under the Presidency of Mr. Laszlo Kothay
Hungarian State Secretary in charge of Water
Two and a half years have passed since the INBO family met in Debrecen on the occasion of the 7th General Assembly. We, Hungarians, were very proud that Debrecen became the water capital of the world for 3 days, from 6th to 9th of June 2007.

Time has been running very rapidly and we are already preparing the next 8th World General Assembly of INBO that will take place in Dakar, Senegal, on 21-23 January 2010.

What happened during this period? Could we achieve better results? I will try to give you a summary about this period with my Hungarian eyes.

In Debrecen, I took over the presidency from Mrs. Madeleine Jouye de Grandmaison, who brilliantly exposed her island's (Martinique) water management and even showed us her country’s culture with the help of the Martinique’s Regional Tourism Committee. Madeleine also created a new tradition and from now on during INBO General Assemblies, the former presidents are kindly asked to organize a national evening with cultural programs to present their countries to the participants.

Very soon after the Debrecen Assembly, we met in Rome at the 5th “EUROPE-INBO 2007” Conference. This was followed by two other EUROPE-INBO conferences in Sibiu (2008) and in Stockholm (2009). I am especially happy to refer to these conferences because it was a common French-Spanish-Hungarian initiative taken during Kyoto World Forum to strengthen cooperation among the European Basin Organizations for the implementation of the European Water Framework Directive (WFD). INBO is a participant in the EU-WFD Strategic Coordination Group, which provides possibility to get direct information from the Water Directors and to present the contributions of INBO.

The EUROPE-INBO Group also contributed in our global activities. We got step by step accustomed that not only European partners participated in these conferences but participants from other continents as well. This process testified that many water organizations outside Europe became interested in the EU-WFD implementation. The dialogue with non-European partners even stimulated the Europeans to improve their own river basin management.

Regional cooperation is an important field for action of the International Network of Basin Organizations. I am very glad that I could personally participate in the General Assembly of the Mediterranean Network of Basin Organizations (MENBO) which was held in Beirut, Lebanon, on 7-9 October 2009. Cooperation between European and Mediterranean Basin Organizations is successfully developing. Another good example of this cooperation is that a special session was organized during EXPO-AQUA in Saragossa on the 8th of July 2008 on "Basin Management and Transboundary Cooperation in Europe and in the Mediterranean Area".

During the 2007-2009 period, INBO Regional Networks got strengthened in Latin America and in the Caribbean, in Africa and Asia. Our Permanent Technical Secretary, Mr. Jean-Francois Donzier, participated in many important events of all regions. We could follow these developments through the INBO Network Newsletter and its website.

I would like to express my appreciation for the good development of INBO Action Plan and of the information and communication activities.

I would like to mention two examples of how INBO successfully entered into new regions:

- In Moscow on 5 June 2008, during the ECWATECH International Exhibition, an INBO session was held on the WFD implementation. This event helped to build up the Russian-speaking Network of Basin Organizations. I remember with good feelings the ECWATECH/INBO session that Professor Dukhovny and I jointly chaired.

- The second example of opening new areas for INBO is China. A strong Hungarian delegation participated in the 3rd and 4th International Yellow River Forums in Dongying and in Zhengzhou in 2007 and in 2009. On both occasions, INBO organized "special sessions" with cooperation from our Chinese partners. The most important step was the signing of a cooperation agreement between the Yellow River Water Conservancy Commission and INBO.

INBO again played an important role during the 5th World Water Forum in Istanbul, where it jointly organized with UNESCO the very successful topical sessions on “Basin Management and Transboundary Co-operation”. Those who participated may remember how full our room at the Kagithane Hall room was.

Participants were sitting on the stairs or standing beside the walls and at the entrance! The session dealt with such important topics as: hydro-solidarity, water users’ participation, institutional tools for transboundary cooperation. INBO also organized several side events in Istanbul with the Regional European Session, the common GWP-INBO presentation of the “Handbook for Integrated Basin Management” and the EU-China River Basin Management Program.

Another success for us was that, in May 2008, INBO participated in the UN Commission on Sustainable Development in New-York. On the occasion of a side event which associated several of our Members, our Permanent Technical Secretary made an introductory speech on the financing of IWRM in the world.

ICOLD and INBO also expressed their interest in technical cooperation during the 80-year jubilee meeting of ICOLD in Budapest.

During the 2007-2009 period, INBO was very active in many international projects: I would like to mention, in particular, the importance of the IWRM-NET project which coordinates the research activities of 20 institutes from 14 Member Countries of the European Union.

All these successes could not be achieved without the participation of managers and experts of our Member Organizations and of INBO Secretariat.

I would like to express my gratitude to all of you who strengthened cohesion inside the INBO Family, and wish good luck to the new African Presidency.
Debrecen - Hungary - 7-9 June 2007

**Declaration of Debrecen**

From 7 to 9 June 2007, 217 delegates coming from 46 Countries, representatives of governmental administrations in charge of water management, of Basin Organizations, already existing or being created, and from interested bi and multilateral cooperation agencies, met in Debrecen in Hungary, during the 7th General Assembly of the International Network of Basin Organizations (INBO) of which IOWater ensures the Permanent Technical Secretariat.

The delegates reaffirmed that freshwater resources are limited and threatened all over the world and that their better governance, respectful of the environment, is one of the main keys to sustainable development.

However, findings are alarming all over the world!

Climate change, pollution, wastage, destruction of ecosystems: the situation is serious in many countries and requires urgent implementation of ambitious reforms.

The Millennium Goals for drinking water supply and sanitation can only be achieved with significant and simultaneous progress made to introduce Integrated Water Resources Management (IWRM), organized on the relevant scale of basins of rivers, lakes and aquifers, either local, national or transboundary.

**Integrated Water Resources Management at the level of river basins is obviously essential worldwide!**

The basins of rivers, lakes and aquifers are the relevant natural geographical territories in which to organize water management.

Indeed, river basins are the natural territories in which water runs on the soil or in the sub soil, whatever are the national or administrative boundaries or limits crossed.

**Significant progress has already been made since the 1990s.**

River basin management experienced a quick development in many countries, which made it the basis of their national legislation on water or try it in national or transboundary pilot basins and the acquired experience allows today to say that Integrated Water Resources Management at the level of river basins is a real advantage for governance.

Water resources management should be organized in geographical areas where the problems occur, i.e.:

1. on the scale of local, national or transboundary basins of rivers, lakes and aquifers;
2. based on Integrated Information Systems, allowing knowledge on resources and their uses, polluting pressures, ecosystems and their functioning, the follow-up of their evolutions and risk assessment.

These information systems will have to be used as an objective basis for dialogue, negotiation, decision-making and evaluation of undertaken actions, as well as coordination of financing from the various donors;
3. based on Management Plans or master plans that define the medium and long-term objectives to be achieved;
4. through the development of Programs of Measures and successive multyear priority investments;
5. with the mobilization of specific financial resources, based on the "polluter-pays" principle and "user-pays" systems;
6. with the participation in decision-making of the concerned Governmental Administrations and local Authorities, the representatives of different categories of users and the associations for environmental protection or of public interest. Indeed, this concerted participation will ensure the social and economic acceptability of decisions. Decentralization is the basis for effectiveness in water policies.

**Legal and institutional frameworks should allow the application of these six principles.**

It is especially necessary to take into account the particular situation of the 263 rivers or lakes and hundreds of aquifers, the basins of which are shared by at least two riparian countries.

Cooperation agreements need to be initiated or signed between these riparian countries to achieve indispensable common cause at the basin level.

It seems necessary to support the creation of International Commissions or similar organizations and to strengthen those already existing.

Such international organizations allow better dialogue, the exchange of useful information, the solving of possible conflicts and the sharing of benefits from better joint management and the strengthening of transboundary cooperation.

Agreements for transboundary aquifer management should be developed in particular, taking their fragility into account.
Adaptation of water management to climate change.

Global warming cannot now be avoided and fresh water resources will be directly affected in the coming years, with announced consequences:

- increase of extreme hydrological phenomena, such as droughts and floods;
- melting of glaciers, reduction of salt water intrusion inland and in coastal aquifers;
- modification of the plant species and soil cover, which will result in increased erosion;
- rise of sea and ocean level, which is likely to drown coral islands, coastal lowlands, polders areas and river deltas and mouths, the flow of which will be changed;
- salt water intrusion inland and in coastal aquifers;
- significant move of populations.

It is thus essential to very quickly adapt water resources management policies, by taking into account the new elements of the climate change.

A priority: to make up for lost time as regards urban sanitation!

85% of the anthropogenic pollution is discharged into the natural environments, without any treatment. The effects on human health and hygiene, on economic development and the degradation of natural environments are very significant and will aggravate with the lack of sufficient measures.

The time lost with sanitation is extremely alarming and will require urgent reforms, several decades of constant effort and huge financial resources.

The renewal, maintenance, operation and management of installations are also a challenge to meet to ensure full effectiveness of the investments.

Vocational training of the employees of the sector will have to be organized on a large scale.

The reduction of non-point pollution is also a prerequisite to maintain or recover good water status.

INBO recommends that agricultural practices be adapted to limit pollution risks (use of fertilizers and pesticides).

Users’ participation should be organized in Basin Committees or Councils for a real mobilization of partners.

These bodies should be involved in decision-making, within procedures that clearly define their role which should be facilitated by the setting-up of integrated water information systems as objective basis for dialogue, negotiation and decision-making.

Significant means should be devoted to public awareness and participation, especially for women and young people.

Funding by the users is the logical consequence of their participation.

The investments necessary for the sustainable management, conservation and control of water resources and ecosystems and for the development, exploitation, maintenance and rehabilitation of public utilities require huge financial resources.

Therefore, it is necessary to set up everywhere complementary financing systems that are based on the users’ participation and common cause.

These arrangements should be an incentive to limiting wastage, to controlling pollution and to reducing discharges, by changing the users’ behavior.

INBO recommends the progressive and wide use of the cost recovery principle, through the establishment of basin water taxes, which have shown their efficiency everywhere they have been applied, while ensuring common cause between the categories of water users, between upstream and downstream, and between generations.

Improving knowledge of water resources, aquatic environments and of their uses is essential for good decision-making.

Systems for warning against floods, droughts and pollution should be developed and coordinated.

It is essential to specify the institutions responsible for the organization and the permanent operation of such systems and to guarantee sufficient means for investments and their continuous operation in the long term.

INBO recommends that the concerned multilateral institutions and National Authorities take into account the specificity of water and environmental management in insular environments.
"Debrecen was the water capital of the world for one week"

For a long time, Hungary had been interested in hosting the World Assembly of the International Network of Basin Organizations.

During the 6th General Assembly - which was held in the Martinique in 2004 - Hungary was unequivocally chosen for organizing the next Assembly in 2007.

It was a great privilege for the Hungarian Basin Organizations to receive their partners from all over the world.

The final site for the Assembly was chosen to be Debrecen, which is rapidly developing with a new conference center and with better price conditions for accommodation.

The Assembly took place on 6-9 June 2007.

From more than 400 applications, we could receive 250 guests (registered participants and accompanying persons) coming from more than 40 countries.

The opening plenary session was greeted by Mr. László Kóthay, Director of the Trans-Tisza Region’s Environmental and Water Directorate and Mr. Gyula Győri, Mayor of Debrecen City. Then, Dr. Miklós Varga, State Secretary for Water, opened the General Assembly on behalf of Dr. Gábor Fodor, Minister for the Environment and Water.

It is an INBO custom to introduce the water management and Water Organizations of the host country: Mr. Sándor Tóth, Chief Councilor, talked about the situation of flood protection in Hungary, Mr. László Kóthay gave a lecture about the challenges of water management in the 21st Century.

Mrs. Madeleine Jouye de Grandmaison officially gave INBO Presidency to Mr. László Kóthay. The new Hungarian President emphasized the importance of cooperation with the Liaison Bureau and INBO Regional Networks and recommended the enlargement of the Network.

The General Assembly was closed at the Aquaticum Hotel with a real tropical Martinique night offered by the Regional Tourist Committee of the Martinique, presided by our former INBO President, Mrs. Madeleine de Grandmaison.

On 9 June, there was a cultural visit of the Hortobágy National Reserve Park, classified UNESCO World Heritage.

Most of the guests visited the Hungarian Puszta for the first time, and it was a particular experience for them to see the fauna and flora of this region. After having lunch accompanied by gipsy music, the participants visited the flood protection dyke enhancement works in Tiszadob.

We were very glad of having the opportunity to show Debrecen and its countryside to our guests. We hope so that they will return to us again.

Organizing the General Assembly in our country in Debrecen raised the prestige of the Hungarian Water Organizations with the election among them of INBO President for the next three years.

The Hungarian Organizing Committee uses this opportunity to express gratitude to all of you who helped strengthen cooperation in the INBO family!

Kálmán Papp
OVF
papp.kalmann@vkk.hu

CEENBO

During its 3rd General Assembly, held in the Czech Republic, the Central and Eastern European Network of Basin Organizations (CEENBO) nominated Mr. Petr KUBALA, Director of the Povodi Vitavy Agency, as President for 2007-2008.

The Romanian APELE ROMANE Authority is in charge of the Network secretariat. Daniela RADULESCU facilitates the activities dealing with the exchange of experience for the Water Framework Directive implementation in the countries of the region, the support to the organization of twinning agreements within the Twinbasin project of the European Commission, the development of a website, the prospects for actions for the implementation of the Directive on floods, etc.

The work program was adopted during the Bureau meeting organized in Debrecen in June 2007; any information is available on the website:

www.ceenbo.org

www.inbo-news.org

All information is available on the Web

www.inbo-news.org
INBO Events

Management of the St. Lawrence and Great Lakes Basin

Organized by the Committee for dialogue and Valorization of the Basin of the Richelieu River (COVABAR), an important International Symposium on the Management of the St. Lawrence and Great Lakes Basin was held from 13 to 15 last September in Sorel-Tracy in Quebec.

It gathered about one hundred participants and elected officials who testified to the successful experiments of water management at the level of river basins in the United States, in Europe and Ontario, such as, in particular, Mr. Jean-François Donzier, Technical Secretary of the International Network of Basin Organizations (INBO), and, for France, Mr. Rémy Filali, Director-General, Interdepartmental Institution for the Development of the Charente River and Mr. Christian Bernad, President of the Association for the Development of the Lot Valley.

The participants thus underlined the importance of raising the awareness of the decision-makers of the St. Lawrence River Basin on the challenges, water stakes and changes in the way of thinking necessary to develop the territory water resources: integrated water management offers the only solution for sustainable development and it is urgent to support its implementation at the level of river basins.

The experiments in the basins of Ontario, the United States and France already have proven its effectiveness.

The creation of a Network gathering the North American River Basin Organizations (NANBO), within INBO, was also at the core of the discussions during the three days of this great meeting.

It was thus agreed to develop, as soon as possible, Water Management Master Plans for the river basins of the St. Lawrence/Great Lakes District on the Quebec territory, in adequacy with the development plans of the Municipalities.

The Minister for Sustainable Development, the Environment and Parks of Quebec, Ms. Line Beauchamp, invited the whole population to act and prioritize water protection.

COVABAR, presided by Mr. Hubert Chamberland, is an Organization representing all the citizens of the territory of the Richelieu River Basin, from Lake Champlain to Lake Saint-Pierre, up to its confluence with the St. Lawrence River.

Robert Chamberland
President of COVABAR
President-founder of the Grouping of Basin Organizations of Quebec (ROBVQ)
Fax: (450) 464 8854
hubert.chamberland@covabar.qc.ca

www.covabar.qc.ca

China

INBO Participation in the International Yellow River Forum

Dongying - 16 to 19 October 2007

The “Yellow River Conservancy Commission” invited INBO to organize a special session on water resources management in Europe and especially on the implementation of the Framework Directive, during the third “International Yellow River Forum”, which was held from 16 to 19 last October in Dongying (China).

This special “European” session was organized, of course, around broad current topics related to the Framework Directive implementation in the European River Basin Districts in 2007, and on the processes, tools and techniques for water resources management implemented in Europe.

More than 500 participants, coming from China and about fifty countries, attended this large International Forum.

Messrs. Laszlo Kothay, Hungarian State Secretary in charge of water and World President of INBO, Jacky Cottet and Jean-Marc Wauthier, former and current Presidents of ‘EUROPE-INBO’, Jean-François Donzier, INBO PTS, as well as about ten European experts participated in this workshop together with their Chinese colleagues.

Yellow River Conservancy Commission
lyrf@yellowriver.gov.cn

http://forum.yellowriver.cn

INBO workshop
The 5th Conference of the "EUROPE-INBO" Group took place from 8 to 10 November 2007 in Rome, at the invitation of the Italian Ministry of the Environment and the Italian Basin Authorities. It gathered 200 representatives coming from 33 countries.

The Conference was organized simultaneously with the General Assembly 2007 of the Mediterranean Network of Basin Organizations (MEMBO).

The "EUROPE-INBO 2007" Conference was opened by Mr. Alfonso PECORARO SCANIO, Italian Minister for the Environment, with many Italian personalities (City of Rome, Parliament and Regions), Mrs. Lubka KATCHAKOVA, Vice-Minister in Bulgaria, and Mr. Laszlo KOTHAY, State Secretary in Hungary and World President of INBO.

The Basin Organizations of the Member States of the European Union have made significant progress since 2000 in the implementation of the Water Framework Directive (WFD):
- Administrative adaptations, economic analyses, public information and involvement of water stakeholders, characterizations, development of monitoring networks, etc.
- The "EUROPE-INBO 2007" Conference allowed noting the increasing interest in the WFD of countries of the Mediterranean Region and Eastern Europe, of Caucasus and Central Asia.

The next step is to formulate Management Plans and Programs of Measures for 2009, with a preliminary public consultation in 2008.

The conference was thus organized around three topics:
- Preparation and cost of the Programs of Measures,
- Account taking of global warming,
- Public consultation.

As the meeting was taking place in Italy, special attention was paid to the Mediterranean aspects.

37 papers were presented and many recommendations were formulated, in particular:

**Preparation and Cost of Programs of Measures**

Involving the local stakeholders is essential especially the Local Authorities. Actions should also include the preparation of local management plans and Programs of Measures at sub-basin level.

Speeding up agricultural and sanitation measures is necessary, as these two sectors are, with the hydro-morphological changes in rivers, the main factors of the Risk of Not Achieving Good Status: integrating the "Urban Waste Water" and "Nitrates" Directives is a prerequisite.

Increasing the means devoted to the management of aquatic environments and wetlands and to hydro-morphology is essential.

It is unavoidable to significantly increase the financial resources, based on the "polluter-pays" and "user-pays" principles.

Economic studies are essential for WFD implementation to justify exemptions regarding deadlines and levels as compared to the Good Status objective, to assess the cost-benefit of the measures, to optimize the efficiency of the Program of Measures. It is necessary to develop an economic culture and train economists specialized in the water field.

The participants wished sharing experiences, harmonizing methods (environmental cost assessment, rate of cost recovery, cost-effectiveness models for measures, etc.) and developing socioeconomic indicators or reference values, in the International Districts as a priority (disproportionate cost concept, etc.).

Giving explanations to the consumers and decision-makers is necessary to make the stakes understandable and the (often unavoidable) water price increase acceptable.

In International Districts, coordination should be fostered (common catalogues of measures, coordinated objectives, common socioeconomic indicators, etc.) by strengthening the action of the International Commissions.

**Account Taking of Global Warming**

The WFD does not directly take climate change into account but provides tools that should be effectively used in the Programs of Measures (quantitative status, hydro-morphology, pricing and cost recovery, etc.).

A common approach seems essential at the European and Euro-Mediterranean levels: research programs, upstream-downstream common cause, data sharing and coordination of activities between basins, especially in International River Basin Districts...

.../...
It is necessary to evaluate the hydrological consequences of climate change in each basin according to various scenarios; to supplement the monitoring networks planned by the WFD; to set up National Water Information Systems; to develop and coordinate warning systems for floods and droughts; to pass from a policy of offer development to a policy of water demand reduction. Management Plans for drought should be developed with the stakeholders, not only in time of crisis but also planned in the long term.

Public Consultation

The Basin Organizations have organized the first two steps of public consultation planned by the WFD. They allowed better knowing the populations' expectations. The limiting factor is the lack of human and financial resources. Involving the stakeholders and the public from the first stages is a factor of success, and this information effort should go further than the official times for public consultation planned by the WFD.

It is necessary to coordinate the process and timetable at the national level and in the International Districts, while favoring the basin and sub-basin scale for the consultation.

Distinguishing information from consultation is needed because these are two different objectives. It is recommended to rely on Basin Councils or Committees when they do exist. It is important to mobilize local elected officials and NGOs, to raise the young's awareness in school, to explain the stakes using local problems, to combine various information tools, not limiting itself to questionnaires and websites but also organizing local public debates. It is important to communicate in a less administrative and more pedagogical way (joint work by water and communication specialists) and ensure transparency (communicating on uncertainties, explaining the decisions made and reporting on the obtained results).

The main meeting of 2008 should not be missed!

These consultations have a cost and it is necessary to plan specific budgets. Experience sharing is necessary to define the most suitable methods according to situation and cost-effectiveness of the various tools.

Situation in the Mediterranean Basin

The Mediterranean Basin is likely to be one of the areas most affected by climate change over the world. The problem of water sharing between irrigation, tourist areas and basic human needs (drinking water) is now arising in many places. The real problem is not so much to mobilize new resources but to better use water!

Among the mentioned proposals there are: a Mediterranean Information Mechanism for Water Resources; a policy for fighting against wastages; not supporting the development of irrigation in water deficient areas; defining maximum abstraction quantities, preparing “drought” action plans; a water pricing policy; the re-use of treated wastewater and the desalination of sea water; making up for lost time as regards sanitation, etc.

Modernizing the institutions and capacity building are also necessary: integrated water management at the level of river basins, creation and strengthening of Basin Organizations and International Commissions, the planning and programming of investments with financing based on the polluter-user-pays principles, water users’ participation, etc.

It is advisable to develop the management of community services of municipal and irrigation water and basic and continuing professional training.

Access to information should be facilitated especially by creating and networking the National Water Information Systems, that are developed within EMWIS, and by more widely disseminating research results, within the European IWRM-Net project for instance.

The participants wished to work on adapting the general principles of the Framework Directive to the Mediterranean Basin while emphasizing the importance of the Euro-Mediterranean common cause and of the next Ministerial Conference planned in the second semester of 2008. The participants underlined the interest of continuing the twinning agreements between basins initiated by the TWINBASIN project, especially for the Mediterranean Basin and the EECCA Region (Eastern Europe, Caucasus and Central Asia), of establishing common socioeconomic indicators and performance indicators allowing making the necessary comparisons between Basin Organizations and of creating a base of practical references on the methods used for public consultation.

Mr. Jacky COTTET, President of the French Rhône-Mediterranean and Corsica Water Agency, was congratulated for his Presidency in 2006-2007 and Mr. Roberto GRAPPELLI, Secretary General of the Tiber Basin Authority (Italy), will take the chair until the next “EUROPE-INBO” conference.

The final resolutions, papers and photographs are available on the website.

INBO Events

"EUROPE-INBO 2007" - Rome - 8 - 10 November 2007

The Closing Ceremony led by Ms. KATCHAKOVA and Messrs. KOTHAY, MAZZITTI, GRAPPELLI, COTTET, PINESCI and DONZIER

The European Basin Organizations are getting mobilized for the Framework Directive!
The MENBO General Assembly examined the Network advances and activities covered since the meeting of Marrakech in 2005. The structure and functioning of the Network were presented to the participants as well as the decisions of MENBO Bureaus and General Assemblies, the approval of candidates and new members, participation in international events, activities developed within projects on integrated water resources management, proposals for the development of future projects.

The General Assembly highlighted the strong and continuous implication of the Network in projects such as TWINBASIN™, MELIA or SPI-Water, in liaison with Organizations that share objectives and projects in the region, such as GWP-Med and EMWIS.

MENBO annual general accounts for 2005 and 2006 were approved and the provisional budget for 2007 was presented. The increase in annual budgets shows a greater support from the Spanish Government and collaborating organizations, and a greater participation in projects for exchanges of experiences between countries of the region.

The Assembly approved the proposal of two new Members: the General Directorate of State Hydraulic Works (DSI) of Turkey and the Water and Irrigation Ministry of Jordan.

It is necessary to underline the quick development of MENBO: the participants were invited to promote participation of their countries in the Network, reminding that the registration to MENBO is free as the primary objective is to obtain an active participation of all the Mediterranean Basin Organizations and Administrations in charge of water management with the joint objective of achieving mechanisms for integrated management at the level of River Basins.

In accordance with MENBO statutes, Mr. Walter MAZZITTI (Italy), President of the 'European Task Force on Water of the Middle East Peace Process' will take the Presidency of the Regional Network up to its next General Assembly in 2009.

It will be from now on Italy to head MENBO, taking over this responsibility from Morocco and previously Spain which allowed the initial and successful launching of the Network.

Mr. Alfonso Pecoraro SCANIO, Italian Minister for the Environment, announced his will to develop actions for collaboration and cooperation between the Mediterranean countries as a continuation of the Spanish and Moroccan Presidencies.

The Assembly especially thanked Mr. Mohamed ELYAZGHI, State Minister of Morocco, for the excellent Presidency he has carried out and the new Moroccan Minister for Energy, Water and the Environment and the State Secretary in charge of water for their reaffirmed support to MENBO and INBO.

Mrs. BENBIBA (Morocco) and MORGUES (Spain) were elected MENBO Vice-Presidents.

MENBO Permanent Technical Secretariat remains hosted by the Jucar River Basin Authority in Valencia, Spain, which was thanked for the efficiency of the work carried out.

Some proposals were given for the organization of the next General Assembly and Liaison Bureaus in 2008: the present countries were invited to participate in the International Saragossa Exhibition 2008.

The participants underlined the prime importance for the Mediterranean Region of the effect of climate change on water scarcity and drought: it was reminded that climate change will have significant effects on water availability and will aggravate extreme phenomena, affecting the Mediterranean areas that are already vulnerable and count on limited water resources. It is anticipated that these effects will have environmental and socioeconomic impacts that will have to be quickly dealt with strategic and preventive measures. In such a context, the compatibility of water uses with environmental protection will have to be taken care of.

Water scarcity and drought affect a great number of Mediterranean countries. MENBO participates in projects on the evaluation and application of joint solutions. MENBO was appointed as observer in the Strategic Coordination Group (SCG) of the Common Implantation Strategy (CIS) of the European Water Framework Directive and participates in the Euro-Mediterranean working group on water scarcity and drought.

The participants applauded the paper of the European Commission "Facing the challenge of water scarcity and drought in the European Union", published in July 2007, as well as the proposal to develop a community strategy that deals with this problem.

MENBO intends to play an important role in the exchange of experiences between the Members States of the European Union and Mediterranean countries facing the same problems.
INBO Events

Network of Asian River Basin Organizations - NARBO

3rd General Assembly - Solo-Surakarta (Indonesia)
20 - 22 February 2008

NARBO (Network of Asian River Basin Organizations) held its 3rd General Assembly from 20 to 22 last February in Solo-Surakarta (Indonesia).

About a hundred delegates participated in the debates, which focused on NARBO Action Plan for 2008-2009 and on the revision of its charter. Technical visits of hydraulic installations on the Bengawan Solo River, the longest river of Java Island, as well as meetings with water users and local decision-makers enabled the participants to perceive field realities.

**Action Plan for 2008-2009**

It was decided to continue the activities related to training on Integrated Water Resources Management (IWRM), preparation of topical workshops, benchmarking work and twinning programs, with the support of the Asian Development Bank and Japanese Cooperation in particular.

An effort for informing the Members about the Network activities should be made, via the website and the newsletter. Other activities could be initiated in the IWRM field, when the conclusions of the Asian-Pacific Water Summit, which was held in December 2007 in Japan, will be officially published.

**Revision of the Charter**

It was decided that the President would become Special Adviser at the completion of his mandate. The Special Adviser will be able to advise the new President and the Secretariat for promoting and strengthening NARBO activities.

The President will be able to recruit a “special officer” to represent and promote NARBO, its objectives and activities in the region and in the world, especially to decision-makers, administrations, the media and the general public.

NARBO gathers 65 Members: 22 Basin Organizations, 17 Representatives of the States, 25 Regional Partners and 1 Cooperation Agency for Development.

Mr. Jean-François Donzier, INBO Secretary, was invited to participate in this General Assembly, to which he made a speech on the progress made in Basin Management over the world and a proposal to strengthen the bonds and cooperation between the two Networks.

**NARBO**

Secretariat: Japan Water Agency (JWA)
Land Axix Tower - 11-2 Shintoshin, Chuo-ku Saitama City, 330-6008 (Japan)
Fax: +81-48-600-6509
narbo@water.jp

**www.narbo.jp**

---

**Water for a more prosperous Africa**


This first meeting gathered many water specialists coming from the entire African continent: technicians, politicians and scientists came to discuss essential problems related to water (control, supply, consumption, security, etc.), to lay the first stones of the building which will guarantee the long term socioeconomic development of Africa, so much hoped for.

Formulating strategies, policies and proposing practical actions for water resources development and supply in a context of climate change: this event also allowed outlining the main environmental and social challenges of the continent.

The discussions of this water week dealt with crucial issues, including:

- efforts necessary for improving expertise and information systems;
- social and environmental challenges related to the development of hydraulic infrastructures;
- roles of the involved parties and the development of partnerships.

Mr. Jean-François DONZIER, INBO Permanent Technical Secretary, was invited to co-chair the session on “institutional capacity building for water security in Africa” and presented an introductory report analyzing the situation of these issues on the African continent.

**www.afdb.org**
From 5 to 16 May 2008 in New York, the participants in the Commission on Sustainable Development of the United Nations drew up an evaluation of the “water and sanitation cycle” launched during CSD-13 in 2005.

The French Ministries for Foreign Affairs and Ecology had mandated the French Water Partnership (FWP) for organizing a side event, on May 12, on the topic of IWRM financing on a national and transboundary scale.

The FWP was created in 2007 after the 4th World Water Forum of Mexico City and gathers the public and private French water stakeholders intervening worldwide. It is a forum for exchanges on governance and management of water resources.

This side event was presented by Mr. Stefanini, the French Ambassador’s representative in charge of the Environment, and by the representative of the State Secretary in charge of the Environment of Slovenia, Mrs. Iskrenovic, on behalf of the EU Presidency.

Mr. Donzier, Permanent Secretary of the International Network of Basin Organizations, made an introductory speech on the financing of IWRM in the world.

The Chief of the Environment and International Relations Department of the Walloon Region of Belgium, Mr. Wau-thier, President of EUROPE-INBO Group 2005-2006, was the facilitator.

In his introductory speech, Mr. Donzier reminded that IWRM was certainly making progresses, but some countries are only at the beginning of its development and still have an approach primarily based on the building of traditional infrastructures and the sharing of available resources.

He underlined that, today, beyond access to the resources, “we must also develop integrated policies for sanitation, the reduction and treatment of polluting discharges, take into account the quality of the ecosystems, as being the true natural infrastructures essential to water cycle operation, and of course it is necessary to prevent the natural erosion, flood and drought hazards”.

Financing is a key element to make effective “everybody’s access to essential services and good resources management”: long-term financial resources should be mobilized and common cause systems set up, which are effective today through the application of the “users-polluters-pay” principles and mechanisms of common cause/equalization between the various categories of users.

This must make the payment of the quantities of safe water essential to their everyday life bearable to the most underprivileged populations. It is also necessary to emphasize the significance of agricultural irrigation in water management.

This meeting was a success.

It gathered 150 participants and a panel of top level decision makers, coming from several continents: the President of the African Ministers’ Council on Water (AMCOW), Mr. Itoua; the High Commissioner of the Organization for the Development of the Senegal River (OMVS), Mr. Ould Merzoug, also President of the Network of International Commissions and Transboundary Basin Organizations; the President of the Water Commission of the French Association of Mayors of Large Towns, Mr. Begorre; the Director of the Water Program of the International Union for Conservation of Nature (IUCN), Mr. Bengkamp; the Director of the National Water Agency of Brazil, Mr. de Cordeiro Netto, Secretary of the Latin American Network of Basin Organizations, and the President of the Mediterranean Water Partnership, Mr. Scoullos.

The conclusions of this side event, drawn by Mr. Donzier, were presented to the 5th World Water Forum of Istanbul, in March 2009.

INBO was designated, together with UNESCO, as coordinator of topic 3.1 of the Forum on “Basin Management and Transboundary Cooperation”, and was the spokesman of these exchanges.
The International Conference on "Water Resources Management under Extreme Conditions" took place in Moscow on 5 and 6 June 2008 within "ECWATECH 2008", the main Water Forum of the Eastern European countries.

This Conference was organized by the Russian Federal Water Resources Agency, the Dutch Water Partnership, the World Water Council, the International Water Resources Association, the World Meteorological Organization (WMO), the European Water Partnership (EWP) and the International Network of Basin Organizations (INBO).

The objective of the Conference was to allow a meeting between water management specialists coming from all over Europe, Caucasus and Central Asia.

During this Conference, the participants dealt with various topics, such as forecasting extreme phenomena; assessing flood and drought risks and associated resources management; monitoring; land use; technical status of infrastructures; lessons learned from management practices, causes and impact of extreme phenomena; social and economic factors in decision-making; damage prevention and limitation.

INBO facilitated a special session, on 5 June in the afternoon, on the new tools introduced by the European Water Framework Directive and its "daughter" Directives and announced the creation of a Regional Network of Basin Organizations from Eastern Europe, Caucasus and Central Asia (EECCA-NBO).

The presentations and discussions of the 300 participants, coming from 36 countries from all continents, demonstrated an increasing number of river restoration projects being implemented during the last 10-15 years. Among stakeholders, there is a growing awareness of the need to use new approaches and a better understanding of opportunities and benefits related with river restoration.

The embedding of river restoration into an appropriate policy is crucial. In the European Union, the Water Framework Directive is an effective driver although slow to produce its effects. In other regions (e.g. Eastern Europe, Latin America), legislations and policies exist, but the Governments do not seem to be enough motivated or interested to apply them; in such cases the academic institutions and civil society can act to support policy implementation. In most cases there is a gap between policy development and practice.

The ECRR delegates underlined that, on the one hand, river restoration practices are being supportive to the implementation of various EU Directives, while, on the other hand, the obligations under the EU Directives often are a driving force for the implementation of river restoration projects.

There is a common understanding that river restoration, based on an integrated ecosystem approach, is a good instrument to implement EU Directives (Natura 2000, Habitat, Bird, WFD and Flood Directives); it can foster a more sustainable relationship between man and nature by creating habitats, reducing flood risk and pollution.

The conference proceedings are downloadable from the ECRR website.

Mr. Laszlo Kothay, INBO World President with Mr. Victor Dukovny

Mr. Laszlo Kothay, INBO World President with Mr. Victor Dukovny
An International Exhibition on water and sustainable development, “Expo-Agua”, took place in Saragossa, Capital of Aragon, from June to September 2008. It combined exhibitions, artistic events, shows and conferences. The “Water Tribune”, a platform for discussions on the economic, social and environmental stakes of water in the world and coordinated by Mr. Eduardo Mestre, former INBO President, gathered some 2,000 international experts during 10 “Thematic Weeks”.

These meetings ended on 11 September with the organization of an International Symposium on Water and Sustainable Development and the signing of the “Saragossa Charter”.

INBO and MENBO got mobilized in “ExpoAgua”, especially on two strategic topics:

**Water, a unique resource**

Within Thematic Week 4 of the Water Tribune: “Water, a unique resource” and the issue of “Shared Water”, organized by Mr. Raimundo Garrido, former INBO President, Mr. Jean-François Donzier, INBO Secretary and General Manager of the International Office for Water, was invited to present on 9 July the Introductory Conference on the topic of “inter-basin twinning agreements, cooperation instruments”.

This introductory speech was followed by a special session in which the French Adour-Garonne Water Agency and Basin Committee and the Ebro River Basin Authority shared their experience.

The organizers of the “Water Tribune” had invited INBO to jointly hold a special session on 8 July on the topic of “Basin Management and Transboundary Cooperation in Europe and in the Mediterranean area” with the Mediterranean Network of Basin Organizations (MENBO) and the European Water Partnership (EWP).

The various round tables organized on this occasion concerned:

- Transboundary surface and ground water management in the international districts of the European Water Framework Directive;
- Participation of the populations and decision makers in water resources management;
- Operational tools for the management of river basins and aquifers;
- Integrated plans for the prevention of floods, droughts and extreme phenomena in the Mediterranean area;
- Management Plans and Programs of Measures for WFD implementation.

These contributions were in line with the preparation of the 5th World Water Forum in Istanbul in 2009, for which INBO and UNESCO were designated as coordinators of Topic 3.1: “Basin Management and Transboundary Cooperation”.

This Saragossa Session was a complete success, and mobilized a large number of participants, including Presidents of the Spanish River Basin Authorities, and representatives from Brazil, France, Hungary, Italy, Portugal, Spain and Turkey. Many projects and initiatives were presented.

**Climate Change and Extreme Events**

The Directorate General for Water of the Spanish Ministry of Environment, Rural and Marine Affairs organized on 24 July a technical day on Drought Planning and Management.

There were 120 participants, international and regional experts from different countries (France, Portugal, Italy, Greece, Germany, USA, Brazil…). The day conference had three technical sessions and a concluding round table dealing with:

1. Institutional aspects (European legislative framework, transboundary basins and social responsibility).
2. Drought characterization impacts and risks (mathematical prediction models, hydrological and drought indicator systems).
3. Drought planning and management in Spain (Special Drought Management Plans, public awareness campaigns).
4. Socioeconomic and environmental impacts of droughts.

The whole event pointed out the need of shifting from a risk/emergency to a planned drought management with agreed measures. The importance of public participation in the decision making process for adequate drought management was stressed, and drought management plans were identified as useful tools to achieve this objective.

Todoro Estrela/ Elisa Vargas
Directorate General for Water, MARM
buon-intengousa@marm.es
Maria Sernegueti Belza
MENBO Permanent Technical Secretariat
remoc1@remoc.org

www.marm.es
This year, the conference of the “EUROPE-INBO” group took place in Sibu, in Romania, from 1 to 3 October 2008, at the invitation of the Romanian Ministry of the Environment and Sustainable Development. It gathered 195 participants coming from 26 countries.

This conference was an important step before the World Water Forum of Istanbul in March 2009: draft “Basin” chapter for the European regional document, joint writing of a handbook with GWP on IWRM implementation in river basins, preparation of the sessions of topic 3.1. of the Forum on “River Basin Management and Transboundary Cooperation”.

A workshop on the IWRM-Net (European network of research programs on IWRM) project was organized as a side event in order to identify the needs for research related to the WFD and to prepare the second transnational research program.

The EU-non-member countries (the Mediterranean, Eastern Europe, the Caucasus, Central Asia) were very active in the discussions, due to their growing interest in the WFD principles.

The participants wished that the “EUROPE-INBO” Group had a more important place in the WFD Common Implementation Strategy (CIS), as a “spokesman of the Basin Organizations” towards the European Commission and Water Directors.

The conclusions of the Conference were reported to the Strategic Coordination Group on 6 November 2008 in Brussels and a note on the WFD implementation in transboundary river basins was presented to the European Water Directors on 25 November 2008 at their meeting in Paris.

The three workshops dedicated to the WFD presented many case studies and exchanges were particularly worthwhile.

**WORKSHOP 1: PREPARATION OF THE PROGRAMS OF MEASURES**

Much work has been done but significant challenges are still to be met.

- **Relevant scales and involvement of local stakeholders**

The Programs of Measures should be developed on relevant river basin scales, not only at the large river basin level, but also in a more detailed manner at sub-basin level.

In WFD field implementation, the local politico-administrative stakeholders (municipalities, provinces, counties, departments, regions), together with the local economic interested parties, will be front-liners, especially for the investments to be made.

However, the consultation process defined in the WFD is not sufficient in itself to mobilize these local stakeholders. The WFD approach should be better explained and its added value made known. The governmental authorities should mobilize themselves not only for enforcing regulations (basic measures) but also for supporting the local stakeholders in their projects.

- **Delays and uncertainties**

As the deadline of 2015 will come very quickly, it is necessary to launch now the measures for which there are no more debates, without waiting for their formal adoption at the end of 2009.

There are still many uncertainties about the real efficiency of certain measures, about the time necessary to carry out projects in the field and to obtain positive results on the quality of water and ecosystems. The time factor is indeed of prime importance and questions are raised about the timeframe of WFD implementation.

The implementation of pre-existing “nitrates” and “waste water” Directives should be at the core of the Programs of Measures. On the one hand, it is necessary to fill the gap in sanitation. On the other, as regards agriculture, INBO is concerned by the lack of ambition noted in the preparatory documents of the CAP Health Check. The Programs of Measures should include proactive measures from now on, otherwise it will be very difficult to obtain positive results in 2015 and even in 2021.

INBO thinks that without a true reform of the CAP, it will be almost impossible to change this situation.

INBO recommends increasing the means devoted to wetlands and hydro-morphology as the functional restoration of aquatic environments is of prime importance for achieving good ecological status.

It is also urgent to reinforce the protection measures for groundwater, to make for lost time.

- **Definition of realistic objectives**

The definition of objectives, exemptions and delays is still a major concern for Basin Organizations despite the work carried out within the CIS. Information has not always been fully disseminated to them and the position remains unclear. As regards the criteria of disproportionate cost, INBO proposes creating an inside working group to share information between Basin Organizations.

A survey, carried out during the workshop with the attending basin representatives, shows that the percentage of water bodies achieving good status in 2015 could vary a lot, between 25% and 75%. Exemptions will be necessary, not only because of technical aspects but also on account of financing capacities. The objectives can only be reached when the corresponding financial mobilization is possible.

However, additional financial efforts will be needed, maybe up to +30% in some districts, and this will probably imply an increase of the water price and raises the question of acceptability by users, especially in the current context of economic crisis!

The issue of overseas territories was underlined, and more widely in EU peripheral areas, especially the need to have specific references and to define a framework for regional cooperation with their non-European neighbors.

.../...
INBO Events

6th Conference of the "EUROPE-INBO 2008" Group
Sibiu - Roumanie - 1 - 3 octobre 2008

WORKSHOP 2: IMPLEMENTATION OF THE FLOOD DIRECTIVE

The Flood Directive provides an essential European framework. It gives a strong signal: it is no more only a question of building defense infrastructures, but of adopting an integrated prevention policy with real changes in policies, institutions, decision-making processes according to 4 pillars: forecasting flooding events, reducing vulnerability, protecting people and goods, alerting and educating populations.

The implementation of the Flood Directive and WFD should be coordinated. But difficulties are encountered in practice, because the administrations concerned are often distinct or act on different territories/scales.

INBO recommends integrating from now on the elements of the flood risk management plans into the 1st WFD River Basin Management Plans (2009-2015) and the totality in the 2nd management cycle (2015-2021). It would be useful to develop a guide of good practices to take into account the requirements of both directives.

The presentations showed the advantage of a proactive prevention policy. As a whole, the invested amounts are lower than the costs of avoided damages. But it will be difficult to invest as much as necessary for the prevention of exceptional floods, which will become more frequent with climate change.

The implementation of the Flood Directive requires increasing exchanges of good practices between countries, formulating national strategies and supporting Local Authorities.

WORKSHOP 3: TRANSBOUNDARY BASINS: PROGRESS REPORT

The WFD brings real added value in European Transboundary Basins, by providing a common reference framework (objectives, methods, deadlines, production of common planning documents). It increased coordination of actions between riparian States and the positive role of international commissions (when they do exist) was underlined.

But huge work is still needed.

Management Plans of International River Basin Districts still too often look like a patchwork of national elements, as each Member State remains responsible towards the Commission for the WFD implementation in what it is concerned.

Although WFD gives a common frame, the national legislations are remaining different in the same international district and the countries do not have the same priorities and deadlines, even for the same types of measures. This is particularly obvious when a river basin is shared with countries not members of the European Union in the Balkans and Eastern Europe.

The Basin Organizations concerned by this transboundary context highlighted specific needs: providing more human and financial resources to the "National" Basin Organizations concerned and to the International Commissions; improving the decision-making process in International Commissions; developing common systems for monitoring and data management; better coordinating the Programs of Measures and giving more ambition to the roof section of the management plan; developing a true public consultation on the international district scale; organizing joint management of transboundary aquifers; better coordinating the management of floods, droughts and climate change.

The work completed in the river basins shared by EU and non-EU member countries is encouraging but it will be necessary to increase the institutional and financial support to non-EU countries to achieve the WFD objectives in these basins.

At the end of the conference, Mr. Alfredo DI DOMENICANTONIO, Director of the Tiber Basin Authority was congratulated for the last year Italian Presidency of "EUROPE-INBO" Group.

He handed the Presidency to Mr. Marius POSTELNICESCU, Director General of the National Administration of Romanian Waters (Apele Romane).

The Romanian Authorities were thanked for the organization of this conference and their warm welcome.

The final resolutions, presentations and photographs are available on the website.

"For facilitating the implementation of the European Water Framework Directive"
INBO Events

Ukraine

"National Dialogue on Integrated Water Resources Management"

The 1st Meeting of the Management Committee of the “National Dialogue on Integrated Water Resources Management” took place last April in the National Academy of Sciences of Kiev, at the initiative of OSCE (Organization for Safety and Cooperation in Europe), EUWI (European Union Water Initiative) and UNEP. Representatives from the Ukrainian National Water Committee presented the situation of water resources in their country as well as drinking water supply and sanitation, and talked about the impact of climate change.

International experts, including Messrs. Jean-François Donzier, INBO Permanent Technical Secretary, Rainer Enderlein of UNECE and Jos G. Timmerman, of the “Center for Water Management” of the Netherlands, presented the new IWRM approaches, which could be adopted by the Ukrainian National Water Committee.

Mr. Viktor ANTONENKO
Director
Water Management Authority - Ukraine
severdonets@ukr.net

LANBO

General Assembly of the Latin-American and Brazilian Networks of Basin Organizations

Rio de Janeiro - Brazil – 10-14 November 2008

Rio de Janeiro hosted the National Forum of Brazilian Basin Committees from 10 to 14 November 2008. Every two years, this event gathers all the Members of the Basin Committees, created within the Law on Water Resources of 1997. To date, about 130 Basin Committees have been created in Brazil, either related to the federal rivers or to the rivers under the sole responsibility of the Federal States.

More than 2,000 representatives, coming from all the Brazilian regions, participated in this exceptional event.

The 3rd General Assembly of the Latin-American Network of Basin Organizations (LANBO) also took place on 11 and 12 November 2008, gathering the representatives of the main Basin Organizations of Central and South America, of the Governments developing basin policies and of the regional Organizations concerned.

A strong Spanish delegation, led by Mr. Teodoro Estrela, Deputy Director at the Water Ministry, also took part in the work.

Work was chaired by Mr. Oscar Cordeiro Netto, Director of the National Water Agency of Brazil (ANA) and by Mr. Jean-François Donzjier, Permanent Technical Secretary of the International Network of Basin Organizations (INBO).

The Assembly discussed ongoing experiments and developments of basin policies in the represented Countries. It approved a reform of LANBO Statutes and elected the new Executive Committee of the Network.

Mr. Edgar Bejarano-Méndez, Director General of the “Regional Autonomous Corporation of Cundinamarca” of Bogota in Colombia was elected LANBO President for the 2 coming years.

The Intermunicipal Consortium of the Piracicaba, Capivari and Jundiaí River Basins - São Paulo State - Brazil, will take care of LANBO Technical Secretariat, with the support of ANA.

The next General Assembly of the Network will take place in Colombia in 2010.

www.ana.gov.br/relob
During a workshop, held on 11-12 December 2008 in Moscow, Russia, the participants were familiarized with INBO activities, the experience of information system development in the water sector - in Central Asia (regional system), Russia, Ukraine, Belarus, Azerbaijan, Kazakhstan, and Armenia - as well as with the activities of water management organizations in these countries. Several communications were presented at the workshop.

Mr. N.I. Tupikin, Director of the Center of Scientific-and-Engineering Information of “Meliovodstroy” at the Ministry of Agriculture, Russian Federation, presented the results of the Congress of Russian hydrologists and irrigation engineers, as well as an interesting proposal on the organization of periodic irrigation, which combines and plans regular irrigation and rainfed farming, depending on precipitations in the steppe zone.

Mr. S.Ye. Bednaruk, Director of the Registry of Hydraulic Structures at the Russian Federal Water Agency, presented the systematic monitoring and forecasting of water availability in Russia. The Center’s website gives free access to information products, such as the Russian registry of hydraulic structures, the Information System on “Russia’s rivers”, the hydroeconomic zoning in the Russian Federation.

Mr. V.A. Ome’yanenko, Deputy Director of the Information Center “NIA Prirody”, which publishes the Nature and Resource Gazette, opened a discussion on the opportunity of creating a transboundary system between the Caspian Sea and the Black Sea, which was strongly supported by the President of Kazakhstan.

The initiative was proposed because of insufficient capacity of the Volga-Don canal.

A.P. Demin of the Water Institute summarized the report presented to the Academy of Sciences on water availability in agriculture in Russia. The water quantity used in agriculture decreased by half from 1980 to 2004. Production on irrigated land remains 3-5 times higher than in rainfed areas. Moreover, the reconstruction of irrigated lands concerned 110 thousand ha in 2002 - 2005, and 160 thousand ha are planned in 2006-2010.

Ukraine has kept specialized water management under the responsibility of the State Committee for Water Resources headed by V.A. Stashuk.

The Deputy Head of the Committee, Mr. O.Lisyuk, presented the “Basin geo-information system for water management and monitoring along large rivers in the Ukraine” as well as the activity of the Seversko-Donetsk Basin Water Management Authority.

The development of an information system in the Ukraine, as well as in Belarus, runs according to the provisions of the European Water Framework Directive.

The main result of the workshop was the agreement of all concerned parties on the establishment of a Network of Russian-speaking Basin Organizations under the umbrella of INBO. Membership in this network is voluntary. It is based on professional community and mutual understanding and aims at organizing exchanges of opinions, experience, and information on various aspects of water management, without requesting any financial contribution.

During the workshop, the Deputy Head of the Committee, Mr. O.Lisyuk, presented the “Basin geo-information system for water management and monitoring along large rivers in the Ukraine” as well as the activity of the Seversko-Donetsk Basin Water Management Authority.

The development of an information system in the Ukraine, as well as in Belarus, runs according to the provisions of the European Water Framework Directive.

The main result of the workshop was the agreement of all concerned parties on the establishment of a Network of Russian-speaking Basin Organizations under the umbrella of INBO. Membership in this network is voluntary. It is based on professional community and mutual understanding and aims at organizing exchanges of opinions, experience, and information on various aspects of water management, without requesting any financial contribution.

INBO has obtained special consultative status

INBO was granted special consultative status by the United Nations Economic and Social Council (ECOSOC).

The non-profit making and voluntary Non-Governmental Organizations can thus develop a mutually advantageous collaboration with the United Nations.

The rights and privileges, detailed in ECOSOC resolution 1996/33, allow the qualified organizations to contribute to the objectives and work programs of the United Nations, as technical experts, advisers and consultants to the Governments and UNO.

In practical terms, this implies INBO participation to the ECOSOC and its various related organizations by attending meetings, by addresses and written reports on issues on the agenda.

The organizations to which the status was granted are also invited to attend the international conferences organized by the United Nations, the special sessions of the General Assemblies of the United Nations and other intergovernmental organizations.

Currently, only 2,719 NGOs have this status over the world.

ONU - ECOSOC

INBO has obtained special consultative status

INBO was granted special consultative status by the United Nations Economic and Social Council (ECOSOC).

The non-profit making and voluntary Non-Governmental Organizations can thus develop a mutually advantageous collaboration with the United Nations.

The rights and privileges, detailed in ECOSOC resolution 1996/33, allow the qualified organizations to contribute to the objectives and work programs of the United Nations, as technical experts, advisers and consultants to the Governments and UNO.

In practical terms, this implies INBO participation to the ECOSOC and its various related organizations by attending meetings, by addresses and written reports on issues on the agenda.

The organizations to which the status was granted are also invited to attend the international conferences organized by the United Nations, the special sessions of the General Assemblies of the United Nations and other intergovernmental organizations.

Currently, only 2,719 NGOs have this status over the world.
INBO Events

The Mediterranean

Ministerial Conference on Water - 22 December 2008 - Jordan

A timetable and field projects in 2009

The Ministerial Conference on Water, held on 22 December 2008 on the shore of the Dead Sea in Jordan, was a first concrete stage for the implementation, in the water sector, of the decisions made by the Heads of State and Government on 13 July 2008 in Paris within the new Union for the Mediterranean area.

A significant contribution of the stakeholders of the civil society was made at a meeting of the main regional NGOs concerned on 21 December, in which INBO and MENBO were represented.

First of all, the ministers adopted orientations for the development of a Water Strategy in the Mediterranean area for meeting the challenges of the climate change.

This Strategy, which will be submitted to the Ministers then to the Heads of State and Government for approval at the end of 2010, will allow tackling with problems exceeding the means for action of a country alone or one organization.

It will include two quantified objectives concerning, on the one hand, the conservation of water quality and, on the other, the reduction of the pressures on water resources with less water consumptive uses.

The Ministers wished the development, as soon as possible, of new infrastructure projects in the field of water.

www.medaquaministerial2008.net

Historical reminder

Fresh water is a priority issue for all the Mediterranean partners and its importance will do nothing but grow as water resources are becoming rarer.


The Euro-Mediterranean Partnership, launched by the Declaration of Barcelona in November 1995, embraces a vast program of collaboration. A specific chapter is devoted to water.

Two Euro-Mediterranean ministerial conferences on water management in the region have taken place since, in Marseilles in 1996 and Turin in 1999.

African Network of Basin Organizations (ANBO)

Mr. Oumar Ould Aly

A Malian citizen, recruited as expert hydrologist by the former Niger River Commission (NRC) for the HYDRONIGER project, Mr. Ould Aly took his duty on 8 October 1980.

The Niger Basin Authority (NBA) was created at the end of 1980 to replace the Niger River Commission.

The HYDRONIGER project, or Hydrological Forecasting System for the Niger River Basin, allowed the setting up of a system for collecting hydrometeorological data in real time, a regional Center, national centers and a telecommunication system. WMO was the executive agency of the project.

The Niger-HYCOS project

Afterwards, Mr. Ould Aly coordinated the Niger-HYCOS project for the Niger River Basin, launched in 2005 by WMO and the NBA / AGRHYMET consortium.

Mr. Ould Aly had also been entrusted with the chair of the Committee for preparing the Conference of the NBA Heads of State and partners in Paris in April 2004.

He carried out with competence and devotion the presidency of the African Network of Basin Organizations (ANBO) from 2002 to 2006, of which he was one of the Founder Fathers.

At the beginning of 2007, Mr. Ould Aly wrote:

"the basin’s populations are getting impatient, they observe and wait with the hope that, one day, they can finally truly enjoy the huge resources of this Basin".

All his life, our friend Ould Aly worked for this hope to come true!

Our friend Ould Aly, first ANBO President, left us suddenly on 5 August 2007. Since October 1980, he has spent twenty seven years at the service of the Niger Basin Authority (NBA)
The topic of basin management and transboundary cooperation was widely discussed during the recent World Water Forum of Istanbul.

The International Network of Basin Organizations (INBO) and UNESCO were entrusted with the task of coordinating the five official sessions of Topic 3.1 entirely devoted to this issue and which has been the subject of a broad preparatory mobilization for more than one year:

- Several regional meetings were organized in 2008 with our partners, in Solo-Surakarta (Indonesia), Venice (Italy), Moscow (Russia), Saragossa (Spain), Sibiu (Romania), Rio (Brazil), etc., as well as a side event during CSD 16 in New York.
- More than 200 papers were received on the Forum website or directly by the coordinators.

These five sessions, which took place on 20 and 21 March 2009, allowed hearing 63 speeches of very diverse organizations, representing the main streams of opinion and the various parts of the World, including a high proportion of basin organizations presenting their field experience.

The sessions, which were held in a packed room where more than 450 participants stayed during almost the 12 hours planned in the official program of the Forum, left a broad place to debate and rich and lively discussions, sometimes heated, impassioned even!

Such questions as the "international" statute or not of transboundary waters, the methods for financing and implementing common infrastructures, the ratification of the United Nations Convention of 1997 or the management of transboundary aquifers saw divergent positions clashing, sometimes vehemently expressed, especially from our numerous Turkish colleagues, showing that it is still difficult to achieve real consensus.

But a vast majority of the participants converged on the advantage of national and transboundary basin approaches to face the great global challenges of water resources management.

Taking account of these many contributions and apart from the most radical positions, the findings and recommendations can be summarized as follows:

- Strong political will and long-term commitment are prerequisites for basin management and transboundary cooperation in the face of future changes.
- Significant progress has already been made since the 1990s with reforms undertaken in many regions and countries around the world. The gained experience allows now saying that integrated water resources management at the level of river and aquifer basins is a real advantage. These experiences allow proposing guidance to countries which want to implement efficient basin management and reinforce their transboundary cooperation.

The progress made so far is however insufficient to meet the requirements of a globally changing world.

Adaptive strategies, focused on maintaining the integrity of river basins and aquifer systems, should become the norm in national and international policy.

This will require:

1. Surface water to be managed in river and lake basin units and groundwater to be managed in aquifers systems units - where the two resources are used together, they should be jointly managed conjunctively.
2. Essential quantitative and qualitative information on resources, their uses, polluting pressures, ecosystems and their functions, the follow-up of their evolution, risk assessment and financial challenges of the sector should be obtained and made accessible. This information should be used as the objective basis for dialogue, negotiation, decision-making and evaluation of undertaken actions, as well as coordination of financing from the various donors;
3. The participation in decision-making of the concerned Governmental Administrations and local Authorities, the representatives of different categories of users and associations for environmental protection or of public interest. This participation would be better organized in Basin Committees or Councils;
4. Basin management plans or master plans clearly stating the long-term objectives to be achieved to guarantee water resource integrity;
Significant increase in training and educational programs for responding to the adaptation needs in cooperation building and basin management;

Mobilization of financial resources to meet the needs of countries in this field, taking account of their socioeconomic, cultural, and geopolitical specificity. It is necessary to set up everywhere complementary funding systems that are based on the participation and common cause of the users. Water charges mechanisms established for basin management can enable the use of the polluter-pays and user-pays principles and may have an interactive effect on consumption reduction and pollution control.

As global inventories of transboundary basins and aquifer systems and their technical and socioeconomic peculiarities are now completed, through the global programs supported by PCCP, World Water Assessment Program, ISARM, EU-WFD, EUWI, INBO-AP, the GEF and others, available conventions and agreements should be ratified by the riparian States concerned.

Furthermore cooperation agreements need to be drafted at global, basin and aquifer levels to achieve necessary and sound cooperation.

In the same manner, institutions such as basin organizations should be created to nurture transboundary cooperation and strengthen communication and dialogue among partners.

Existing or developing legal instruments as well as adapted technical tools and gained experiences should be further disseminated through efforts of agencies and networks of basin organizations to promote transboundary water resources management.

In parallel to the official sessions of the Forum, several side events allowed presenting a broad range of field experiments and direct exchanges between managers of basin organizations: the meeting organized between Chinese and European managers and experts within the "China - European Union Program for basin management" and the meeting between the people in charge of the Po Basin Authority in Italy and their counterparts of several large rivers in other continents, in particular.

The regional “Europe” session allowed presenting the implementation of the European Water Framework Directive and the UNECE Convention of 1992, called Helsinki Convention.

The ministerial declaration of the Forum supports “the implementation of Integrated Water Resources Management (IWRM) at the level of river basins and groundwater systems, within each country, and, where appropriate, through international cooperation, to equitably meet economic, social and environmental demands and, inter alia, to address the impact of global change, taking into account the interests of all the partners, using participatory process in decision-making and planning, while creating links between relevant sectors to achieve solutions that benefit all parties”.

The ministers also declared that they will “strengthen the prevention of pollution from all sectors in surface and ground water, appropriately applying the “polluter-pays principle”… that they resolve to develop, implement and further strengthen transnational, national or/and local plans and programs to anticipate and address the possible impacts of global changes,… that they will strive to improve water related monitoring systems and ensure that useful information is made freely available to all concerned populations, including neighboring countries”.

Finally, they also declared “that they will take, as appropriate, tangible and concrete steps to improve and promote cooperation on sustainable use and protection of transboundary water resources through coordinated actions of riparian States, in conformity with existing agreements and/or other relevant arrangements, taking into account the interests of all riparian countries concerned.

They will work to strengthen existing institutions and develop new ones, as appropriate and if needed, and implement instruments for improved management of transboundary waters”.

Of course, some people will point out that these formulations can be subject to interpretation and obviously all the problems will not be miraculously solved, as some positions still remain too different, but unmistakably basin management and transboundary cooperation have scored during the World Water Forum of Istanbul!

All the papers and photographs of these events, organized during the last World Water Forum held in Istanbul from 15 to 22 March 2009, may be consulted and downloaded on INBO website.

www.worldwaterforum5.org

www.inbo-news.org
The significance of developing experience sharing between Europe and other areas in the world was particularly highlighted, especially with the examples of projects developed in China and Africa. Finally, this round table led to the following conclusions:

- the river basin is the relevant scale for water resources management;
- the WFD is a significant progress;
- the great principles of the WFD and Helsinki Convention are transferable in other areas over the world;
- it is necessary to strengthen cooperation between Europe and other regions.

"EU-China Cooperation on Basin Management"


The session dedicated to China was jointly chaired by Messrs. Friedrich Barth, Vice-president of EWP and Shang Hongqi, Director of International Cooperation at the Yellow River Commission. The European session was jointly chaired by Jean-François Donzier and Yang Xiaoliu, Professor at the University of Beijing. 10 case studies were presented around two topics: climate change and benchmarking of integrated management policies in river basins.

The project led by INBO and the African Network of Basin Organizations on the application of performance indicators to the African Transboundary Basin Organizations, presented by Messrs. Alain Bernard (IOWater) and Tamsir Ndiaye (OMVS) showed that transferring the European "acquis" to very different contexts is possible.

A round table then gathered 10 great witnesses representing: the UE-Turkey twinning, the International Commission of the Rhine, the National Institute of Hydrology of Romania, the Emilia-Romagna Region in Italy, the Ministries of Water of Hungary and Spain, the Yellow River Commission, the EU - China Cooperation Program, the Asian Development Bank.

"The Po River Basin and other large basins in the World"

The objective of this session organized with the regional Authorities of the Po Valley, was to share experience between several large basins of the world.

This side event allowed comparing the practices used in very different contexts: the St. Lawrence Basin, the Congo-Ubangui-Sangha Basin, the Scheldt Basin, the Rhone-Mediterranean Basin and the Po Basin.

As a conclusion, Giuseppe Bortone, Director General for the Environment of the Emilia-Romagna Region, underlined the role of local institutions in water policies.
INBO Events

Canada

International Meeting on Integrated Water Management
Sherbrooke, Canada - 1 - 3 June 2009

550 participants attended the “International Meeting on Integrated Water Management” which took place from 1 to 3 June 2009. The event was jointly organized by the Council of Water Governance of the St-François River Basins (COGESAF) and the Environmental Training Center of the University of Sherbrooke (CUFE). 30 workshops gathered 95 lecturers on topics related to planning and governance tools, the great stakes of water management, action in agriculture, tools for characterization and diagnosis and information and dialogue.

18 voluntary facilitators took care of the good organization of the workshops.

Mr. Riccardo Petrella presented a conference on the importance of access to water everywhere on the Earth.

Mr. Jean-François Donzier, Permanent Secretary of the International Network of Basin Organizations, presented at a plenary session an introduction to Integrated Basin Management over the world and participated in a round table on the management of the world transboundary rivers in the closing session, with Mr. Oscar Cordeiro, Secretary of the Latin-American Network of Basin Organizations and Director of the National Water Agency (ANA) of Brazil and Mr. Normand Cazelais, prefigurator of the North-American Network of Basin Organizations (NANBO).

Jean-François Donzier, INBO Secretary, who presented a progress report on transboundary river and aquifer management over the world.

Dr. Fadi Comair
General Director of Hydraulic and Electric Resources
Ministry of Energy and Water
gdher@terra.net.lb

Audience of the President of the Lebanese Republic to the participants of the 2nd Beirut Water Week

Lebanon

2nd Beirut Water Week - 4-7 February 2009

The 2nd Beirut Water Week was organized by the Directorate General of Hydraulic and Electric Resources in cooperation with the Global Water Partnership-Mediterranean (GWP-Med).

This 2nd Beirut Water Week focused on:
- discussions on priority themes of the Mediterranean water agenda, including water governance, climate change adaptation, water demand management, water financing, education and transboundary water resources management;
- elaboration of the “Mediterranean Message to the 5th World Water Forum”, which was presented in Istanbul, on 19 March 2009;
- presentation of the outcomes of the on-going MED EUWI activities in Lebanon (Phase I).

The Water Week 2009 gathered 200 participants, including Mr. Walter Mazzitti, MENBO President, who chaired a round table on the financing of water management in the Mediterranean area, and Mr. Jean-François Donzier, INBO Secretary, who presented a progress report on transboundary river and aquifer management over the world.

Dr. Fadi Comair
General Director of Hydraulic and Electric Resources
Ministry of Energy and Water
gdher@terra.net.lb

Plenary session about Integrated Basin Management over the world
INBO Events

NANBO
Birth of the North-American Network of Basin Organizations

Within the “International Conference on Water Governance in the Americas” in Quebec (Canada), the Constitutive Assembly of the North-American Network of Basin Organizations (NANBO) was held on 15 October 2009.
Affiliated to INBO, NANBO intends to promote basin management by gathering the greatest possible number of organizations which work in this part of the world, from Panama to Alaska and Greenland, including the Antilles.
In Debrecen (Hungary), during the last General Assembly of INBO in June 2007, representatives of the Committee for Dialogue and Development of the Richelieu River Basin (COVABAR), Messrs. Normand Cazelais and Hubert Chamberland, received the mandate to carry out this extremely important operation in the life of INBO, since, hitherto, North America had no regional network.
On 15 October, Mr. Normand Cazelais, coordinator of the provisional committee set up with representatives of Canada, France (St. Pierre and Miquelon), the United States, Mexico and Quebec to ensure the creation of NANBO, declared that this Constitutive Assembly was a “historical event”.
On this occasion, NANBO officially adopted its statutes and elected its administrators.
Mr. Hubert Chamberland became the first President of NANBO.

Training

Seminar of the African Water Facility

Transboundary Water Management - Tunis - 26 - 30 October 2009

From 26 to 30 October 2009, the International Network of Basin Organizations (INBO) facilitated, through Mr. Daniel Valensuela, a seminar in Tunis addressed to African and Mediterranean executives of Basin Organizations and Ministries for Water and organized by the Multilateral Institute of Africa, the African Water Facility and the African Development Bank (AfDB).
It aimed to build the capacities of the executives of the national and regional Administrations and Basin Organizations as regards Transboundary Water Resources Management (TWRM).
Africa, from the Mediterranean to the Cape of Good Hope, is indeed characterized by a great number of transboundary basins of aquifers and surface water; almost all the countries are sharing part of their water resources with at least a nearby country. Most countries share transboundary river basins or aquifers: the aquifers of the Sahara and Nubia involve all the North African Countries, the Nile or Congo River Basin, for example, involves ten countries, while Guinea shares twelve rivers basins with its neighbors.
Transboundary Water Resources Management seems one of the keys to improve governance of water resources on the continent and the condition for the population to have access to water for meeting both human needs and sustainable economic development.
Gathering about twenty countries and regional organizations such as the Economic Commission for Central African States or the Sahara and Sahel Observatory, and several representatives of Basin Organizations (OMVS, OMVG, NBA, VBA, CICOS, LCBC, NBI), the seminar allowed broad experience sharing on topics such as: harmonization and coordination of national, regional and basin policies; sharing of information on a transboundary scale; role of the civil society and water stakeholders in TWRM; joint management of surface and ground water; impact of climate change on water resources and adaptations to be considered.
Many speeches led to discussions and group work during the five days of the seminar, which was closed by the speeches of Jean-François Donzier, INBO Secretary, on the management of transboundary water throughout the world, and of Jean-Michel Ossete of the African Water Facility on the opportunities for financing TWRM.

This year, the yearly EUROPE-INBO Group conference took place within the World Water Week of Stockholm and was part of the official events of the Swedish Presidency of the European Union.

Jointly organized by INBO and the Swedish District Authorities, it gathered 131 participants from 24 countries during 3 days, with the presence of the European Commission. The conference was opened by Mr. Björn Sjöberg (Sweden), Director of the “Skagerrak and Kattegat” District Authority, and by Mr. Ovidiu Gabor (Romania), President of EUROPE-INBO 2008.

The conference dealt with three topics: Management Plans, Climate Change and Programs of Measures.

The District Authorities are indeed currently facing the same stakes in all the European countries: implementing the very first cycle of the Management Plans and Programs of Measures which must be adopted before the end of the year and integrating climate change into water resources management.

In addition to the introductory speeches, a significant part of the program was dedicated to exchanges in round tables.

**Management Plans and Public Consultation**

Mr. Patrick Weingartner (Rhine-Meuse Water Agency, France) introduced the topic and presented the French participative approach and more particularly that used in his Basin, with the sending of one questionnaire to all the French families, accompanied by a communication campaign (local TV, radio, newspapers), local information meetings and a Website dedicated to the consultation.

The rate of reply however remains relatively low and it is thus still necessary to increase awareness. The public consultation led however to modify the draft Management Plans and the results were communicated to the public.

**Climate Change: Challenges for Water Management**

After a scientific introduction by Professor Sten Bergström (Swedish Meteorological and Hydrological Institute), three basin experiments were presented: Mrs. Wanda Zevenboom (Netherlands), Mr. Juan Jose Moragues (Spain) and Mr. Jean-Marie Wauthier (Wallonia, Belgium).

The round tables led to the following conclusions, reported by Mrs. Daniele Radulescu, Romania: the costs of the adaptation to climate change will be lower than those of non-adaptation and it is important to act as soon as the Program of Measures 2009-2015, the Marine Strategy, the Floods Directive and the Framework Directive would gain from better coordination especially between the responsible administrations and at the European level (CIS); expertise is lacking for taking into account climate change in planning; it is necessary to develop meteorological modelling, specify orientations and carry out case studies. Europe should be a leader in this approach.

**Economic Aspects of the Programs of Measures**

Mrs. María Brattemark of the European Commission estimated that the economic analyses presented by the Member States remain rather disappointing: many draft Management Plans do not refer to the cost-effectiveness analysis and only 60% of them tackle the subject of pricing.

Three district experiments were presented by Mr. Peter Pollard (Scotland), Mr. Hans Christian Karsten (Denmark) and Mrs. Geraldine Aubert (France).

The discussions, reported by Mr. Mario Cerutti (Maas International Commission) underlined the difficulty in finding the best combination of measures, for non-point pollution in particular. Exemptions are often needed and not only when there is disproportionate cost. The polluter-pays principle should be better applied in agriculture and hydropower. Measures should be initiated at governmental level.

Many Basin Organizations estimate that their financing instruments are not suitable and that it would be necessary to develop case studies on this matter on the European scale.
They fear that there is not sufficient stakeholders’ appropriation at local level, that the effects of the measures are insufficient, that there are interferences with other European programs (renewable energies, ...): it is necessary to find a good balance with the other environmental objectives and to put the Programs of Measures on the political agenda in order to solve controversies.

On the whole, 17 papers were presented.

The exchanges continued in a more informal way during a dinner-cruise in Stockholm archipelago, offered by the Swedish District Authorities.

During the closing ceremony, Romania transmitted the Presidency of EUROPE-INBO Group to Sweden for the year to come.

Mrs. Ann-Louise Månsson, Water Director of the Swedish Ministry of the Environment was handed the EUROPE-INBO symbol by Mr. Vasile Pintilie and Mr. Ovidiu Gabor, respectively Director General and Deputy Director General of Apele Romane (National Water Administration of Romania).

During the official conclusion of work, Mr. Jean-François Donzier, INBO Permanent Technical Secretary, underlined the stakes for the European Basin Organizations.

Mr. Jean-François Donzier, INBO Permanent Technical Secretary, underlined the stakes for the European Basin Organizations.

He reminded that huge work has been done since 2000, but important challenges are remaining to achieve the objectives of the Framework Directive.

110 River Basin Districts have been established across the European Union, Switzerland and Norway.

40 are Transboundary River Basin Districts which cover more than 60% of the territory of the EU, making international coordination one of the most significant issue and challenge for the WFD implementation.

To conclude his speech, he declared: “The gained experience shows that this new basin approach has real advantages! From now on, it is possible to progress towards better basin management in the European Union: we will to do it”

Mrs. Maria Brättemark reminded the expectations of the European Commission and Mrs. Ann-Louise Månsson, Swedish Water Director, presented the priorities of the Swedish Presidency of the European Union (climate, marine environment, biodiversity, eco-efficient economy, Strategy for the Baltic Sea).

The conclusions of the conference will be reported to the Strategic Coordination Group and to the European Water Directors.

The participants thanked our Swedish partners for their very good organization and their warm welcome.

This conference took place at a key moment of the development of Management Plans by the European Basin Organizations.

You can find all the documents on INBO website.
110 delegates coming from 26 countries met in Beirut (Lebanon), on the occasion of the International Seminar on River Basin Management and Cooperation in the Euro-Mediterranean Region and the 7th General Assembly of the Mediterranean Network of Basin Organizations (MENBO), to define the most suitable actions needed for achieving the objectives of integrated and participatory management of inland surface and ground water resources and of related coastal zones in the Mediterranean area.

This event took place at the invitation of the Lebanese Ministry of Energy and Water (Directorate General for Hydraulic and Electric Resources) and of the Litani River Authority (LRA).

Mr. Fadi Comair, General Director for Water, Energy and Electric Resources (Lebanon), was elected new President of MENBO. The General Assembly expressed its high gratitude to Mr. Walter Mazzitti (Italy), MENBO President 2007-2009, for his very successful Presidency of the network.

Mr. Laszlo Kothay, INBO World President, concluded the work with Mr. Selim Catafago, LAR President.

MENBO has now 34 members from 17 different Mediterranean countries.

The Seminar was structured around three main thematic round tables: Water and Agriculture in the Management Plans of the Mediterranean Basin, Adaptation to Climate Change and Water Saving and Usefulness of the Tools of the WFD in Mediterranean non-EU Countries.

During this Seminar, the conclusions of the Euro-Mediterranean Ministerial Conference on Water (December 2008, Dead Sea, Jordan) were recalled as well as the ongoing process of preparation of a Long Term Strategy for Water in the Mediterranean, that should be approved on the occasion of the next Euro-Mediterranean Ministerial Conference on Water (April 2010 in Barcelona, Spain).

The delegates of the General Assembly requested the former Italian President of MENBO, with the support of the Spanish Permanent Technical Secretariat, to report the “Declaration of Beirut” to the Water Experts Group of the Union for the Mediterranean, in charge of elaborating the Strategy for Water in the Mediterranean.

**DECLARATION OF BEIRUT**

The delegates reaffirmed that freshwater resources are limited and threatened all over the Mediterranean and that their better governance is one of the main keys to sustainable development.

The Millennium Goals for drinking water supply and sanitation can only be achieved with significant and simultaneous progress made to introduce Integrated Water Resources Management (IWRM), organized on the relevant scale of river basins.

In particular, more cooperation agreements have to be initiated, signed or reinforced between the riparian countries of transboundary river basins. When they are in place, International Commissions or similar organizations allow better dialogue, the exchange of useful information, the solving of conflicts and the sharing of benefits from better joint management and the strengthening of transboundary cooperation.

**Water and agriculture in the Management Plans of the Mediterranean basins**

Mediterranean agriculture is subject to strong constraints which are not limited to the arid and semi-arid areas of the Southern and Eastern Countries. Low availability of water resources, arable land loss and decrease in soil fertility compromise the capacities of this agriculture to meet the stakes of food security and quick demographic growth.

The Mediterranean basin is also one of the areas most vulnerable to the announced impacts of climate change.

Agriculture will be one of the most affected economic sectors. It is thus imperative to integrate rainfed and irrigated agriculture in the Management Plans of the Mediterranean basins. It is necessary to produce better and more while using less water.

**Saving water**

It is necessary to identify less water consuming solutions: water demand management, better efficiency, mobilization of non-conventional water and water reuse are priorities.

Synergies between water and energy are to be promoted.

INBO recommends creating a system for modernizing agricultural practices allowing water saving by sound dissemination of innovations, thanks to education, training, research and development.

**Improving water governance and financing**

Transfer of the management of irrigated lands to irrigators’ Groups allows improving irrigation and drainage facilities mainly their operation & maintenance functions, as well as adapting the allocated water to the real needs.

It is necessary to support the development of participative methods for dialogue and multiple uses of water, the reinforcement of the management bodies for collective irrigation systems and the organization of farmers in users association.

It is imperative to create national and local financing and equalization mechanisms recognizing the principle of common cause between the water users in each basin. It is also as important to facilitate the farmers’ access to micro-financing.

.../...
INBO Events

7th General Assembly of the Mediterranean Network of Basin Organizations (MENBO) - Beirut - Lebanon - 6 - 9 October 2009

INBO Presidency handing over from Italy to Lebanon

INBO recommends that agricultural practices be adapted to limit pollution hazards in fertilizing and in using phytosanitary products. In the Mediterranean area, arable lands are limited and have to be maintained.

ADAPTING WATER MANAGEMENT TO CLIMATE CHANGE

It is now clear that climate change will have effects such as increase in the frequency and intensity of extreme hydrological phenomena (floods, drought, ...), with strong consequences in the Mediterranean. As the Mediterranean region is one of the areas most vulnerable, it is essential to adapt water resources management policies and to quickly assess the hydrological and agro-economic consequences of this change, according to various scenarios.

Flood/Drought Risk Management Plans have to be elaborated in the basins, to anticipate climate change and integrate coordinated measures in River Basin Management Plans.

Thinking at all levels about risk management should be launched.

Usefulness of the tools of the WFD in Mediterranean Non EU-Countries

For the first time in history, 29 countries in Europe were committed to jointly manage their water resources at the level of national or transboundary basins. The Water Framework Directive (WFD) can inspire other areas in the world as it introduces the principles of good governance that can be applied everywhere.

It cannot be exported as it is, but its approach, principles and tools are transferable: characterization of initial status and development of monitoring, formulation of Management and action Plans at basin level, definition of indicators and common reference frames for data management, introduction of the cost recovery principle, participation of the interested parties and of the public...

In the Mediterranean Region, additional human and financial resources will be necessary for implementing the WFD principles in the pilot basins.

Knowledge of the resource and investments: two priorities

The initiative of a group of Mediterranean Countries to strengthen their National Water Information Systems, harmonized at regional level for supporting the implementation of the Strategy for Water in the Mediterranean, meets an overall need of the decision makers.

The investment needs of the water sector are significant. Financing of the sector will require the right mix of taxes, tariffs and transfers, and a persistent effort for sustainable financing strategies. Realistic cost recovery is to be looked for. Tariffs should be differentiated reflecting local conditions and affordability considerations.

Economic, fiscal as well as legal issues related to non-conventional water resources should be addressed in a systematic and forward looking way.

Increasing action and supporting the creation of Basin Organizations in the Mediterranean area!

The delegates requested that Official bi or multilateral Development Aid and the water-related programs of International Cooperation Organizations should be refocused to support projects aiming at implementing real concerted actions, which meet the above principles, in each basin, and experimentations, evaluations and exchanges of know-how in these areas.

They also underlined the advantages of twinning agreements between Mediterranean and European Basin Organizations as an effective means for disseminating gained field experience.

Katharina Kober
MENBO
Katharina.Kober@chj.es

110 participants coming from 26 countries

www.remoc.org
Organized by Changjiang (Yangtze) Water Resources Commission (CWRC), EU-China River Basin Management Program (RMBP) and WWF, a high-level dialogue on river basin management was held in Shanghai, China, on April 19, 2009, the day before the third International Yangtze Forum, which has been an important step in promoting integrated river basin management (IRBM) in the Yangtze River Basin and in China.


The Secretaries of INBO, Mr. Jean-François Donzier, and of GWP, Mr. Martin Walshe, were invited to address this conference. This Dialogue Conference placed emphasis on sharing experience and lessons gained in promoting IRBM both in EU and China and in implementing the Water Framework Directive (WFD) in European Union Member States.

A consensus was reached in this conference to declare that IRBM is a vital approach to ensure water security, ecosystem security and the sustainable economic and social development in the world, and that its implementation requires political will, high-level commitment, cooperation between economic sectors, participation by all stakeholders and support with legal framework. All the participants of the conference also appealed to strengthen international cooperation to promote River Basin Management and to address climate change.

The 4th International Yellow River Forum (IYRF) took place in Zhengzhou, China, from 20 to 23 October 2009, on the theme: “Ecological Civilization and River Ethics”.

The Forum was organized around technical sessions on the following topics:

- social and environmental impact of climate change; sustainable water resources management;
- watershed rehabilitation;
- scientific meanings of ecological civilization; modern river basin management and restoration;
- river ethics and sanitation;
- application of experiences and new technologies of water resources management;
- sediment management of high silt-laden rivers and reservoirs;
- water right transfer, water safety, water environment, water market and water saving.

The International Network of Basin Organizations (INBO) was invited to organize an “official session” on IWRM implementation in the River Basins of the world, with two topics:

- role of Regions/Provinces, Local Authorities and users in basin management;
- financing of the Basin Management Plans, of their Investment Plans and Programs of Measures.

At the closing ceremony of the Forum, a partnership agreement was signed by Mr. Laszlo Khotay, World President of INBO, and Mr. Li Guoying, Commissioner of the Yellow River Conservancy Commission (YRCC).

The papers of the special session of INBO and the photographs of the Forum are available on the website:

www.rionet.org

Yellow River Commission
iyr@yellowriver.gov.cn

www.yellowriver.gov.cn

Huge participation in the 4th IYRF

Participants in the UE-China Dialogue

Dr. Yang Guowei
Institutional Specialist of EU-China RBMP (RBMCP)
yanggw1117@hotmail.com

www.euchinarivers.org

Signing of INBO / YRCC partnership agreement
For the second time, this initiative of the Mekong River Commission (MRC) gathered, in Chiang Rai, Thailand, a hundred participants coming from the four Member States: Cambodia, Laos, Thailand and Vietnam.

A very reactive Chinese delegation also participated.

INBO Technical Secretary was represented by IOWater’s Director of International Cooperation, Mr. Jean-Louis Millo.

The objectives of this meeting were to ensure transparency on the preparation of the 2011-2015 development programs.

Three topics were dealt with:

- impact of hydropower,
- development of irrigation,
- climate change.

The exchanges alternated between technical presentations and participative workshops, including:

- MRC presentations of its comprehensive and structured planning methods,
- many very relevant addresses of local groups, in particular on environmental and social issues and about fishing,
- a request for increased collaboration, presented by the Chinese delegation.

Some figures give the extent of the challenges: in Laos, 70 dams are planned to produce electricity and in Thailand projects are planned to transfer water towards the North-Eastern areas.

The current water storage capacity upstream (China) is 25 km³, downstream in the 4 MRC Countries, the projects relate to 23 km³ in new reservoirs.

It is planned to increase irrigated lands by 500,000 ha, i.e. 36% of the current surface area.

Fishing accounts for 15% of the world production out of fresh waters, i.e. 2.6 million tons each year.

The Commission insisted on two of its current concerns: necessary inter-State coordination and impact of climate change, on the Mekong delta in particular.

Jeremy Birn
Executive Secretary
Mekong River Commission Secretariat
mrcs@mrcmekong.org

www.mrcmekong.org

The concepts of the European Water Framework Directive are used as reference for the analysis of Decree 120, new Vietnamese legislation directing IWRM since its publication in December 2008.

The project implementation is planned over two years and will be the subject of many papers, on the “institutional assistance” part in particular.

Vietnam

Launching of the pilot project of Dong Nai River Basin

Vietnam experiences a fast economic development which implies significant environmental challenges.

In such a context, a cooperation memorandum was signed in June 2007 by the French and Vietnamese Ministers in charge of sustainable development.

Year 2009 allowed the materialization of an ambitious bilateral cooperation project on Integrated Water Resources Management (IWRM), which deals with the Dong Nai pilot Basin.

It aims at providing:

1. An institutional assistance to the National Authorities in charge of IWRM coordination, financed by the French Loire-Brittany and Seine-Normandy Water Agencies (€ 400,000) according to the “Oudin-Santini” Law on decentralized cooperation.

2. A technical assistance financed by the French Ministry of Economy, Finance and Employment for the development of surface water monitoring in the Dong Nai pilot basin (€ 800,000). It will be implemented by SCE consulting firm and ASCONIT Consultants at the beginning of 2010.

The first step of the project was the kick-off seminar held on 20 and 21 October 2009 in Hanoi, which allowed an exchange on the application of integrated water management in both countries.
INBO Events

Latin American Network of Basin Organizations (LANBO)

“Meeting of Basin Organizations from Latin America and the Caribbean”
Foz do Iguaçu - Paraná - Brazil - 18-21 November 2009

The Latin American Network of Basin Organizations (LANBO) was established in August 1998 in Bogotá, Colombia. It is one of the regional networks of the International Network of Basin Organizations (INBO). It gathers administrations and institutions in charge of water resources management in watersheds and multilateral cooperation agencies involved in water resource management.

At the initiative of the National Water Agency (ANA) of Brazil, the last LANBO General Assembly took place in Rio de Janeiro in November 2008 and brought together 106 delegates representing 67 institutions from 21 countries.

The Meeting of Basin Organizations from Latin America and the Caribbean, organized by LANBO, took place in Foz do Iguaçu (Paraná - Brazil), on November 18-21, 2009.

It was supported by Itaipu Binacional, the State Government of Paraná, the State Secretariat for Environment and Water Resources (SEMARH), COPEL, SANEPAR, the National Water Agency (ANA), the International Network of Basin Organizations (INBO), the Brazilian Network of Basin Organizations (REBOB), the National Forum of River Basin Committees (FNCBH) and IUCN.

This Meeting was held at the same time than the 6th Cultivating Good Water “Cultivando Agua Buena” and the 7th Iberoamerican Meeting on Sustainable Development (EIMA).

This event contributed to strengthening Integrated Water Resources Management in Latin America and the Caribbean through the knowledge and exchange of national and international experiences of river basin agencies.

The 1st Meeting of the Governing Board of LANBO also took place on this occasion to draft a proposed work schedule of the Network for the coming years.

Edgar Bejarano Méndez
President of LANBO
direccion_general@car.gov.co

Mártide Somarriba
Vice President of LANBO
matilde.somarriba@una.edu.ni

Dalto Favero Brochi
Technical Secretary of LANBO
dalto.favero@agua.org.br

www.ana.gov.br/relob

Brazil

Brazilian Network of Basin Organizations

The Brazilian Network of Basin Organizations (REBOB), established on July 1, 1998, is a regional association of watershed organizations.

Its main objectives are to represent its members in matters of common interest and promoting the exchange of experiences among them.

It is also supporting cost recovery for water use and the creation of truly decentralized systems of water resources management.

In 1998, the National Water Resources Council (NWRC) was created in Brazil, and REBOB took a seat as representative of the River Basin Agencies.

The goals proposed by REBOB were achieved: the system for Water Resources Management in Brazil has existed since 1997; the creation of REBOB motivated the Basin Committees to organize nationally in 1999, in Ribeirão Preto city, São Paulo State, Brazil. With the full support of REBOB, the National Forum of River Basin Committees was created, and the partnership between the two organizations has been strengthening over the years.

The institution is a member of the International Network of Basin Organizations (INBO) and of the Latin American Network of Basin Organizations (LANBO).

Since its foundation REBOB has participated in national and international events and has sponsored regional meetings for strengthening existing organizations and the creation of new ones in the States of São Paulo, Rio de Janeiro, Minas Gerais, Santa Catarina, Bahia, Rio Grande do Sul and the Federal District.

It participated in Expo Zaragoza, which was held in 2008 in Spain. In 2009, REBOB worked to strengthen the networks (REBOB, LANBO, INBO) and help promote Integrated Water Resources Management to the civil society to lead to the constitution of new River Basin Committees.

Francisco Carlos Cabo Labor
President of REBOB
francisco@agua.org.br

www.rebob.org.br
Our publications

"Handbook for IWRM in Basins"

The result of an effective collaboration between INBO and GWP

For Integrated Water Resources Management (IWRM) to be effective and practical, it is essential that it is implemented on a basin scale, whether national or transboundary. The basin of a river, a lake or an aquifer is indeed the geographical area most relevant to deal, in an integrated way, with the problems of water resources and impacts of regional planning on these resources. Many experiments of integrated basin management were initiated in the world these past years. The International Network of Basin Organizations (INBO) and the Global Water Partnership (GWP), with the financial support of the French Ministry for Foreign and European Affairs, have joined to produce the “Handbook for IWRM in Basins”, based on these experiments and know-how, practices and knowledge acquired sometimes for several decades.

This handbook is intended for professionals of water resources management of the public and private sectors. It is also addressing representatives of local authorities, economic sectors and NGOs, involved in basin management.

The handbook aims at providing them with examples of tools and practical advice to facilitate their decision-making regarding the governance and management of water resources, either for the creation of new basin organizations, or for improving and modernizing already existing basin management bodies.

After introducing fundamental notions, then problems and challenges encountered by the managers, the document analyzes the tools and mechanisms available for establishing basin management systems as well as the types of possible basin organizations and their roles, according to the situation.

The handbook deals, in a pragmatic way, with mechanisms used for an equitable share of the resource between the various uses (domestic, agriculture, energy, industry, transport, tourism, fishing, environment), with instruments for conflict prevention and resolution or protection against risks, especially those caused by climate change.

The aspects of financing the water sector, stakeholders’ involvement, long-term strategy and action plans, communication and development of follow-up and information systems are analyzed while focusing on the practical elements, dealing both with the improvement of institutional arrangements and working practices.

More than fifty experiments or case studies implemented in the five continents are used to illustrate the various topics and are references likely to help decision-makers in their search for solutions to their problems.

Designed for providing practical assistance to catalyze the changes towards sustainable development, this handbook, published in English and French, aims to be a dynamic document. The first version of which, presented on 20 March 2009 at 19:00 at the 5th World Water Forum in Istanbul - Sutluce Conference Center, will be regularly updated thereafter.

A "Brief" for better basin management

The Technical Committee (TEC) of the Global Water Partnership (GWP) and the International Network of Basin Organizations (INBO), in collaboration with “the Global Evaluation of Water Management in Agriculture (CA)” have published, in English and in French, a “Brief” on the issue of water management at basin level.

This brief analyzes basin governance in the context of increasing competition for water between agriculture and the other uses, of impacts of water pollution and deterioration of ecosystems.

This analysis shows that, to face all the challenges, it is necessary to create arrangements for governance which take into account the various geographical scales.

The basin is a particularly relevant level for the field implementation of integrated management associating all the stakeholders related to water.

The note gives an overview of the various functions which must be fulfilled on this scale, advisable institutional arrangements for effective governance, roles which the Basin Organizations can play according to the national context, to criteria which determine the quality of the operation of Basin Organizations.

The "brief" also emphasizes the need for a preliminary institutional characterization, so that the type of Basin Organization to be created is suited to the challenges to face and is consistent with the actions of all the other Institutions which usually already exist in the same area.

The new body should be a privileged place for coordination and dialogue.

Download the document file on:
www.inbo-news.org
www.gwpforum.org

Progress report 2007 - 2009
Groundwater accounts for 98 to 99% of the total volume of freshwater on Earth. It runs in aquifer systems which can extend over tens, hundreds or even thousands of kilometers.

More than half of the population in the world currently depends on groundwater.

On a worldwide scale, 65% of the abstracted groundwater is used to meet the needs for agriculture, 25% for domestic uses, and 10% for industry, mining and energy activities. However, this distribution varies from one area to another: in many developed countries, groundwater represents a significant resource used for drinking water, as in Europe where it covers 70% of the needs. In arid areas, it also represents the main drinking water resource, as in Saudi Arabia and Libya, in Yemen, Pakistan and Chad, in India or in Algeria and in Niger.

This strategic resource, necessary for socioeconomic development, must require special attention and its sustainable management must be a target to aim for. This is even more the case when the aquifers are transboundary.

The management of transboundary water resources shared by various sovereign States remains indeed a delicate problem.

Nowadays, many efforts have already been made with regard to the management of transboundary surface water, which allowed, on the one hand, the establishment of Transboundary River Basin Organizations and, on the other hand, launching thoughts and experience sharing, as carried out within INBO.

On the contrary, relatively few actions related to transboundary aquifers have been yet carried out, except for those implemented in a restricted number of projects for some large aquifers. The fact that groundwater is invisible and has complex operating modes, undoubtedly does not allow the decision-making authorities to take fully into account their vulnerability, their real potential and the true stakes they represent for the society.

And yet, to date more than 270 transboundary aquifers worldwide have been assessed by the ISARM program of UNESCO/IHP:

These aquifer systems undergo increasing pressures, linked to the development of human activities, agriculture in particular, and to climate change. In addition, in most arid and semi-arid zones, these groundwater resources are "fossil", i.e. non-renewable or hardly renewable.

Their rational use is indeed crucial.

To avoid the degradation of these aquifers and not to deprive future generations of an heritage to which they have the right to claim, and also to prevent conflicts between States over the shared exploitation of these resources, it is of great importance to establish lasting dialogue and collaboration between all interested parties.

This requires the definition of common objectives and adapted strategies, but also, more specifically, the establishment of management bodies with transboundary responsibilities. Good knowledge of the characteristics and functioning of the aquifer systems is also imperative, without it, no sound decision can be made.

This was acknowledged in the United Nations General Assembly Resolution of December 2008.

In order to contribute to the suitable management of transboundary aquifers, the French Development Agency with its partners, BRGM, UNESCO, IOWater, INBO and the Water Academy, launched a methodological study which aims at drafting an operational guidebook for the management of shared groundwater, intended for the political and administrative authorities concerned.

This guidebook will especially highlight the problems linked to the management of these resources, will give a progress report on the state of the art and ongoing practices, will present examples of transboundary aquifers on several continents and the stakes they represent, and will suggest a set of recommendations to set effective management of transboundary groundwater. The guidebook will be presented at the INBO General Assembly planned in Dakar from 20 to 23 January 2010.
INBO Action Plans

TWINBASIN™

For promoting twinning between Basin Organizations

The International Network of Basin Organizations (INBO) has acquired experience in fostering twinning agreements, in managing the TwinBasin project (2004-2007) financed by the European Commission. In 4 years, the project has obtained very interesting results: 41 technically and financially supported twinning agreements, more than 100 missions for the exchange of experience, involving 70 Basin Organizations from 42 countries. The representatives of the two largest basins in the world in particular — those of the Amazon and Congo Rivers — met, thanks to the project support, and signed a twinning agreement.

It is clear that twinning agreements are a powerful tool to improve the operation of Basin Organizations and to develop true and effective Integrated Water Resources Management. Twinning agreements allow for the capacity building on technical and institutional issues needed by Basin Organizations.

The decision-makers should be aware of this relevance to mobilize the resources needed for implementing effective exchanges. The lessons learned from the project are summarized on line on the website: www.twinbasin.org.

The TwinBasin project demonstrated the real added-value of developing twinning agreements between River Basin Organizations for improving Integrated Water Resources Management. By exchanging field experience, Basin Organizations can:

- strengthen participation of stakeholders and civil society in decision-making processes;
- improve methodologies for mid-term and long-term planning;
- set up the data bases required to organize Information Systems and decision-making supporting tools;
- build staff capacity;
- design sustainable financial mechanisms.

The TwinBasin project:

- gave strong credibility to the Twinning process;
- proposed a framework for agreements between partners;
- organized calls for proposals for selecting the best and more adapted Twinning arrangements;
- required technical reports with specific added value after the realization of experts’ missions.

It is worth saying that average support made by TwinBasin has been of 4,000 Euros for each twinning, covering less than 40% of the direct expenses. For such a reasonable investment, benefits have been much higher! Thus, for any future Twinning project, INBO proposes a 3-steps methodology:

1. Explaining the needs, which depend on the topics to be tackled with (institutional, legal, economical, technical, communication) and the practical methods used for exchanges (awareness, training, capacity building) as well as the contacts to establish (political people in charge, representatives of the economic sectors, managers of basin organizations, technicians, specialists, etc.).
2. Identifying the most compatible “Twins”, in particular thanks to the regional networks of Basin Organizations.
3. Proposing a precise content for twinning agreements specifying the objectives, expected outputs, missions’ duration, foreseen period, expert(s) profile(s), local counterparts, performance indicators, financial arrangements, etc.

Under these conditions, twinning agreements have more chance to be truly effective and to become genuine tools for sharing experience and know-how.

The Rochehaut seminar

Economic component of the Water Framework Directive

With TWINBASIN™ support, an important seminar, held in Rochehaut (Belgium) in April 2007, gathered representatives of Basin Organizations from 6 countries (Bulgaria, Romania, Latvia, Malta, Walloon Region and France) particularly motivated by the economic dimension of IWRM and Management Plans. They worked on the economic component of the European Water Framework Directive and drafted a “guide”, available on the TWINBASIN™ project and the French Artois-Picardy Water Agency websites.

This seminar allowed the drafting of a proposal for the implementation of Programs of Measures in Bulgaria, within an institutional cooperation between the Bulgarian Water Authorities and the French Artois-Picardy Water Agency. The program especially focused on the following main topics:

- input of the cost-effectiveness analysis in the development of the Program of Measures,
- potential derogations,
- cost-recovery.

This seminar has also given to the participants the opportunity to perform a session on “ECO WHAT?”, which allows, under interactive and “real” conditions and using the economic analysis, justifying a River Basin Management Plan towards decision-makers.

Auréa Courtecuisse
Artois-Picardy Water Agency
Tel.: +33 3 27 99 90 60
a.courtecuisse@eau-artois-picardie.fr
www.eau-artois-picardie.fr
This twinning agreement was signed in 2006 within the TWINBASIN™ project.

It aimed at the transfer of innovative tools and smart technologies for irrigation and urban water use from Murrumbidgee River Basin, Australia, to Davao River Basin, Philippines.

One of the innovative tools is the hydrological model, SWAGMAN (Salt Water and Groundwater Management), which is already being used both as an educational and management tool by environmental officers and farmers in the Murrumbidgee River Basin, Australia. This twinning agreement aims at adapting it to the Davao River Basin, Philippines.

Professor Shahbaz Khan from UNESCO HELP, Australia, and Dr Ruth Gamboa from PCEEM Davao Foundation, Inc, Philippines, are working together to develop this twinning with the main actors, which include the City Government of Davao, Department of Agriculture, National Economic Development Authority, University of the Philippines, PCEEM, CRS and KFI.

The institutions within the Philippines are generally better established for managing water supply for the demands of the various drivers (population, industrial, agricultural, irrigation etc.) as opposed to managing water in an integrated sustainable approach.

Under this twinning cooperation, the involved institutions are being engaged to learn from the policies and laws adopted in the Murrumbidgee Catchment to help conserve the Davao River Basin.

The TWINBASIN™ missions proved to be an opportunity to acquire and share best practices and lessons learned. This twinning brings new ideas and innovative strategies and approaches in environmental and economic management.

It has been acknowledged through the Australian Government’s Eureka Water Prize.

Prof. Shahbaz Khan
UNESCO HELP/CSIRO/CSU
Fax: +61 269332647
Shahbaz.Khan@csiro.au

www.csiro.au

The Hungarian Delegation gave information on the multilateral cooperation system between Hungary and the numerous countries sharing the Danube River basins and sub-basins. During the visit of the Atazar dam, different topics were discussed including the emergency and functioning plans for large dams.

The Delegation also met the staff from the Tagus River Basin Authority, in Madrid, where details on the close cooperation between Spain and Portugal in the Albufeira agreement framework were shared. It was also able to directly observe the functioning of the Hydrologic Automatic Information System (SAIH) and its benefits over available water resources control.

Miguel Antolín Martínez
Coordinator of International Affairs, Directorate General for Water
Fax: +34 91 453 53 06
mantolin@mma.es
The French Water Agency RM&Co received the Bulgarian Black Sea Basin Agency

From 24 to 28 September, a Bulgarian delegation, made up of the Director of the Black Sea Basin Agency in Varna, Mr. Ventsislav NIKOLOV, of two of his collaborators and a representative of the Water Directorate of the Bulgarian Ministry of the Environment and Water, stayed in Lyons, Marseilles and Toulon at the invitation of the Rhone-Mediterranean and Corsica Water Agency, within the European TWIN-BASIN™ arrangements.

After 2 days spent in Lyons to exchange on water taxes – what taxpayers and how they are identified, which type of taxes and how pollutant emissions are measured, the measurement networks and public consultation planned for by the WFD – the delegation went to Marseilles, for a presentation of the Agency’s littoral policy, of the 9th Action Program and the Master Plan for Water Development and Management. The Bulgarian delegation could attend a meeting of the Basin Committee’s Geographical Commission on Littoral in Aix-en-Provence.

On the last day, our Bulgarian colleagues met the IFREMER staff in Toulon who presented their activity related to the measurement of marine environmental quality, especially the Nautil, a pocket submarine for great depths, and then they visited the waste management unit of the harbor.

Jean FAURE-BRAC
In charge of External and International Relations
Rhone-Mediterranean and Corsica Water Agency
Fax: +33 4 72 71 26 06
Jean.FAUREBRAC@eaurmc.fr

www.eaurmc.fr

Sebou - Seine-Normandy

A most active twinning!

The contacts established since 2003 between the Basins of Sebou in Morocco and Seine-Normandy in France have led to the signing of a twinning agreement in 2005.

Exchanges increased and the European Union chose Sebou as a "pilot basin" to test an adaptation of the principles of the Water Framework Directive.

The first exchanges between the Sebou River Basin Agency and the Seine-Normandy Water Agency (AESPN) started in 2003: a mission allowed identifying some major topics for cooperation.

In 2005, a cooperation agreement was signed and dealt with the stakes of the Sebou River Basin: establishment of water taxes, communication tools, aquifer contracts, management of water abstraction for agriculture and agricultural pollution.

In 2006, an engineer of Sebou ABH stayed one week at the AESN to work on water quality and an AESN engineer participated in the Sebou water users’ awareness on the management of aquifers and agricultural pollution. He testified on the occasion of the Moroccan national debate on the establishment of aquifer contracts.

In March 2007, a Moroccan delegation came to Paris to visit the International Agribusiness Show (SIMA), and met the Minister for Ecology and Sustainable Development as well as farmers and irrigators of the Seine-Normandy Basin. In April, a new mission took place in Fez and Meknès, where the National School of Agriculture organized discussions. Dialogue with farmers is continuing!

Sanitation is not forgotten. Fez is building a wastewater treatment plant with European financial support. On a smaller scale and in rural areas, the Sebou ABH requested AESN to finance the installation of a viable and effective system for wastewater treatment in a human settlement of Sefrou Province.

This project fits in the solidarity program of the French Water Agencies (Oudin-Santini Law of February 2005).

The Sebou, a WFD “pilot basin”…

In coordination with the Moroccan WWF, the Sebou ABH requested Seine-Normandy to receive three engineers for one week at the end of June 2007 in Paris. Their stay, focusing on the WFD economic analysis, was the occasion of many meetings and visits, and is likely to be followed by other actions…

CALLE Myriam
Seine-Normandy Water Agency (AESPN)
Fax: +33 01 41 20 16 00
calle.myriam@aesn.fr

CALLE Myriam
Agence de l’Eau Seine-Normandie
Fax: (33) 01 41 20 16 00
calle.myriam@aesn.fr

www.eau-seine-normandie.fr

www.abhsebou.ma
INBO Action Plans

"Apele Romane"

Participation in international twinning agreements

**TWINNING cooperation with South Africa and Swaziland**

In 2007, Romania, Swaziland and South Africa started a close collaboration based on the cooperation agreement between the Komati Basin Water Authority (KOBWA) and the National Administration “Apele Romane” - Olt River Basin.

This “Olt-Komati” twinning agreement was developed within the Twinbasin project.

The first mission of the project took place in Swaziland between March and April 2007 and included practical information exchanges through meetings at the KOBWA departments and technical field visits.

The project focuses on several specific areas of interest:

- **Administrative and legal framework:**
  - At national level: the River Basin Organizations such as Olt in Romania, the Komati River Basin Authority in Swaziland and the Catchments Management Agencies (CMA) in South Africa.
  - At transboundary level: the Danube River Commission in Europe and the Komati Joint Water Commission between South Africa and Swaziland.

- **Dam operation, monitoring and maintenance:** SANCOOLD in South Africa and CONSIB in Romania play a similar role.

- **Improvement of monitoring networks** for water quantity and quality (biological and physical-chemical parameters).

A final meeting took place in Mbabane between both Basin Authorities and Swaziland Authorities involved in water management.

It set a stage for further collaboration on drought and flood mitigation strategies.

The mission of a Swaziland delegation in Romania took place in August 2007 and included a meeting at the Head Office of Olt Water Directorate, in Ramnicu Valcea.

Maria Manolescu / Chris Keevy
Fax: +40 (21) 13 155535
maria.manolescu@rowater.ro
chriskeevy@mweb.co.za

**French-Hungarian twinning between Basin Organizations**

Cooperation between France and Hungary is flourishing along the Danube. The first agreement signed in 1994 was renewed several times and a multi-party agreement was signed on 8 December 2008 between 2 French Water Agencies (Seine-Normandy and Loire-Brittany) and 5 Hungarian Water Directorates (Central Directorate, Middle Danube, Upper Tisza, Trans Tisza, Western Transdanubian).

Among the priority actions there are topics related to the WFD implementation. A workshop devoted to the Economic Analysis was thus held on past 25 and 26 May 2009 in Budapest, with the presence of Laszlo Khotay, State Secretary in charge of Water and World President of INBO.

It gathered about 40 people: on the Hungarian side, the Ministry for the Environment was represented as well as 11 of the Regional Directorates; on the French side, economists of the Seine-Normandy and Loire-Brittany Agencies took care of the technical proceedings of this workshop.

The 2 French Agencies had also asked Pierre Strosser and Arnaud Courtecuisse, European experts, for having a view of the economic problems in the other countries of the European Union.

The seminar was divided into 5 topics:

- cost recovery through the water utilities;
- impact of the social, economic and environmental situations on the costs;
- the economic justification of exemptions;
- incentive pricing for the application of the development plans;
- financing of the WFD Program of Measures.

These two days highlighted the challenges that Hungary must face to achieve “good status”.

19 countries share the Danube River Basin, 14 of which are Members of the International Commission for the Protection of the Danube River (ICPDR). This specificity makes the development of a Management Plan rather complex.

The main problems encountered in the basin are associated with organic pressures, with the difficulties related to wastewater treatment, with flood and irrigation. In Hungary as in France, there is real integration of the tools for economic analysis in the development of Management Plans and yet the insufficiency of their use as decision-making supporting tools is striking. It thus appears necessary to better integrate economics into the other disciplines to meet the WFD requirements!

Finally, this French-Hungarian collaboration leads to exchanges of young professionals eager to widen their horizons and to see other practices on same topics. The Seine-Normandy and Loire-Brittany Agencies will thus receive two young Hungarians from the Western Transdanubian while two young French people will go to Hungary...English language being a must!

Myriam Calle
Seine-Normandy Water Agency
calle.myriam@aesan.fr
www.eau-seine-normandie.fr

Méridie Stein
Loire-Brittany Water Agency
michel.stein@eau-loire-bretagne.fr
www.eau-loire-bretagne.fr
Cooperation between the French and Moroccan Basin Agencies

Nine executives of the seven Moroccan Agencies and of the State Secretariat in charge of water participated in a one-week study, in Toulouse, in June 2008, at the invitation of the Adour-Garonne and Rhone-Mediterranean and Corsica Water Agencies. This meeting mainly dealt with the calculation and recovery of water taxes and the allocation of aids to water users.

Indeed, the French Agencies have a 40-year experience in this matter.

In Morocco, the application of the water law of 1995 is progressive to be bearable and the taxes on water, irrigation, electricity and supply are now generalized and those on domestic and industrial pollution are being established.


Following a seminar on concerted groundwater management, which had taken place in Beni Mellal in April 2007, another seminar was held in Lyons in December 2008 on measurement tools and networks.

There are frequent cooperation contacts between the Adour-Garonne, Rhone-Mediterranean and Corsica and Seine-Normandy Water Agencies, on the one hand, and the Oum er Rbia, Loukkos, Tensift, Souss Massa and Sebou Agencies, on the other hand, bound by twinning agreements.

Julien MARTINEZ
Adour-Garonne Water Agency
julien.martinez@eau-adour-garonne.fr

Michel DEBLAIZE
Regional Delegate of Montpellier
Rhone Mediterranean and Corsica Water Agency
michel.deblaize@eaurmc.fr

Collaboration between Poland and the Ukraine

A cooperation agreement on the Bug River Basin was signed on 11 May 2006 between the Regional Water Management Authority in Warsaw and the Western Bug River Basin Authority in Lutsk.

The agreement takes into account:

- UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes in Europe,
- EU Water Framework Directive (WFD),
- Agreement between the Polish and Ukrainian Governments regarding cooperation on water management on transboundary rivers.

As a part of this agreement, missions were co-funded by the international TwinBasin program that aims at increasing bilateral cooperation between River Basin Organizations for integrated water resources management.

A Workshop dedicated to the Polish experience in WFD implementation was held at the home office of the Lublin River Basin Authority.

It mainly focused on the delimitation of water bodies in the Bug River Basin.

The seminar in Lutsk allowed the following issues to be discussed:

- progress of WFD implementation in the Ukrainian part of the basin;
- typology and identification of surface water bodies – methodology and implementation results in the Ukrainian part of the Bug River Basin;
- significant problems of water management in the basin.

The cooperation plan for the next two years was ratified in November 2008, in Lutsk.

Magdalena Krawczyk
Regional Water Management Authority RZGW - in Warsaw
zagranica@rzgw.warszawa.pl

www.rzgw.warszawa.pl

La rivière Bug
INBO Action Plans

Signing of a cooperation agreement between the Niger River Basin Agency (Mali) and the Loire-Brittany Water Agency (France)

The Niger River Basin Agency in Mali and the Loire-Brittany Water Agency in France have maintained for years regular and profitable exchanges especially within the UNESCO Loire-Niger project. Both agencies wished to consolidate their partnership by signing a cooperation agreement for the development of joint actions in the field of integrated water resources management and decentralized cooperation.

This signing took place on 16 July 2009 in Bamako (Mali) under the presidency of Professor Tiémoko SANGARE, Minister for the Environment and Sanitation of Mali, and in the presence of Mr. Bruno DETANGER, Vice President of the Loire-Brittany Basin Committee, and His Excellency the Ambassador of France in Mali.

This protocol signed by Messrs. Hamadou DIAKITE and Noël MAETHIEU, Directors of the 2 Agencies, defines the practical provisions of this cooperation (field of competences, actions considered, follow-up of the protocol…) on the basis of a principle of equality and mutual benefit.

A Malian Director was received in Orleans in autumn 2009 to familiarize himself with the French basin tax system, a French expert will carry out a mission in Bamako for dealing with the problem of treating dyeing liquid waste and the Angers-Metropolis will finance the water supply project in Moribabougou.

An evaluation of the commitments and actions of this partnership will be made at the end of the first 2 years.

Michel STEIN
In charge of International Affairs
Loire-Brittany Water Agency
michel.stein@eau-loire-bretagne.fr
www.eau-loire-bretagne.fr

Signing of the agreement.

The Seine-Upper Tisza twinning

Twinned with the Hungarian Upper Tisza Basin Directorate, the Seine-Normandy Water Agency (France) took the opportunity of INBO General Assembly in Debrecen in June 2007 to make a visit to its counterpart.

The Seine-Normandy Water Agency (AESN) has been linked by a cooperation agreement with the Hungarian Water Authorities since 1994. The agreement was renewed in 1997, then in 2005 at Mount St Michel.

Regular exchanges are fed by current topics.

Contacts have multiplied since 2000 and common understanding of the obligations of the European Framework Directive is achieved through experience sharing between the 2 basins: communication, stakeholders’ mobilization, flood control and management or definition of sensitive areas, etc.

The discussions mainly focused on the development of flood protection on the Tisza (too frequent floods), forecasting and warning systems, the building of dikes and devices for anticipating floods. Water quality and public consultation were also included in the discussions.

The coming to France of a Hungarian delegation is planned for April 2008 and topics such as quality recovery in the Seine, pollution caused by the Champagne wine industry, public consultation and wetland protection should be discussed.

Calle Myriam
Seine-Normandy Water Agency
Fax: +33 01 41 20 16 00
calle.myriam@aesn.fr
www.eau-seine-normandie.fr

Twint basin xn

38
In 2003, the World Bank and the Niger Basin Authority (NBA) completed an Audit, carried out by IOWater, INBO secretariat, aiming at proposing institutional and organizational reforms for the Authority. Various meetings of the Niger Basin Authority (NBA) bodies have since confirmed the will of the nine Member States (Benin, Burkina Faso, Cameroon, Chad, Ivory Coast, Guinea, Mali, Niger, Nigeria) to make this organization a tool for regional cooperation and economic development.

Thus, a "clear and shared Vision" of the Niger Basin was formulated to create an "environment favorable to cooperation and to draw up a "Sustainable Development Action Plan (SDAP)" accepted by all the basin stakeholders. The Declaration of Paris on "The principles of management and good governance for sustainable and shared development of the Niger Basin" was signed in April 2004 by the nine Heads of State and Government.

The Niger Basin Authority is financed by the Water Facility of the European Union to implement a project entitled "Formulation and Implementation of an Investment Program", which deals with the following topics:

- Drafting a Water Charter;
- Consistency of the SDAP with the national and regional processes of Integrated Water Resources Management (IWRM);
- Preparation of the investment program and methods for implementing the projects.

With the formulation of the SDAP, the development of the Investment Program at the end of 2007 and the Summit of the Heads of State and Roundtable of Donors planned in 2008, the Niger Basin Authority will be able to achieve practical and lasting outcomes for ensuring the future of the basin users and citizens.

Institutional support

NBA: Towards the achievement of the "Shared Vision"

In 2003, the World Bank and the Niger Basin Authority (NBA) completed an Audit, carried out by IOWater, INBO secretariat, aiming at proposing institutional and organizational reforms for the Authority. Various meetings of the Niger Basin Authority (NBA) bodies have since confirmed the will of the nine Member States (Benin, Burkina Faso, Cameroon, Chad, Ivory Coast, Guinea, Mali, Niger, Nigeria) to make this organization a tool for regional cooperation and economic development.

Thus, a "clear and shared Vision" of the Niger Basin was formulated to create an "environment favorable to cooperation and to draw up a "Sustainable Development Action Plan (SDAP)" accepted by all the basin stakeholders. The Declaration of Paris on "The principles of management and good governance for sustainable and shared development of the Niger Basin" was signed in April 2004 by the nine Heads of State and Government.

The Niger Basin Authority is financed by the Water Facility of the European Union to implement a project entitled "Formulation and Implementation of an Investment Program", which deals with the following topics:

- Drafting a Water Charter;
- Consistency of the SDAP with the national and regional processes of Integrated Water Resources Management (IWRM);
- Preparation of the investment program and methods for implementing the projects.

With the formulation of the SDAP, the development of the Investment Program at the end of 2007 and the Summit of the Heads of State and Roundtable of Donors planned in 2008, the Niger Basin Authority will be able to achieve practical and lasting outcomes for ensuring the future of the basin users and citizens.

OMVS: An institutional reform to face the future challenges

OMVS is an outstanding tool for cooperation, having a tested and stable legal and institutional framework, with practical results, benefiting from a strong political commitment. It especially developed two common infrastructures:

- The anti-salt Diama dam to allow the development of irrigated crops in the valley;
- The Manantali Dam for flood management, flow regulation downstream, for energy production, irrigated crops and waterway navigation.

OMVS has proven its capacity to mobilize its partners to design and carry out projects on a great scale that no State could have implemented alone. But it has also a potential to do more and must face new challenges such as the integration of Guinea, the implementation of the Declaration of Nouakchott, of the Water Charter and of true Integrated Water Resources Management (IWRM), as well as the development of navigation and new hydropower projects of second generation.

With financing from the World Bank and on OMVS’s request, the International Office for Water (IOWater), INBO Secretariat, is making recommendations for an institutional reform, starting from a complete functional analysis. The proposal focuses on:

- the search for a better institutional, organizational and economic consistency;
- improving human resources management.

The proposed reform allows:

- better adequacy between resources and the tasks to be carried out;
- reducing the costs and loads for decreasing the pressure on the Public Treasuries of the States;
- self-capacity building for investment in the priority sectors transparent and coherent management of the financial resources of the Organization.

In addition, the reform complies with the constitutive texts of the Organization and can be quickly and easily applicable and potentially implemented in 12 months with an entirely acceptable economic and social cost and with an evolution according to the technical, economic and institutional developments of the coming years.
INBO Action Plans

Volta Basin Authority

The VBA Web Portal

The Volta Basin Authority (VBA) committed itself in April 2007 to create an information system in order to guarantee communication within the cooperation framework of the technical and financial partners. For this purpose, the VBA requested in 2009 IWater, INBO Secretariat, to prepare and design the VBA multilingual French / English Web portal and the catalogue of the data sources of the basin.

The VBA portal allows disseminating information to the public and sharing working papers between the various

VBA partners, each partner being able to consult and/or feed and update the various headings of the portal according to the rights of access.

The catalogue of the information sources, accessible via the portal facilitates the identification of the existing data while allowing each data producer/manager of the basin to present the data available at his level.

Following this first phase, it is now planned to install the portal on a server directly managed by the VBA personnel, and to provide them training on the administration and maintenance of these tools.

Charles A. Biney
Volta Basin Authority
Fax: +226 50376486
cbiney@gmail.com

www.abv-volta.org

CICOS : Institutional Audit

The International Commission of the Congo-Ubangui-Sangha Basin (CICOS) requested the International Office for Water (IWater), INBO Secretariat, to prepare the Terms of Reference of an institutional audit, which is a priority for both the CICOS Secretariat General and the Member States.

The study will propose ad hoc modifications for this purpose so that the institutional framework and institution are operational and long-term performing, with an orientation towards the sustainable development of the basin for the wellbeing of the riparian populations.

The Terms of Reference, which were validated at the session of the Ministers’ Committee in November 2009, define the framework of the study and the specific objectives:

- Analyzing the primary causes of the institutional difficulties encountered by CICOS during its last two fiscal years;
- Identifying several scenarios related to the links with the Economic and Monetary Community of Central Africa (CEMAC), of which CICOS is a specialized agency;
- Proposing a sustainable financial mechanism for the entry into force of the new reform of the CEMAC in 2013;
- Examining the possibilities of linking CICOS to the Economic Community of Central African States (ECCAS) due to the presence of the Democratic Republic of Congo and possible accession of new countries;
- Allowing the operational implementation of the Additive to CICOS mandate extending its responsibilities to IWRM (Integrated Water Resources Management), including institutional development and capacity building;
- Identifying the appropriateness and place of a Basin Information System;
- Proposing an increasing and responsible involvement of all the basin stakeholders (public authorities, private operators and socio-professional organizations, users, NGOs, organizations of the civil society).

The results of this study are expected in the first half of 2010.

www.cicos.info

OMVG: Organization for the Development of the Gambia River

The Organization for the Development of the Gambia River (OMVG) carried out an institutional reorganization in 1991, which allowed a new approach, the starting of true basic studies and the concretization of a good-will for regional integration (1991-1997).

The following decade (1997-2006) allowed the maturation of priority projects, especially a strategic "Energy" project consistent with the WAPP (West African Power Pool).

In the current economic and environmental context, the benefits expected from this Energy Project are very interesting:

- Production of 1,350 GWh/year of clean energy to contribute to meeting the increasing demand in the area;
- Exploitation of renewable natural resources with a concern for sustainable development with the reduction of CO2 emissions;
- Cost price of the energy quite lower than the alternative thermal solutions;
- Improvement of the total reliability of the electric sector thanks to an ambitious interconnection.

More than 550 MEuros were already gathered for dams, hydropower units and interconnections, nearly 65% of the total budget of 857 MEuros.

This Energy project is strategic for the sub-region. However, OMVG has not yet an overall and integrated vision of water resources management in its river basins in order to:

- better guarantee management sustainability, especially of the planned structuring works;
- prepare the future actions to be carried out in the short, medium and long term, beyond the already identified projects.

In such a context, the French Ministry for Foreign Affairs mandated IWater, INBO Secretariat, to provide strategic support to the Organization for the Development of the Gambia River (OMVG).

The analysis made by IWater showed that it is very important to support OMVG in its institutional and technical capacity building, and 2 priority lines can be retained for 2009/2010:

- thorough assessment of governance at the national and transboundary basin level, in synergy with the studies already undertaken by NBA (case of Guinea) and OMVS (case of Senegal);

It is also important to reinforce the institutional structure of OMVG, to develop monitoring and decision-making supporting tools, to train staffs, to increase participative approach, etc.
INBO Action Plans

Hungary-Romania

The Water Framework Directive implementation in the Körös/Crisuri Transboundary Basin

Hungary and Romania, are members of the European Union and apply, in a convergent way, the same community legislation.

The project, started in 2005, exceeded its initial objectives with the finalization of one of the very first Management Plans for the Danube Basin, as required by the WFD for 2009.

Jointly financed by the French Global Environment Facility (FFEM) with one million Euros, this project, being carried out at the core of the Tisza Basin, shared by Hungary, Romania, the Ukraine, Slovakia, and Serbia, is of major interest to this region.

The methodological and practical contribution of the French experts of Water Agencies was useful to develop the new practices necessary for the Water Framework Directive implementation.

This project, carried out under the aegis of the International Commission for the Protection of the Danube River (ICPDR), by IOWater, INBO Secretariat, with help from experts of the French Water Agencies, allowed true cooperation between Hungary and Romania for the creation of a management body, coordinating the work of the two national parts of the basin.

In a first phase, "organizational blocks" were created for data management, the introduction of mechanisms for regional dialogue, the harmonization of the delimitation of ground Water Bodies and the monitoring of ground and surface waters, the economic analysis, from the analysis of cost recovery to the choice of the best measures to be taken, the projection of the trends up to 2015, and the organization of accidental pollution control.

This preliminary work allowed the progressive drawing up of two international documents showing the high level of coordination reached by the two basin’s countries at the end of the project, i.e.:

- A Management Plan for the Körös / Crisuri, in accordance with WFD requirements;
- A plan for the prevention of accidental pollution, which was tested during an international exercise in June 2007.

After 2 years of work and many assignments, the following exemplary results can be underlined:

- Development of a catalogue of shared metadata;
- Creation of a website, hosted by ICPDR (www.icpdr.org) entirely devoted to the project, with the various experts’ reports;
- Checking that the Objectives of Good water Status would be achieved in 2015, according to the implementation of the Program of Measures proposed through modeling;
- Implementation of joint work aiming at harmonizing the methods for sampling fish and invertebrates for the realization of a Biological Quality Index;
- Training on quality management in the laboratories analyzing the basin water and implementation of a blank quality audit;
- Testing a public consultation on significant basin issues in the two countries for preparing the national phase;
- Drafting of a detailed economic analysis of the measures planned for the project;
- Drafting of a guidance document on the implementation of the various stages of the planning process necessary for the development of the Management Plan;
- Presentation of the project results during various international meetings and design of a brochure for disseminating the obtained results.

At the end of this particularly profitable project, we deplore the death in May 2007 of one of its craftsmen, Mr. Petru Serban, Romanian Water Director in Apele Romane, initiator of CEENBO, who led his country on the way to Integrated Water Resources Management and widely contributed to the success of the project by his direct personal involvement in the activities and his active participation in the Steering Committee.
The twinning agreement signed by the Bulgarian Ministry of Water and the Environment and the French Ministry of Ecology (MEESDS) started in March 2009. Seconded for 18 months by the Artois-Picardy Water Agency, Arnaud Courtecuisse took his position of Resident Adviser of the twinning in Sofia, at the Bulgarian Water Directorate.

This project is led by IO Water, mandated by the MEESDS and INBO Secretariat, for following up the twinning arrangements in the field of water.

A launching phase to adapt the work plan to the local context

The beginning of the project was marked by exchanges with the Bulgarian partners to take into account the work started by the Basin Directorates on the development of Programs of Measures; indeed to be in conformity with the WFD timetable, a first version of these documents had been presented for public consultation at the end of 2008.

A kick-off seminar for the project was held on 7 April 2009; it was opened by Mrs. Lubka Katchakova, Bulgarian Vice-Minister in charge of water. Experts of the Rhone-Mediterranean & Corsica, Rhine-Meuse Agencies and of IOWater also participated in this seminar.

Assistance to the Bulgarian Basin Directorates for the preparation of the Programs of Measures and Management Plans

The important capacity building program for the Bulgarian Water Management Authorities began with the creation of the Technical Coordination Group. Composed of experts from the Ministry and each Basin Directorate, this group participates in all the training activities; it is in charge of coordinating the project activities with work for drafting the Basin Management Plans.

A delegation of 12 Bulgarian executives of the Ministry and of the 4 Basin Directorates was received in Lyons in July 2009.

The Rhone-Mediterranean & Corsica Water Agency organized meetings for exchanging experience on the preparation of the Programs of Measures and water tax systems, as well as field visits. The Bulgarian delegation also particularly appreciated being invited to a session of the Rhone Basin Committee on 2 July 2009.

Several assignments were carried out by French experts of the Water Agencies (Artois-Picardy, Rhone-Mediterranean & Corsica, Rhine-Meuse and Seine-Normandy), BRGM and IOWater for:

- jointly analyzing with the Bulgarian experts the progress report on the Programs of Measures of the 4 basins and identifying additional needs;
- reminding the expectations of the European Commission as regards reporting;
- presenting the methods that can be used for estimating the effectiveness of measures, identifying and justifying exemptions, mitigating the lack of data;
- refocusing the work to be carried out on the priorities.

Development of economic instruments

The second objective of the project aims at helping with the revision of the water tax calculation system, to make it coherent with the recent modifications of the Bulgarian Water Law.

The interventions of French experts (François Guerber of the Rhone-Mediterranean and Corsica Agency, Delphine Passé of the Artois-Picardy Agency and Paul Haener of IOWater) dealt with the definition of the taxes (pollution parameters, rate), and with the improvement of the information system linked to the recovery of these taxes.

Today these taxes are recovered by the Basin Directorates and transferred to the National Environment Fund; the use of the product of these taxes for financing the Programs of Measures of the WFD is also at the core of the discussions.

Mrs. Lubka Katchakova, who left her functions after ministerial reorganization, played an important part throughout the implementation of this French-Bulgarian twinning.

The Bulgarian Project Leader is now Mrs. Zvetanka Dimitrova, Director of the Water Management Department.

www.moew.government.bg
INBO Action Plans

Malta

A Program of Measures for Maltese groundwater

A PHARE twinning agreement on the definition of the Program of Measures planned by the European Water Framework Directive (WFD), signed by the French Ministry of Ecology and Sustainable Development (MESD) and the Malta Resources Authority (MRA), was carried out from January to August 2007 and managed by IOWater, INBO Secretariat, as project operator.

Strong stakes for groundwater management

Historically, the Maltese population always had to face a relative scarcity of freshwater resources, but the increase in groundwater abstraction led to a fragile balance between recharge and withdrawal.

While technical solutions were developed (building of desalination plants), they did not allow abating the pressure on groundwater, caused by population growth, but also by the high increase of illegal boreholes.

The characterization, required by the WFD, thus classified 10 out of the 16 Groundwater Bodies "at risk of not achieving the quantitative objectives in 2015".

It showed a significant increase in concentrations of nitrates and chlorides, up to values sometimes exceeding 5 times the limits relating to drinking water. 15 out of the 16 Water Bodies were thus identified at risk or potentially at risk of not achieving Good Chemical Status.

To these stakes should be added significant needs with regard to water control and management by the institutions, but also huge requirements in terms of knowledge of these aquifers and public awareness to water management issues.

The Framework Directive demands to the Member States to develop a Program of Measures, to achieve the environmental objectives. The development of such a program, in collaboration with the Maltese experts, was thus the paramount objective of this twinning, which mobilized, during 32 assignments, 12 experts coming from French Water Agencies (Artois-Picardy, Loire-Brittany, Rhine-Meuse and Seine-Normandy), BRGM and IOWater.

The Program of Measures, developed during a 6-month cooperation between French and Maltese experts, thus attempted to provide answers to these great stakes, using a logical and participative approach. In a first step, it consisted in revising the risk assessment carried out in 2005 and in identifying the great challenges of water management.

On this basis, an identification of all the possible measures to be taken was carried out and technical and economic information on their description and their implementation was gathered in a catalogue of measures.

An economic analysis, dealing with cost/effectiveness criteria, was then carried out with 3 different scenarios and thus allowed proposing a selection suited to the Maltese situation.

Finally, the work aimed at analyzing the financial consequences of this Program of Measures for the various water stakeholders and users, as required by article 9, on cost recovery, of the Framework Directive.

The development of such a program over a short period was a great challenge for the Maltese and French experts.

The participative approach used was a significant element of success of this project: indeed, a "panel" of interested parties, representing various State administrations or water users (companies, agriculture, etc.), was involved from the start of the project, then in 3 feedback seminars at the important stages and allowed the taking into account of the opinions and remarks on the work.

In addition, regular sectoral meetings gathered the French and Maltese experts in order to propose relevant measures suited to Maltese realities.

To supplement the assignments in Malta, 3 study tours in France enabled the Maltese people in charge to exchange, with their French and European counterparts, their experience in WFD implementation but also to discover precise examples of groundwater management bodies (Syndicates for Alsace, Rousillon and Astien aquifers).

John Mangion
Water Director
Malta Resources Authority
John.mangion@mra.org.mt

www.mra.org.mt

Malta: Twinning on the WFD

Malta has to provide, like the other Member States of the European Union, its first Management Plan under the Water Framework Directive at the beginning of 2010.

Under the aegis of the French Ministry of Ecology, the International Office for Water, INBO Secretariat, and the French Rhône-Mediterranean & Corsica, Rhine-Meuse, Loire-Brittany and Adour-Garonne Water Agencies and also the French Water Agencies Bureau in Brussels, have conducted, with European financing, a 6-month Twinning with two Maltese institutions to prepare the documents necessary for the Management Plan of Malta. In fact, Malta has the originality to have two competent Authorities: the Malta Resources Authority (MRA) for groundwater and the Malta Environment and Planning Authority (MEPA) for surface water.

Close work with these two institutions has been carried out to produce a common Management Plan which is dealing with all issues of the Directive, the drafting of a strategy for the participation of the public and partners, and the creation of a website.

Two study visits from Maltese experts in France were organized with the French Rhône-Mediterranean & Corsica Water Agency to illustrate the proposed solutions in the management of groundwaters and coastal waters. All the Maltese personnel have been trained in using the tools and instruments produced during the twinning.

The further implementation of the Directive seems thus on a good path in Malta.

Jean FAURE-BRAC
Rhône-Mediterranean Corsica Water Agency
Fax: 33 (0)4 72 71 26 06
Jean.FAUREBRAC@eaurmc.fr

www.eaurmc.fr
With the prospect of Turkey’s possible accession to the European Union, a twinning agreement, called “Capacity Building Support to Turkey for the Water Sector” started in October 2007. The Netherlands, the United Kingdom and Slovakia will assist Turkey in water management in line with the EU water legislation, the Water Framework Directive (WFD) 2000/60/EC of 23 October 2000 in particular, the Urban Wastewater Treatment Directive 91/271/EEC of 21 May 1991 and the Dangerous Substances Directive 76/464/EEC of 4 May 1976 and daughter directives in order to enable the implementation of the EU community water “acquis” before Turkey’s accession.

The project lasted 27 months and had four components: a legal and institutional gap analysis, implementation plans, a pilot project in a Turkish river basin and a communication plan.

The progress report of this project was presented in “INBO special session” during the International Yellow River Forum, in October 2009 in China.

Henk Sterk
Resident Twinning Advisor
Ministry of Agriculture, Nature and Food Quality
h.j.sterk@minlnv.nl

The Government of the Tocantins State is the contracting authority for two studies on the formulation of Master Plans for the Rio Manoel Alves and Rio Palma Basins, financed by the World Bank.

Both rivers are born in the buttresses of the Serra Geral, are fed by the huge Urucuia aquifer and run from East to West to the Rio Tocantins, itself tributary of the Amazon. This year, a state of emergency was declared in several communities of the study area because of drought. The Master Plans of the Rio Manoel Alves and Rio Palma Basins will have to allow for better mobilization of the available water . . . or better organization of the human activities according to water availability.

For the Government of the Tocantins State, implementing a Basin Master Plan means the possibility of orientating the economic development in such a way to be sustainable and respectful of the environment. There are large dam projects for irrigation purpose in the Rio Manoel Alves and Rio Palma Basins. Several hydropower stations are being built, others are planned. The area is favorable to the cultivation of sugar cane for the production of ethanol. At the same time, there is a great potential for the development of ecotourism. Among all these possibilities, the stake of the Master Plans is to enable the local stakeholders to collectively say what they wish for the future of their area in the short, medium and long terms.

www.recursoshidricos.to.gov.br
The MELIA Project (Mediterranean Dialogue for Integrated Water Management) is a coordinated INCO-Med action financed by the European Union within its 6th FPRD.

Led by CSIC, Spain, it gathers 45 organizations from 16 Member and non-Member States of the European Union. The gathering of bodies of different nature (public authorities, international organizations, NGOs, universities, etc.) is a fundamental feature of this project. It started in September 2006 and will be completed in 2010.

MELIA aims at evaluating the methods for Integrated Water Resources Management (IWRM) in the Mediterranean countries, using the regulations of the European Water Framework Directive (WFD) to harmonize water policies in the Mediterranean Basin.

Its objectives are to:

- develop awareness on social (cultural and participative), economic and technical issues related to water management on the Mediterranean scale;
- propose participation mechanisms and prevention tools to avoid competition for the allocation of the resource between the regions and the various water users;
- support sustainable water policies, provide the institutions with criteria accepted by a broad representation of the social, economic, scientific and political stakeholders of the various countries;
- provide indicators to implement benchmarking of IWRM in the Mediterranean region;
- facilitate the development of a common language to contribute to water-related negotiations.

In the MELIA project, the International Office for Water, as INBO Secretariat, and MENBO lead the “Water Policy” working group, which aims at analyzing the water policies of the various countries represented in the project, using a common conceptual framework.

The project allowed the identification of the main problems related to water policies application in the region: pricing policies, groundwater management, water scarcity or development of non-conventional water resources…

Good practices and exemplary experiments were then identified. They were summarized in the document: “conceptual analysis of the water policies in the Mediterranean area”.

These elements will support one of the objectives of MELIA project: the formulation of recommendations to support the application of the principles of the Water Framework Directive in the Mediterranean area.

This means identifying the main factors which direct and condition the development and implementation of these policies (conditions of resource scarcity, sustainable — or non sustainable-developmemt approaches, etc.), how they are effectively applied, and furthering dialogue between decision-makers, lawyers and researchers in order to improve the water policies, by basing them on the example provided by the WFD, but by paying special attention to the limits of using the WFD or its principles in the Mediterranean Countries.

The MELIA Project has a website at the address:

www.meliaproject.eu
INBO Action Plans

The European network of managers of Integrated Water Resources Management research programs

The involvement of the various a
The promotion of research, as a scientific support to the implementation of public water policies, requires:

- The involvement of the various stakeholders (decision-makers, managers, researchers, users, etc.) throughout the process, for identifying the scientific contents of the research activities initiated by the network;
- Access to the information on ongoing or recently completed programs.
This is why, during the first 18 months, the IWRM-Net partners started:

- assessing the needs for water-related research, with a short-term prospect, based on a scientific review and workshops inviting the various stakeholders to express their needs;
- facilitating access to the information and analyzing existing programs;
- drafting procedures for financing, launching and following-up the research activities of the network.

2008: LAUNCHING OF THE FIRST IWRM-NET PROGRAM
The Network members participated in a meeting, held in Vienna on 8 and 9 October 2007, on the financing of the first IWRM-Net research program, divided in two parts:

- Pressures/hydrological and morphological impacts,
- Water governance.

The objectives of this meeting were to validate the scientific contents of the program as well as the procedures for its financing, the selection and follow-up of the research projects.

The program was launched in January 2008.

The donors of the first joint program met in Berlin in May 2008 to select research projects among the submitted seventeen.

Two projects called FORECASTER (Facilitating the application of the Case Studies on Ecological Responses to hydro-morphological Output from Research degradation and rehabilitation) and RIFLOW (Riparian vegetation modeling for the assessment of environmental flow regimes and climate change impacts within the WFD) were retained for the topic “Hydro-morphological pressures/impacts on good ecological status” and a project named I-FIVE (Innovative Instruments and Institutions in Implementing the Water Framework Directive) was adopted for the topic “Water Governance”. Research began during the last quarter of 2008.

IWRM-Net: a network which sees far...
Using this first experiment, IWRM-Net prepared its second call for projects for 2009.

Again, the method of identifying research needs was based on a series of regional workshops through Europe. The workshops aimed at drawing up the list of research priorities for each regional area considered:

- Valencia, Spain in June 2008, for the Mediterranean area;
INBO Action Plans

"INECO"

INSTITUTIONAL AND ECONOMIC INSTRUMENTS FOR SUSTAINABLE WATER MANAGEMENT IN THE MEDITERRANEAN REGION

INECO, "Institutional and Economic Instruments for sustainable water management in the Mediterranean Region" is a coordinated project, supported by the European Commission (6th RDFP), with specific measures for international cooperation (INCO Program) with the Mediterranean Partner Countries (MPCs).

INECO gathers 14 institutions from 10 Mediterranean countries (Greece, France, Italy, Cyprus, Tunisia, Egypt, Lebanon, Syria, Algeria and Morocco), including public, private and international organizations. The project, which extended over 3 years, began on 1st July 2006 and was completed in June 2009.

It was led by the School of Chemical Engineering of the National Technical University of Athens (Greece).

It aimed at presenting an interdisciplinary approach to water management, which integrates three main aspects: environment, economy and society.

INECO dealt with the various problems encountered in the decision-making process and with the difficulties of the current governance structures in the Mediterranean Basin. Research focused on the alternative institutional and economic instruments which allow promoting equity, economic effectiveness and environmental sustainability in water resources management.

The main goal of INECO is to develop the stakeholders’ skills and constructive commitments in Integrated Water Resources Management.

The project focuses on three challenges:

- Water sharing, with (institutional, regulatory, legislative and economic) mechanisms to be created for allocating water resources in river basins;
- Giving a value to water, with cost assessment, maximization of economic effectiveness, implementation of cost recovery and of the "user-pays" and "beneficiary-pays" principles;
- Improving the governance of water and institutional environment which allows the implementation of Integrated Water Resources Management.

In a first step, an inventory was made of the best practices and institutional and economic instruments used in the European Union, the United States, Japan, Australia, Israel, Argentina, Chile and Canada...

The project then sought to see how some of these measures could be adapted in the Southern Mediterranean countries. It then organized, with its various partners, national workshops to analyze the water related problems and to propose solutions.

SPI-Water

Facilitating the transfer of IWRM principles

Usually, the research outcomes are not easily available to the decision-makers and water managers and, on the contrary, researchers lack visibility of the users’ needs.

The SPI-Water project (2006-2008) financed by the 6th EU Framework Program for Research and Development gathers 16 European and non-European partners. It proposes practical actions to fill the gaps by developing a "science/policy" interface, focusing on a mechanism for improving the use of the research outputs resulting from the implementation of the Water Framework Directive (WFD).

For two years, the SPI-Water project has been:

- Evaluating the projects and initiatives developed in river basins for WFD implementation. The scientific knowledge, research outputs and demonstration projects thus collected were entered into the WISE-RTD knowledge base;

- Analyzing water policies in non-European countries for facilitating the implementation of the principles of Integrated Water Resources Management;

- Assessing the needs in the two Mediterranean basins of Sebou (Morocco) and Litani (Lebanon), while complying with the WFD methodological framework;

- Studying the applicability of WFD practices in non-European countries and identifying conditions for their implementations in these countries;

- Producing recommendations to improve the appropriation and dissemination of the obtained research outputs in non-European countries.

MENBO, in particular, and its partners reviewed the existing water policies in Mediterranean non-European countries and compared those with the current Water Framework Directive (WFD) practices in the European Union.

The recommendations were discussed at a final conference organized in Brussels in October 2008.

In a public report and a summarizing leaflet the partners explain how IWRM knowledge can be transferred within a research program to water managers: how these principles shall be adapted to regional specificities and how the communication between European and non-European researchers and water managers may be improved.

It finally organized a Conference for summarizing this work.

INECO more particularly dealt with:

- the analysis of the current practices used by developed countries in arid zones, other than EU Member States,
- the role of women in Integrated Water Resources Management in the Mediterranean countries,
- the organization of workshops and exchange activities.

INECO was a “social experiment” for developing skills and political structures.

INECO aimed at providing experience and enabling local societies to change their perceptions and, consequently, their water management practices and at providing complete and adaptable recommendations.

http://environ.chemeng.ntua.gr/ineco

SPI-Water Facilitating the transfer of IWRM principles

Usually, the research outcomes are not easily available to the decision-makers and water managers and, on the contrary, researchers lack visibility of the users’ needs.

The SPI-Water project (2006-2008) financed by the 6th EU Framework Program for Research and Development gathers 16 European and non-European partners. It proposes practical actions to fill the gaps by developing a “science/policy” interface, focusing on a mechanism for improving the use of the research outputs resulting from the implementation of the Water Framework Directive (WFD).

For two years, the SPI-Water project has been:

- Evaluating the projects and initiatives developed in river basins for WFD implementation. The scientific knowledge, research outputs and demonstration projects thus collected were entered into the WISE-RTD knowledge base;

- Analyzing water policies in non-European countries for facilitating the implementation of the principles of Integrated Water Resources Management;

- Assessing the needs in the two Mediterranean basins of Sebou (Morocco) and Litani (Lebanon), while complying with the WFD methodological framework;

- Studying the applicability of WFD practices in non-European countries and identifying conditions for their implementations in these countries;

- Producing recommendations to improve the appropriation and dissemination of the obtained research outputs in non-European countries.

MENBO, in particular, and its partners reviewed the existing water policies in Mediterranean non-European countries and compared those with the current Water Framework Directive (WFD) practices in the European Union.

The recommendations were discussed at a final conference organized in Brussels in October 2008.

In a public report and a summarizing leaflet the partners explain how IWRM knowledge can be transferred within a research program to water managers: how these principles shall be adapted to regional specificities and how the communication between European and non-European researchers and water managers may be improved.

It finally organized a Conference for summarizing this work.

INECO more particularly dealt with:

- the analysis of the current practices used by developed countries in arid zones, other than EU Member States,
- the role of women in Integrated Water Resources Management in the Mediterranean countries,
- the organization of workshops and exchange activities.

INECO was a “social experiment” for developing skills and political structures.

INECO aimed at providing experience and enabling local societies to change their perceptions and, consequently, their water management practices and at providing complete and adaptable recommendations.

http://environ.chemeng.ntua.gr/ineco

SPI-Water Facilitating the transfer of IWRM principles

Usually, the research outcomes are not easily available to the decision-makers and water managers and, on the contrary, researchers lack visibility of the users’ needs.

The SPI-Water project (2006-2008) financed by the 6th EU Framework Program for Research and Development gathers 16 European and non-European partners. It proposes practical actions to fill the gaps by developing a “science/policy” interface, focusing on a mechanism for improving the use of the research outputs resulting from the implementation of the Water Framework Directive (WFD).

For two years, the SPI-Water project has been:

- Evaluating the projects and initiatives developed in river basins for WFD implementation. The scientific knowledge, research outputs and demonstration projects thus collected were entered into the WISE-RTD knowledge base;

- Analyzing water policies in non-European countries for facilitating the implementation of the principles of Integrated Water Resources Management;

- Assessing the needs in the two Mediterranean basins of Sebou (Morocco) and Litani (Lebanon), while complying with the WFD methodological framework;

- Studying the applicability of WFD practices in non-European countries and identifying conditions for their implementations in these countries;

- Producing recommendations to improve the appropriation and dissemination of the obtained research outputs in non-European countries.

MENBO, in particular, and its partners reviewed the existing water policies in Mediterranean non-European countries and compared those with the current Water Framework Directive (WFD) practices in the European Union.

The recommendations were discussed at a final conference organized in Brussels in October 2008.

In a public report and a summarizing leaflet the partners explain how IWRM knowledge can be transferred within a research program to water managers: how these principles shall be adapted to regional specificities and how the communication between European and non-European researchers and water managers may be improved.

It finally organized a Conference for summarizing this work.

INECO more particularly dealt with:

- the analysis of the current practices used by developed countries in arid zones, other than EU Member States,
- the role of women in Integrated Water Resources Management in the Mediterranean countries,
- the organization of workshops and exchange activities.

INECO was a “social experiment” for developing skills and political structures.

INECO aimed at providing experience and enabling local societies to change their perceptions and, consequently, their water management practices and at providing complete and adaptable recommendations.

http://environ.chemeng.ntua.gr/ineco

SPI-Water Facilitating the transfer of IWRM principles

Usually, the research outcomes are not easily available to the decision-makers and water managers and, on the contrary, researchers lack visibility of the users’ needs.

The SPI-Water project (2006-2008) financed by the 6th EU Framework Program for Research and Development gathers 16 European and non-European partners. It proposes practical actions to fill the gaps by developing a “science/policy” interface, focusing on a mechanism for improving the use of the research outputs resulting from the implementation of the Water Framework Directive (WFD).

For two years, the SPI-Water project has been:

- Evaluating the projects and initiatives developed in river basins for WFD implementation. The scientific knowledge, research outputs and demonstration projects thus collected were entered into the WISE-RTD knowledge base;

- Analyzing water policies in non-European countries for facilitating the implementation of the principles of Integrated Water Resources Management;

- Assessing the needs in the two Mediterranean basins of Sebou (Morocco) and Litani (Lebanon), while complying with the WFD methodological framework;

- Studying the applicability of WFD practices in non-European countries and identifying conditions for their implementations in these countries;

- Producing recommendations to improve the appropriation and dissemination of the obtained research outputs in non-European countries.

MENBO, in particular, and its partners reviewed the existing water policies in Mediterranean non-European countries and compared those with the current Water Framework Directive (WFD) practices in the European Union.

The recommendations were discussed at a final conference organized in Brussels in October 2008.

In a public report and a summarizing leaflet the partners explain how IWRM knowledge can be transferred within a research program to water managers: how these principles shall be adapted to regional specificities and how the communication between European and non-European researchers and water managers may be improved.

It finally organized a Conference for summarizing this work.

INECO more particularly dealt with:

- the analysis of the current practices used by developed countries in arid zones, other than EU Member States,
- the role of women in Integrated Water Resources Management in the Mediterranean countries,
- the organization of workshops and exchange activities.

INECO was a “social experiment” for developing skills and political structures.

INECO aimed at providing experience and enabling local societies to change their perceptions and, consequently, their water management practices and at providing complete and adaptable recommendations.

http://environ.chemeng.ntua.gr/ineco
Performance Indicators for the African Basin Organizations

Performance indicators are now regularly used in the management of drinking water supply and sanitation utilities. For a few years, experiments have been made for their use by Basin Organizations to define criteria for the evaluation of Integrated Water Resources Management.

In order to propose an approach to the adaptation and integration of African specificities in this field, the International Network of Basin Organizations, through the African Network of Basin Organizations (ANBO), with the support of the International Office for Water and Ecologic, launched a project aiming at developing, testing and comparing Performance Indicators for the African Basin Organizations.

This project, financed by the European Water Facility and the French Ministry for Foreign Affairs, is lasting 3 years and involving ten African river basins during 2 test phases. The first phase for testing the use of these indicators was launched in November 2007. It involved the Senegal, Niger, Congo, Orange-Senqu and Okavango River Basins.

After a seminar organized in Ouagadougou in November 2007, a first list of indicators was proposed. These indicators belong to two categories:

- the first one (Governance) aims at describing the operation of the bodies in charge of implementing integrated management on a transboundary basin scale,

- the second one (Technical) gathers indicators related to the field practical outcomes of this basin management approach.

The testing of this first list of indicators in the Niger, Congo, Senegal, Lake Victoria and Orange basins allowed analyzing their relevance and usefulness.

A seminar for the presentation and analysis of the first results was organized in Kinshasa in October 2008, then in Istanbul in March 2009.

The table of indicators thus could be refined for better describing:

- the governance and operation of the organizations in charge of integrated management on a transboundary basin scale,

- the status, pressures and evolution of transboundary river basins.

The last testing phase is been carried out at the end of 2009 and at the beginning of 2010 in 10 transboundary basins to refine the results and to lead to a final list of performance indicators.

It will then be advisable to make this experiment and tool known in other African basins and worldwide.

For further information:

http://aquacoop-e.org/PITB

Information and data

Eastern Europe - Caucasus - Central Asia


Management of data on transboundary water resources

With more than 50% of their territory covered by transboundary basins, the countries of Eastern Europe, Caucasus and Central Asia strongly depend on shared water resources: it is thus of prime importance to develop effective management policies in these basins for managing these resources while respecting natural water balances, more especially as regards climate change.

The implementation of these policies implies above all having a complete and detailed assessment of the water resources, based on homogeneous and consistent information.

However, apart from some specific cases, access to the information necessary for water resources management remains often problematic in the area as in many other areas of the World.

In such a context, the Secretariat of “the UN Convention on Protection and Use of Transboundary Rivers and International Lakes” carries out water resources assessments in this area.

A pilot project could be implemented in 2010 in 2 pilot transboundary basins. It will include:

- A component aiming at building the data administration and sharing capacities of the national and local Authorities involved in each of the 2 basins, by using methodologies that can be replicated in other transboundary basins of the region.

- Regional actions aiming at using the results obtained in these 2 pilot basins and at disseminating the defined methodologies in the other transboundary basins and countries of the region.

For each pilot basin, the project proposed:

- Characterization of the existing data sources with joint production of catalogues;

- Development of “Water Data Master Plans” at basin level;

- Recommendations on rules for sharing data among the competent authorities;

- Specification of the needs for strengthening the data producers and managers’ abilities;

- Capacity building for the production of synthetic information (maps, indicators) on priority topics.

The French Ministry of Ecology (MEESDS) supports this initiative as regards the preliminary design and feasibility studies, carried out by IOWater, Permanent Technical Secretariat of INBO, which should allow the pilot project to be financed by the French Global Environment Facility (FFEM) in 2010.

www.unece.org
African Water Datacumentation and Information System (AWIS)

Towards an African Water Information System for better regional integration of knowledge on local water management

**AWIS** is a project financed by the Water Facility of the European Union and the French Ministry for Foreign and European Affairs. It is managed by a consortium of partners from Northern and Southern Africa: the African Network of Basin Organizations (ANBO) and its secretariat, the Organization for the Development of the Senegal River (OMVS), the Regional Center for Drinking Water Supply and Sanitation (CREPA), the International Office for Water, INBO Secretariat, the Solidarité-Eau program (PS-Eau) and the Water Engineering Development Centre (WEDC).

The project aims at testing the feasibility of an African Water Information System. The major objective of the project is to offer an instrument which allows sharing African expertise, information and abilities.

The first meetings of AWIS Steering Committee were held in Paris at IOWater in April 2007 and in October 2007 in Dakar at OMVS head office. The consortium, which manages AWIS, carried out, from the start, a survey involving about twenty bodies distributed throughout the African continent to identify the interest of the African stakeholders in this project, their needs and their expecta-

A knowledge base is at the core of the system. It consists of documentary notes filled up by the Focal Points; a search engine allows making an inventory of the studies available with the partners. The AWIS system entered a field testing phase during a kick-off workshop held from 27 to 30 October in Ouagadougou for launching and training the FPs. For 6 months, the Focal Points have tested the tool and made comments to improve the system.

The core of AWIS strategy is its Internet portal: [www.african-wis.org](http://www.african-wis.org) operational since January 2009. This portal proposes:

- a search engine which identifies the information available at the various partners,
- electronic conferences,
- forums of exchanges,
- current events of the sector,
- a directory of the African water stakeholders,
- AWIS products: news bulletin, bibliographical syntheses, technical sheets...

Today, the portal has entered about 60 current events, 174 referenced documents, 93 websites indexed by AWIS Focal Points.

**AWIS** process does not aim at replacing the existing information centers, but, on the contrary, at developing them and facilitating access to the information they manage, at referencing high quality information on the Africa water sector, and at proposing free access to this information via an Internet portal.

**A partners’ network**

**AWIS steering committee identified 12 partners, called Focal Points - FPs, distributed over French and English-speaking Africa.** A Focal Point is a body with its network specialized in the field of water (drinking water supply, sanitation, IWRM, basin management, etc.). It contributes to feeding AWIS portal and participates in the development of products of common interest on topics predefined by AWIS community: topical newsletters, guidance documents, topical or geographical summaries, conferences, etc.

The project is training the people in charge of these Focal Points on the practical methods for information management and on all the skills required for feeding AWIS portal. Sub-networks may be created to develop AWIS products.

**The information system**

“AWIS portal” is a window of Pan-African information; it does not create information but directs towards information. It identifies and indexes the information available with its partners having the information (FPs) and sends the visitor towards their website.

---

**INBO Action Plans**

**African Water Datacumentation and Information System (AWIS)**

**Meeting of AWIS Steering Committee at IOWater head office in Paris**
INBO Action Plans

EMWIS: 20 National Focal Points exchange their information on water

Operational since the end of 1999, the Euro-Mediterranean Water Information System (EMWIS) is an essential tool for dialogue and institutional exchange between the concerned Countries of the Euro-Mediterranean Partnership.

It fits in with the decisions made by the Ministers at the Conferences of Marseilles (1996) and Turin (1999) on local water management.

The significance of the completed work was underlined by the Partnership Countries, which also reaffirmed their will to continue cooperating on the basis already defined during the Euro-Mediterranean Conference of Athens in November 2006.

EMWIS and INBO are bound by a Partnership Agreement signed during MENBO General Assembly in Marrakech in May 2004.

SYNTHESIS AND KNOWLEDGE TRANSFER

Two working groups, led by EMWIS within the EU Water Initiative in the Mediterranean and Water Framework Directive joint process, are sharing experience and gathering information on:

- Water monitoring networks and programs, for which a survey-based inventory was prepared and discussed during a workshop organized as a side event of MENBO General Assembly in Beirut in October 2009. This inventory contributes to the work of the monitoring sub-group of Horizon 2020 Initiative aiming at removing pollution in the Mediterranean Sea and of the experts’ group on water of the Union for the Mediterranean;
- Drought and water scarcity, for which a workshop was organized in November 2009 in Spain to evaluate the indicators used by the Partner Countries and those proposed at the European level and to analyze case studies on the mitigation measures planned by the countries. This work will result in a regional synthesis in 2010.

A Web portal in full expansion

The new international portal of EMWIS receives about 50,000 monthly visits on the average: about 1,000 news and more than 500 events are published every year.

Its thesaurus on water is now available in 5 languages (Arabic, English, Spanish, French and Italian). These actions will be supplemented in 2010 by the updating of the water thesaurus accessible on line in 7 languages (English, Arabic, Spanish, French, Italian, Greek and Turkish) on EMWIS website in order to take into account the vocabulary specific to water accounts, the Horizon 2020 Initiative and some concepts suitable for water management in Arab countries.

The electronic flash (e-Flash) is sent every month to more than 14,000 readers in Arabic, English and French. It not only allows incorporating the information provided by the NFPs and various topical websites, but also providing flows of information in real time for other websites (e.g. Alliance for water monitoring, INBO, etc.).

It is a reference media for water information in the Euro-Mediterranean area and a collaborative working tool for the working groups of the WFD/Med-EUWI Joint Process.

Thanks to a toolbox based on free software, which enables to generate very powerful Web portals in a simple way, Jordan launched its new bilingual (English-Arabic) EMWIS portal in May 2007, in cooperation with the main national stakeholders.

NATIONAL WATER INFORMATION SYSTEMS

EMWIS has 16 national websites with the launching of the Egyptian website.

The 20 National Focal Points (NFPs) do not spare their efforts to revise their site and produce contents useful for the national stakeholders of the water sector. The know-how acquired by Algeria, Spain and France in the technical and organizational implementation of their National Water Information Systems enables to facilitate the actions of the other countries.

TOWARDS THE CREATION OF A MEDITERRANEAN WATER INFORMATION MECHANISM

According to the mandate given to EMWIS by the Euro-Mediterranean Ministers during the Turin Conference on Local Water Management, the Euro-Mediterranean Water Directors agreed to study, with the voluntary countries, the feasibility of "a Water Information Mechanism in the Mediterranean".

This study is coordinated by EMWIS Technical Unit and the Water Directorate of the French Ministry of Ecology and Sustainable Development, and carried out with the technical support of IOWater, INBO Secretariat, owing to its expertise in the field of shared water information systems.
The first phase of the study, aiming at identifying the objectives and the main prospects of such a mechanism, was carried out in 2006 and its first results were presented during the Water Directors’ Conference in Athens (November 2006).

A second phase, which was completed at the end of 2007, enabled to identify detailed proposals for the implementation of this mechanism. The study results were presented during the Water Directors’ meeting in Bled (December 2007) and enabled to specify:

- The objectives and overall principles of the mechanism;
- The main common measures to be adopted for promoting the production and enhancement of interoperable water data;
- The possibility of building the national capacities of data services, especially for the production of data of common interest, which meet national expectations while being compatible with the expectations at the regional level;
- The priority topics such as the production of ‘Millennium Water Indicators’, the indicators of the Mediterranean Strategy for Sustainable Development, etc.;
- A program for the mechanism implementation with an estimated budget.

A pilot project for harmonizing data for the implementation of the Tunisian National Water Information System (SINEAU) began in June 2009. It is based on the System of Economic and Environmental Accounting for Water - SEEAW - defined by the United Nations, and on the work undertaken in this field in the MEDSAT II project with the Statistic Institutes of each country.

This action prepares the implementation of “SINEAU” which will start at the beginning of 2010 thanks to a financial support from the African Water Facility. It allowed preparing a draft-agreement between the stakeholders to identify the basic data to be integrated into “SINEAU” to feed the “Water Accounts” and to use the data produced by the various Tunisian parties. A second pilot activity is being analyzed in Lebanon.

FOR HARMONIZING WISE AND EMWIS

Thanks to the support reiterated by the DG Environment of the European Commission, two series of actions were carried out by EMWIS to help the Mediterranean Partner Countries organize their water data, to facilitate their access and to acquire the knowledge necessary for good management. This project is based on the good practices resulting from the Water Information System for Europe (WISE).

First of all a generic model at three levels (entity, variables, attributes) was defined to represent and manage information on water. This model supplements the technical recommendations of the WISE system to guarantee communication possibilities with the National Information Systems and the comparison of data. A drafted technical guidance document based on this model was presented to EMWIS National Focal Points and is available for the countries to build their own system.

A prototype catalogue of the sources of water information in the Mediterranean area was then implemented after analysis of the existing experiments, of the tools available in open source software, of the requirements of the European INSPIRE Directive on spatial information and of the WISE system.

This catalogue is a kind of inventory which allows easy search by key words or on a map and gives access to descriptive sheets of the data sources (maps, data bases, reports, online services), and even direct access to the data when the owner allows it. The use of international standards and common rules by all the interested parties will allow an automatic collection of these sheets.
Communication strategy

INBO Newsletter

River Basin Management It works!

La gestion par bassin ça marche!

S’adapter aux conséquences du changement climatique

Adaptar a las consecuencias del cambio climático

Adapting to the consequences of climate change

Progress report 2007 - 2009
Communication strategy

E-letter

Website

All information is available on the Web
The website
of basin management
over the world

- The International Network of Basin Organizations
- INBO World General Assembly
  Dakar - Senegal - 20 - 23 January 2010
- The Regional Networks of Basin Organizations:
  - Africa - ANBO
  - Asia - NARBO
  - Latin America - LANBO
  - North America - NANBO
  - Brazil - REBOB
  - Central Europe – CEENBO
  - Eastern Europe, Caucasus, Central Asia - EECCA - RBO
  - The Mediterranean – MENBO

"EUROPE-INBO":
European Water Framework Directive implementation

- The Network of International Commissions
  and Transboundary Basin Organizations

Privileged links with websites:
worldwaterforum5.org / worldwatercouncil.org
gwpforum.org / iowater.org / emwis.net
unesco.org / water.europa.eu

Secretariat: International Office for Water
21, rue de Madrid - 75008 PARIS - FRANCE
Tel.: +33 1 44 90 88 60 - Fax: +33 1 40 08 01 45
Mail: inbo@wanadoo.fr
N° ISSN : 1265-4027

"INBO Newsletter" is published with the support of the Water Agencies,
the French Ministries of Ecology, Energy, Sustainable Development and the Sea,
and for Foreign and European Affairs

Publishing Director: Christiane RUNEL
Editing - Translation: Gisèle SINE
Production: Frédéric RANSONNETTE