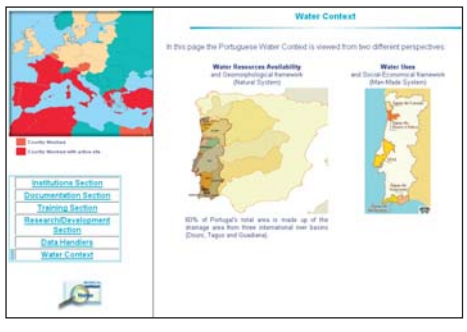
Malta - Malta Resources Authority
M. George CASSAR www.semide-mt.org



Morocco - Secrétariat d'État auprès du Ministère de l'Energie, des mines, de l'eau et de l'environnement, chargé de l'Eau M. Ahmed SKIM, Chef de Division Organisation & Méthodes www.semide-ma.org

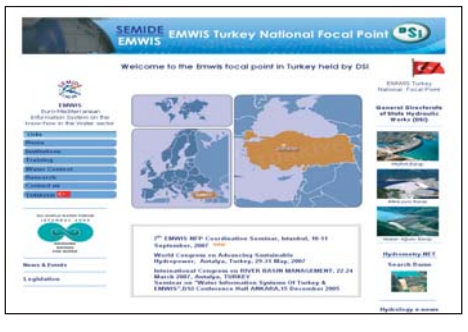
Palestine - Palestinian Water Authority
M. Yousef AWAYES, GD Public Relation & International Coordination Unit www.semide-ps.org

Portugal - Instituto de Agua (INAG)
M. Orlando BORGES www.semide-pt.org



Tunisia - Ministère de l'Agriculture – BIRH - Direction Générale des Ressources en Eau M. Mohamed Lotfi NACEF, Directeur du Bureau de l'Inventaire et des Recherches Hydrauliques www.semide-tn.org

Turkey - General Directorate of State Hydraulic Works (DSI)
M. Murat HATIPOGLU www.semide-tr.org

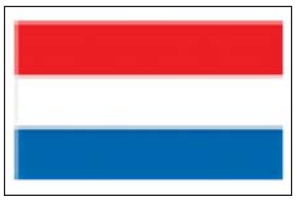


Austria - Federal Ministry of Agriculture, Forestry, Environment and Water Management

Belgium - Aminal - Afdeling Europa en Milieu

Luxembourg - Ministere de l'Intérieur - Services de la Gestion de l'Eau

Syria - Ministry of Irrigation



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MEDA Water

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