



# EMWIS

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

## Ten years after Naples

Information is at the heart of any decision-making process. It is also vital for building up mutual confidence in cooperation activities, whether they be transnational, national or local. With this in mind, the Euro-Mediterranean water ministers meeting in Marseilles in 1996 decided to work together to share information on water, and initiated the Euro-Mediterranean Information System on Know-how in the Water Sector, or EMWIS.



**1997** – Following a year-long feasibility study, the 27 Euro-Mediterranean water directors met in Naples, where they approved the structure, work programme and budget for EMWIS. Water directors from 20 countries then named their National Focal Points, and a legal structure was established to manage the initiative and host the Technical Unit.

**1999** – The operational launch of EMWIS, thanks to co-financing of international activities from the European Commission, Spain, France and Italy. The activity programme defined in Naples was started at end 1999 for an initial period of three years. This year also saw the Euro-Mediterranean Water Ministers' Conference of Turin, which approved an action plan on local water management and confirmed and consolidated the existence of EMWIS.

During this initial phase, the Mediterranean countries were able to develop their first national websites, which made public existing information relating to know-how in the water sector, grouped under five main themes: institutions, documentation, training, research and development, and data management techniques. In 2002, at the end of this initial phase, it became apparent that the capacities of the Mediterranean partner countries needed to be reinforced to improve the availability of information at national level and that the system should be upgraded to the latest Internet technologies to facilitate communication and the integration of a variety of information sources.

Thanks to EMWIS's support, the Mediterranean countries gradually became aware of the importance of having a National Water Information System as an indispensable tool for the integrated management of water resources, allowing data to be exchanged between the different institutions working in the sector.

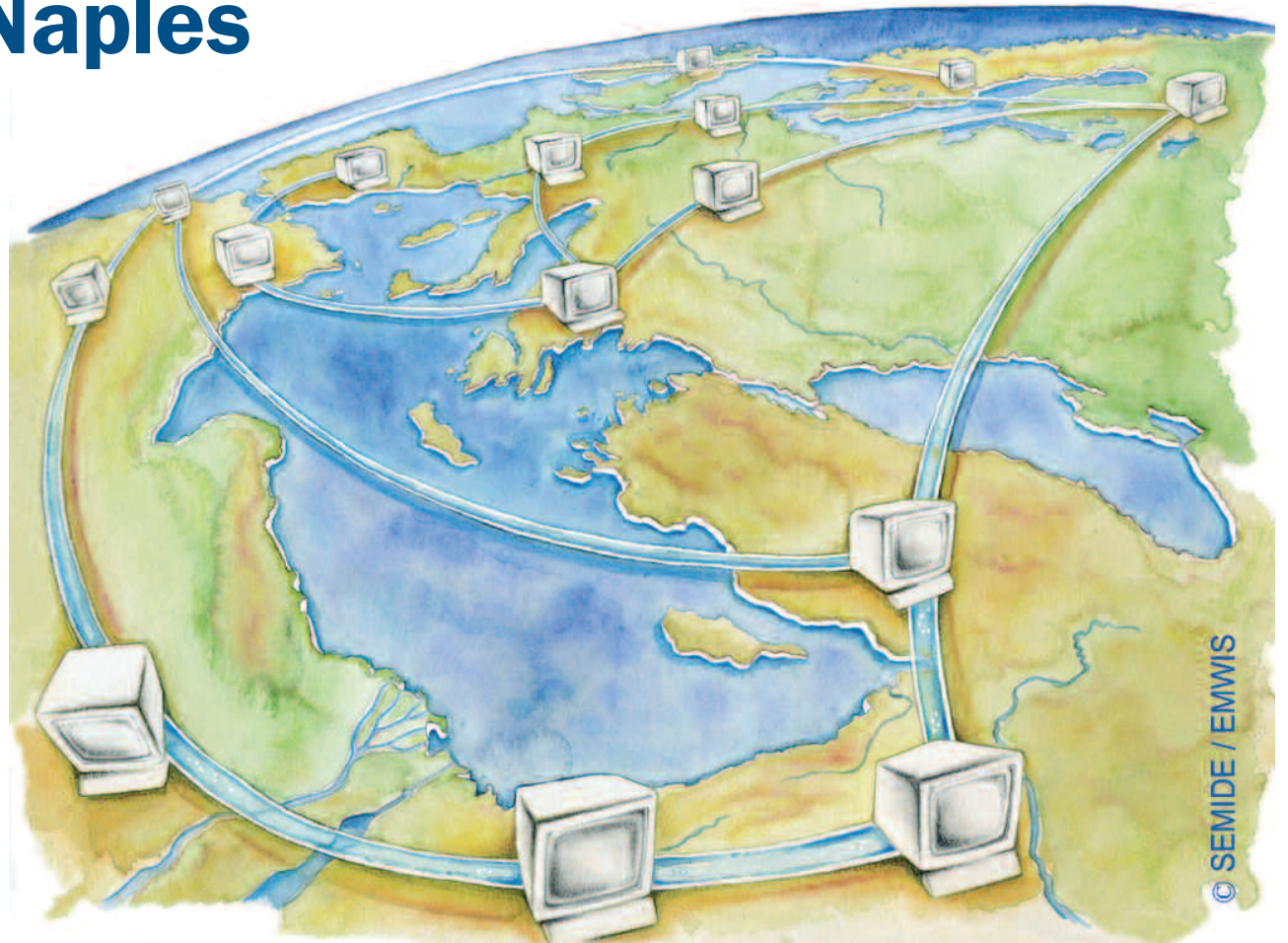
In this context, during their 2005 conference, the Euromed water directors decided to launch a feasibility study for a regional water observation mechanism, the first results of which were approved the following year in Athens. This commitment provides a good example of the progress that had been made since the launch of this initiative. Indeed in 1997, a discussion on potential data exchange would have been unthinkable, but common activities on national water information portals had done the groundwork for initiating exchange processes on a transparent and voluntary basis, while respecting the confidentiality of information when necessary.

This mutual confidence in EMWIS's organisation is an invaluable asset for ensuring future cooperation in the Mediterranean water sector.

### Four-year programme

At our Rome conference in November 2005, the Euromed Water Directors considered EMWIS's ten-year strategy and recommended that the new four-year programme should be put into action without interrupting the current phase. This programme aims to support regional cooperation between all Mediterranean countries to reach sustainable water management at local level. It is based on:

- guiding countries to manage information on water using their National Focal Points and National Water Information Systems;
- running an efficient regional website for disseminating



information and joint activities about all water issues in the area;

- setting up a regional water observation mechanism based on National Water Information Systems to help countries and international bodies follow up on their policies and regional/international initiatives;
- Transferring knowledge and know-how at transnational level on priority themes, leading to concrete results (e.g. pilot projects) in the Mediterranean Partner Countries.

### Other recent developments in Mediterranean water cooperation sector

In 2000, Europe committed itself to implementing the Water Framework Directive, with an ambitious programme spanning 27 years. The experience resulting from its application constitutes an important source of knowledge for the Mediterranean partner countries, especially when it relates to basin characterisation and water monitoring networks (cf. 2005 EMWIS survey of non EU Med water directors). The Water Information System for Europe –WISE, launched in March 2007, opens up new perspectives in the exchange of information. Many European countries are currently adapting their national databanks to feed the European system.

In the 2002, at the World Summit on Sustainable Development (WSSD) in Johannesburg, the European Union launched a "Water Initiative" (EUWI) to contribute to the achievement of the Millennium Development Goals (MDGs) for drinking water and sanitation, within the scope of an integrated approach to water resource management (IWRM). This initiative comprises a Mediterranean component.

In November 2005, the 21 signatory countries of the Barcelona Convention, within the ambit of the Mediterranean Action Plan, adopted a "Mediterranean Strategy for Sustainable Development", which has a strong focus on water and sanitation.

Lastly, the European Neighbourhood Policy (ENP) was drawn up in 2004 with the aim of proposing a privileged relationship based on shared values to the Union's neighbouring countries. From 2007, the EU's Instrument of Neighbourhood Policy European Neighbourhood and Partnership Instrument (ENPI) replaces the "financial instrument", MEDA.

### Much needed revival of Mediterranean cooperation in the water sector

Nearly ten years after the adoption of the Turin Plan of Action, faced with this new regional context and the major issues of sustainable development linked to water in the Mediterranean (the fight against poverty, economic development, population displacement, environment and health improvements, etc.), another conference for water ministers is needed.

This conference should have a political content, which could focus on:

- 1). the definition of shared strategic regional trends, including adapting to climate change, the integrated management of water resources and the challenges of water demand management, lack of water, drought and floods. If possible, it should aim to:

- explore the terms and scope of a new regional outline programme benefiting from funding, which would also aim to improve coordination between the various existing instruments, policies, initiatives and programmes
- define a new mandate for the Water Directors' Forum that takes recent developments into consideration
- optimise funding in view of the 2009 revision, both at national level, with the bilateral Action Plans of the EU's Neighbourhood Policy (ENPI), and regionally, via the regional programming foreseen by the ENPI
- streamline and better coordinate bilateral aid from European and multilateral funding partners,

- 2). the response to needs for collecting and managing quantitative information relating to water, including the setting-up of a Mediterranean Water Observatory,
- 3). the Mediterranean contribution to the 5<sup>th</sup> World Water Forum to be held in Istanbul in March 2009.

The evolution of the EMWIS is strongly related to the decisions that will be taken at this meeting of the Euro-Mediterranean Ministers in charge of water management, planned at the end of 2008 under the French Presidency of the European Union.

Pascal BERTEAUD  
President of the EMWIS Steering Committee





Since the beginning of its mandate in 1999, EMWIS has continued to provide a tool to promote and support the exchange of know-how in the Euro-Mediterranean water sector. It has made a number of significant achievements for the regional cooperation and within each country, not least the posting of a newly designed and extremely comprehensive website portal at the end of 2006. During 2006, Pascal Berteaud, French water director who holds the post of EMWIS Steering Committee President, set out five main priorities for 2008-2011. The list emerged as the result of dialogue with the Mediterranean Partner Countries (MPCs), and takes into consideration national priorities, as well as the National Action Plans of the European Neighbourhood Policy, and the priorities defined at regional level, such as the Millennium Development Goals, Mediterranean Strategy for Sustainable Development and Pollution Control in the Mediterranean.

### Prevention & risk management for extreme phenomena

One of the major consequences of the global climate change is the increasing number of extreme phenomena events which in the Mediterranean region are **floods** and **water scarcity or drought**. In Mediterranean Partner Countries, floods result not only structural damage but are also costly in human lives. The recent adoption of a flood directive by the EU shows that this interest is shared across the 2 sides of the Mediterranean. Water scarcity and drought are major concerns of Med Partner countries since a long time, now it is also becoming an issue for EU countries. A working group of the Joint Process has already produced an interim report in 2006, now works focus on the quantitative assessment of the situation, the definition of relevant indicators and the review of measures to be set up to minimize the effect of drought and water scarcity.

### Non-conventional water resources

Due to the increasing water demand in the region and the lack of natural resources, the development of alternative resources has been set as a priority at the Euromed Ministerial conference of Turin in 1999. The two major resources to be exploited are the **desalination** of sea or brackish water and the **reuse of waste water**. A working group has been set up within the Med Joint Process on waste water reuse, a theme of high interest for both EU and non EU countries. This group has already produced its final report available on EMWIS portal)

### Water monitoring

This group has been launched in the context of the Med Joint Process. The overall objective is to promote exchange between EU and non EU partners of the Mediterranean region and to identify good practices for the improvement of monitoring networks based on the existing situation and experiences collected within the Water Framework Directive-implementation process and in the Mediterranean Partner

Countries. The inception meeting of this working group took place in Madrid in July 2007 where its draft mandate was define. It will also be complementary to the activities on **National Water Information Systems** and will improve the availability of data related to water quantity necessary for water scarcity and drought assessment. Two other priority issues have been identified, but the working groups have not started yet: **local sanitation management** and **participative approaches** in Integrated Water Resources Management. EMWIS believes that the exchange of know-how taking place in these working groups as well as the production of reports and recommendations should be followed by pilot implementations demonstrating and validating the effective transfer between experts and countries. EMWIS has devised and encouraged a number of devices to help ensure the success of these priorities. The following tools

based on the same approach, or are in the process of doing so. With its vast system of databases and files, the portal is documenting the water management issues in the Mediterranean area and providing a cooperation area for experts. The portal provides a detailed, yet clearly presented blueprint for NFPs to use as a starting block for their own version of the site. The website is set to evolve over time, with the integration of interactive maps for example.

### National Water Information Systems

Another initiative that came to being in 2006 is the focus on National Water Information System, or NWIS. The systems record water-related quantitative information using a variety of information technologies, with a particular emphasis on data sharing between various institutions. Depending on the needs of the country assembling the



Bled, Slovenia, hosts the Euro-Mediterranean Water Directors Forum, 10-11 December 2007"

will provide assistance over the next three years, and beyond.

### Web portals

2006 saw the posting of the newly designed and greatly improved EMWIS portal, available in English, French and Arabic. Most of NFPs have created or revised their own portal

data, an NWIS can be organised in different ways. There might be emphasis, for example, on accessing certain types of documents, on facilitating exchanges, or on common indicators. EMWIS helped countries thanks to feasibility studies providing a road map for future developments. Part of EMWIS's role over the coming years will be to assist countries in creating and maintaining their NWIS, including the organisational issues, fund rising and standardisation of data and exchange protocols.

### Water Observation Mechanism

This global monitoring mechanism is in line with work carried out by the UN Commission for Sustainable Development. It is based on regional mechanisms linked to the National Water Information Systems with the aim of improving the collection, processing and comparison of reliable information in the water sector, and the Med mechanism will be implemented in liaison of international initiatives collecting water related data in the region. A feasibility study is already well under way and has made good progress.

### Euro-med Water Directors' Forum

This Forum has existed since 1997 (Naples), it has been regularly convened by EMWIS till 2005 and since 2005 it is jointly organised by Med-EUWI and EMWIS. It provides an appropriate structure for meeting the needs of the various international initiatives in the filed of water, such as the EU and the UN Mediterranean Action Plan. Its role will have to be defined by the Euro-Med Ministers in charge of water at their meeting at the end of 2008. But It could have a consultative role for the definition of priorities, the validation of proposals, follow-up on implementation and the evaluation of results.



Paris, UNESCO 28-11-2007 - Meeting of the pilot committee on the study "Assessment and prospects for cooperation in the Mediterranean water sector" that will be presented at the Euromed water directors conference, 2007





## Egypt

A workshop was held in Cairo on 10 February 2007 to celebrate the forthcoming launch of Egypt's EMWIS national website. Organised by the country's National Focal Point, the Ministry of Water Resources and Irrigation, or 'MWRI', the emphasis was on sharing information both nationally and between countries.

Dr. Mahmoud Abu Zeid, Minister of Water resources and Irrigation, opened the workshop by stressing the importance of sharing documentation and knowledge, both within and beyond the MWRI. The forthcoming website will come as a natural complement to the Ministry's activities in research and development, monitoring and evaluation, since it promises not only to reach a wide public but also to provide users with an interactive, complete and easy-to-update tool.

MWRI already boasts a dynamic documentary pool and an



online database, and has a strong tradition of collecting specialised information and sharing it between its national services. The creation of a new national EMWIS website is the logical step forward in further opening out its services. The site will not only offer access to documentation and databases, but also include up-to-date digital maps, news, useful links, country reports, contact information and advertisements for job positions in the sector. It will be available in Arabic and English simultaneously so that users can see both languages on screen at once. Currently in feedback and testing phase, a beta version should be available in early 2008.

The development of the Egyptian EMWIS website is supported by the Italian cooperation.

For further details: Dr. Mohamed Rami Mahmoud; EMWIS NFP coordinator; [rami@mwri.gov.eg](mailto:rami@mwri.gov.eg)

## Cyprus

An EMWIS national information seminar was held in Cyprus on 10 May 2007, hosted by the country's national focal point, the "WDD", or the Water Development Department of the Ministry of Agriculture, Natural Resources and the Environment. The event provided an occasion for the NFP to present its new staff team and provide a detailed overview of its current action and projects. Three main topics provided a focus for discussion: water information systems, drought, and wastewater reuse.

The WDD made a number of presentations to illustrate its current and future methods for making information readily available to interested parties. It is planning a stakeholder awareness campaign, as well as the creation of a National Water Information System (NWIS) to provide an online system that integrates data and know-how from

all national stakeholders. Work is also well under way for delivering a second, upgraded version of the national EMWIS website.

The ongoing concern of the country's water scarcity was discussed in depth, including a number of concrete measures and suggestions for meeting the increasing water needs of this semi-arid island. A complementary presentation on the subject made by Mr Ahmed Skim of the Moroccan NFP provided a useful insight into this country's methods for tackling the problem.

On the theme of wastewater reuse, Ms Heba Abur Rub from MEDA-water MEDWA project, related to participatory sustainable water management at farm level in Jordan and Palestine, presented a case study that was followed by numerous exchanges with the participants.

For further details: [www.emwis-cy.org](http://www.emwis-cy.org)



## Palestinian Territories

The first ever EMWIS information seminar was held in Ramallah in Palestine on 13 May 2007.

The Palestinian Water Authority (PWA) has been an active member and representative of the EMWIS initiative since the 1996 Ministerial conference on local water management. The presentations made at the event illustrated the PWA's continued efforts to collect and disseminate information in the water sector, despite past and ongoing difficulties in the area.

The talks showed that although the non-existence of a national government planning body has had a very detrimental effect on the water sector, the existence of NGOs on the field has played an important role in the country. NGOs have provided a major source for water-related information in the Palestinian Authority, and have



helped draw attention to the serious problems in finding sufficient water resources for the population.

PWA efforts as EMWIS NFP are focusing on the publication and improvement the national web site presented during the seminar, in collaboration with all PWA services and the civil society.

For further information: [www.emwis-ps.org](http://www.emwis-ps.org)

## Tunisia

On 22 November 2007, an information day on EMWIS developments was held by the Water Resources General Directorate of the Tunisian Ministry of Agriculture and Hydraulic Resources. The event, which received a lot of press coverage, gathered around 140 players from the water sector and aimed to improve cooperation between institutions in the sharing and dissemination of information. At the opening session, Abderrazak DAALLOUL, the State Secretary for fishing of the Ministry of Agriculture and Hydraulic Resources, reiterated his commitment to EMWIS and his will to reinforce Euro-Mediterranean cooperation in this vital sector.

Participants were informed on progress of the EMWIS National Focal Point, run by the *Bureau de l'Inventaire et des Recherches Hydrauliques* – BIRH. Notable events included the recent launch of a virtual library on water issues, called GedEAU. The library is available on the national portal in English, Arabic and French and constitutes the only point of reference on water in Tunisia. A national leaflet was printed and sent out to mark the launch.

A large part of the day focused on the implementation of a



national water information system to enable water stakeholders to share their data. The study of the system, based on a concept suggested by EMWIS, was financed by the World Bank, which is also to support its launch in 2009. The system has been given the name SINEAU and will integrate existing modules, like the SYCHOTRAC flood management system, and the SYGREAU water resources management system. Presentations of the concertation mechanism of Eastern Tunisian aquifer –SASS-, of the Spanish water information system and the work on the

Mediterranean water observation mechanism made the Tunisian national system easier to envisage its future and showed how it would benefit international exchanges. The work on water accounts, led by the National Statistics Institute as part of the MedStat project, also underlined the importance of sharing and standardising data.

There was a common consensus from the various interventions related to water data management: the need for players to cooperate in standardising the information and metadata necessary for developing indicators. Working together in this way will also help players feel more involved in the future system.

During the round table discussions that ended the day, the need for standardising data and exchange protocols between the various players emerged as a priority to be dealt with before the launch of the system -SINEAU-. The African Water Facility proposed funding for this preliminary phase by associating data producers as well as users. The FAO also proposed its support for the work in homogenising data on water for agricultural usage.

More information is at [www.semide.tn](http://www.semide.tn)



## Jordan

An EMWIS national information seminar was held in Amman, Jordan on 16 May 2007. The aim of the meeting was to raise awareness of the benefits of exchanging know-how and information among the main stakeholders in Jordan's water sector.

The country's Ministry of Water and Irrigation, which acts as the National Focal Point, also took advantage of the occasion to officially launch its new EMWIS web portal. The Jordanian Ministry of Water and Irrigation is one of the vital players in EMWIS. It took part in the preliminary EMWIS feasibility study in 1997 and has always been very active in the steering and coordination committees. Among the NFP's achievements are: the creation of a "yellow pages" of actors in the water sector; a catalogue of information sources on the 5 EMWIS themes; its web

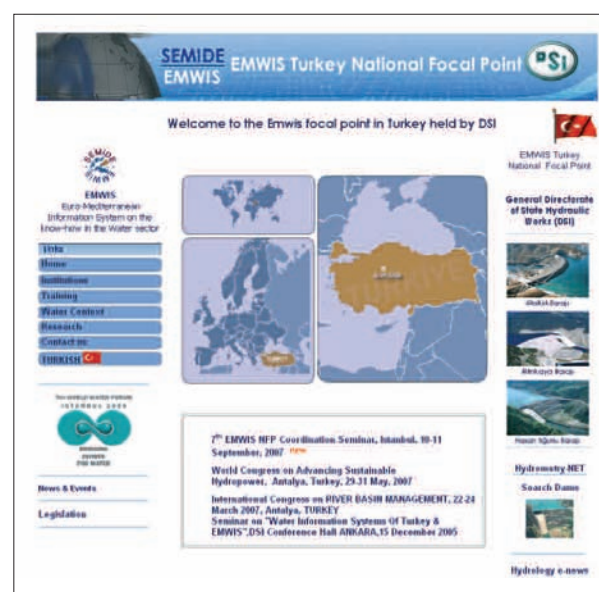
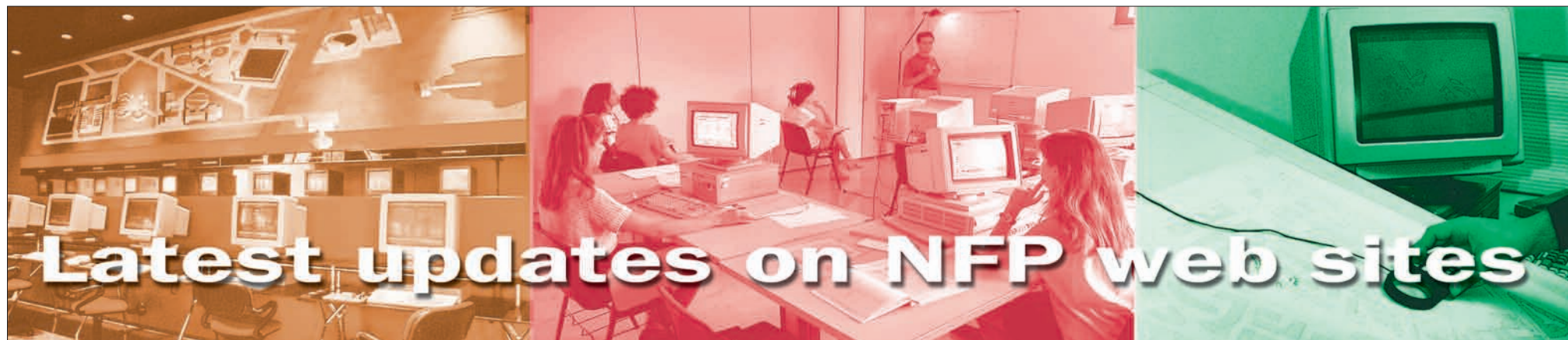


portal; information on documentation on water projects and an EMWIS brochure in Arabic and English.

The NFP also recently conducted a user needs survey, interrogating national stakeholders and inviting their feedback on the content of the projected website. The results were an encouraging indicator of the portal's significant contribution to collecting and disseminating information to interested parties in the Kingdom of Jordan.

The seminar also gave place to a working session for joint analysis and proposals to enrich the content by the national web site. A draft partnership agreement was also discussed with the participants in order to formalise the exchanges and the publication of information.

For further information: [www.emwis-jo.org](http://www.emwis-jo.org)



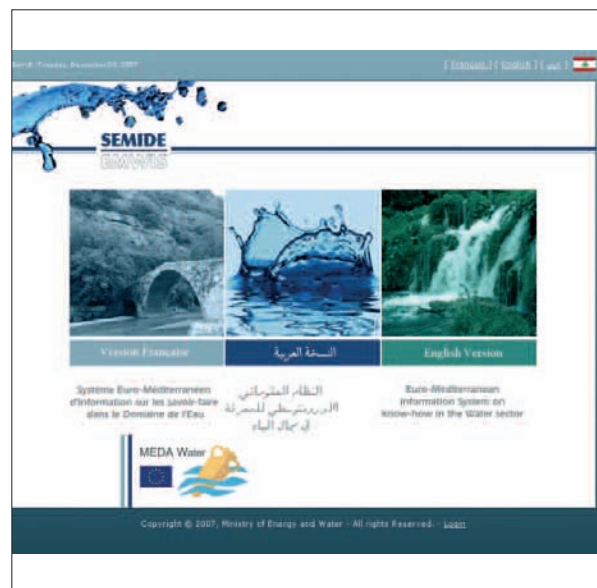
New design and more comprehensive Turkish web site  
[www.emwis-tr.org](http://www.emwis-tr.org)



Virtual library GEDEau of the Tunisian NFP  
[www.semide.tn](http://www.semide.tn)



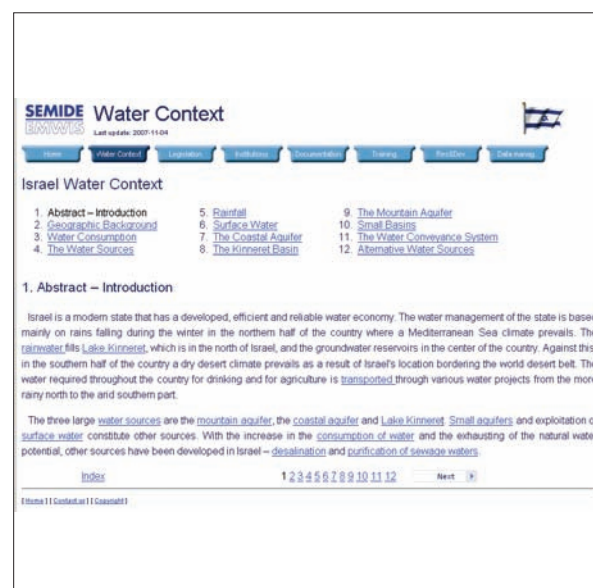
The unique Palestinian web site on water  
[www.emwis-ps.org](http://www.emwis-ps.org)



Site Libanais  
Redesign of the Lebanese web site, the unique national water portal  
[www.emwis-lb.org](http://www.emwis-lb.org)



New Jordanian web site, using the EMWIS toolkit  
[www.emwis-jo.org](http://www.emwis-jo.org)



Two new sections for the Israeli web site: the water context and the legislation, available in English and Hebrew  
[www.emwis-il.org](http://www.emwis-il.org)

November 2007

**Chief editor: Walter Mazzitti**

Content: EMWIS Technical Unit – [www.emwis.net](http://www.emwis.net)

Design & printing: Giservice srl - Teramo, Italy

Produced with the support of the European Commission



The contents of this document is the sole responsibility of EMWIS and can in no way be taken to reflect the views of the European Union

### EMWIS Steering Committee

President	Pascal <b>BERTEAUD</b> , Ministry of Ecology & Sustainable Planning	France
Secretary General	Walter <b>MAZZITTI</b>	Italy
Vice Presidents	Hassan <b>HACHEM</b> , Ministry of Energy & water	Lebanon
	Abdelaziz <b>ZEROUALI</b> , River Basin Agency Oum er Rbia	Morocco
Members:		
	Tahar <b>AICHAOUI</b> , Ministry of Water Resources	Algeria
	Christodoulos <b>ARTEMIS</b> , Water Development Department	Cyprus
	Mohamed <b>RAMI MAHMOUD</b> , Ministry of Water & Irrigation	Egypt
	Fadel <b>KAWASH</b> , Palestinian Water Authority	Palestine
	Teodoro <b>ESTRELA</b> , Ministry of Environment	Spain
	Khalid <b>KHASHMAN</b> , Ministry of Water & irrigation	Jordan
	Haydar <b>KOCAKER</b> , DSI	Turkey
	Uri <b>SHANI</b> , Ministry of National Infrastructures, Water Authority	Israel
	John <b>MANGION</b> , Malta Resources Authority	Malta

### Coordination Committee:

President	Tahar <b>AICHAOUI</b> , Algeria
Vice-President	Christodoulos <b>ARTEMIS</b> , Cyprus