Report of Activities 2013 - 2016

under the World Presidency of Mr. Lupercio ZIROLDO ANTONIO, President of the International Network of Basin Organizations 2013 - 2016

- INBO -

www.inbo-news.org
We should more than ever build bridges between Basins, Regions, States and Countries worldwide for finding solutions for the recovery and conservation of our water resources.

To cooperate means to join our efforts to follow the same path, integrating and optimizing outcomes for the benefit of all.

By nature water is meant to unite peoples.
There are many places in the world where water resources are degraded, rivers are dead, ecosystems are devastated and groundwater is polluted.
In this context of global change, the participation of the whole society in water resources management is crucial.

In this sense, access to information is the basis for dialogue between all parties involved and for their mobilization.

The International Network of Basin Organizations is supporting this great surge of daily participation in the field for protecting our rivers, lakes and aquifers.

We have to share our ideas, our projects and our solutions.
We will integrate our ideals and our vision into the Sustainable Development Goals, always in the direction of effective cooperation for our water resources.

Lupercio Ziroldo Antonio
President of the International Network of Basin Organizations
Governor of the World Water Council

www.inbo-news.org
Peru

Conference on integrated basin management

Peru has started a major reform of its water policy.

In 2012, a new law reformed the calculation of economic “retributions” (fees) for water use and wastewater discharge.

Under a project funded by the World Bank, the International Office for Water, INBO Secretariat, brought its expertise for the definition of a methodology, which is ambitious, pragmatic, socially and economically acceptable.

Today, these “retributions” are effectively collected.

Second International Symposium on Lake Titicaca

“a shared responsibility”

7 - 9 March 2013 - Puno - Peru

The Symposium gathered more than three hundred participants.

The organizers aim to institutionalize the Symposium as a Forum for technical and scientific treatment of the problems and potentialities of Lake Titicaca, in order to build environmental responsibility between public and private stakeholders; with a participatory approach.

INBO Secretary, Jean-François Donzier, was invited to make the introductory speech to the Conference on the topic of the best experiments of basin management worldwide.

The Binational Autonomous Authority of the Water System (TDPS – ALT) in coordination with the various institutions involved in the preservation and conservation of the basin in Peru and Bolivia organized on 7, 8 and 9 March 2013 the “Second International Symposium on Lake Titicaca - a shared responsibility”.

This event aimed to bring together all the experts concerned to enrich the scientific and technical debate and propose to government Authorities, alternatives for integrated management of water resources shared by the two countries, as well as generate proposals for management tools for sustainable use of Lake Titicaca and its basin, fed by five tributaries: Ramis, Huancañé Coata, Ilave and Suche and the Desaguadero River.

Presentation of the French and European water policy

On the occasion of the International Symposium on Lake Titicaca organized on 7, 8 and 9 March 2013, Mr. Jean-François Donzier, Secretary of the International Network of Basin Organizations (INBO), was invited by the National Water Authority (ANA) to give in Lima a keynote speech on the water policy applied in France and in Europe for 50 years.
High-level meeting on national drought policies

11 - 15 March 2013 - Geneva - Switzerland

Droughts are causing the deaths and displacement of more people than cyclones, floods and earthquakes combined. These natural disasters are therefore the most destructive ever. Yet while the frequency, magnitude and intensity of droughts are expected to increase as a result of climate change, there are few countries having effective drought management policies to fight against this scourge.

Three United Nations Agencies are now joining forces to facilitate the development and implementation of practical policies at the national level, focusing on prevention, to develop the adaptive capacity of drought-prone countries.

The high-level meeting on national drought policies intended to encourage countries to move progressively from an after-the-fact approach to a forward-looking policy, as it is already the case for tropical cyclones and flooding.

Goals:

- Foster greater collaboration to enhance the national, regional and global observation networks and information delivery systems to improve public understanding of and preparedness for drought;
- Add comprehensive public and private insurance and financial strategies into drought preparedness plans;
- Define safety nets for emergency relief based on sound management of natural resources and self-help at different governance levels;
- Effective coordination, focused on users’ needs, of drought programs and response measures;
- Build adaptation capacities and focus efforts.

Asia-Europe Meeting

ASEM (Asia Europe Meeting) is an informal intergovernmental dialogue to strengthen the partnership between Asian countries and Europe.

ASEM is working on the conservation of water resources

In June 2012, a dialogue on sustainable development and the environment took place in Budapest.

At the initiative of Vietnam, a conference was held from 20 to 23 March 2013 in Can Tho in the Mekong Delta, on the topic of water resources and river basin management.

Nearly 150 delegates from 51 ASEM Member Countries and relevant organizations presented measures to assist these Member Countries in adopting a model for sustainable development.

Thus, new approaches were proposed for poverty alleviation and food security, infrastructure construction and the establishment of institutions to adapt to the impacts of climate change.

Mr. Jean-François Donzier, INBO Technical Secretary, made a speech on the European water management policies, and presented the cooperation actions carried out on this topic in Asia, particularly in China and in the Mekong River Basin, under twinning arrangements with French Water Agencies.

www.aseminfoboard.org
At the invitation of the General Directorate for Water Management of the Turkish Ministry of Water and Forestry, the second high-level international symposium on river basin management was held from 16 to 18 April 2013 in Nevsehir (Cappadocia, Turkey).

It gathered representatives of the European Commission, EU member countries (Spain, Greece, Bulgaria, Portugal, Netherlands, France, Hungary, Croatia) and experts from institutions and Non-Governmental Organizations, including INBO.

The second day was devoted to presentations of practices and experiments in the different represented countries in river basin management, including the drafting of river basin management plans, how to overcome the problems, the difficulties in the implementation of the cost recovery principle, the implementation of the European Blueprint and its consequences, etc.

The third day was devoted to technical visits (Kayseri WWTP and Yamula Dam).

www.suyonetim.gov.tr
Preparation of the 7th World Water Forum - Daegu 2015

Kick-off meeting

After Marseilles in 2012, Daegu and Gyeongju, in South Korea, will host the 7th World Water Forum from 12 to 17 April 2015.

The kick-off meeting was held from 13 to 15 May 2013 in Seoul and Daegu, with more than 500 experts from 41 countries.

A roadmap was established, divided into different processes (thematic/regional/political/technological) for the preparation of the Forum.

The International Network of Basin Organizations (INBO) was officially invited to this kick-off meeting, especially to the roundtable on water governance and transboundary basin management.

INBO will also be involved through its Regional Networks in the Forum’s Regional Process.

The European Regional Process in particular was launched on 19 May 2014 in Brussels and the issues in which the EUROPE-INBO Group, CEENBO and MENBO will get involved are:

- The European Directives and the “Blueprint”;
- The management of European transboundary rivers;
- European tools for adaptation to climate change.

http://worldwaterforum7.org

North-American Network of Basin Organizations (NANBO)

Second Water Forum in Quebec

Four great challenges

From 27 to 29 May 2013, the second Water Forum was held in Lake Beauport, in the region of Quebec, at the initiative of the North American Network of Basin Organizations (NANBO) and the Regrouping of the River Basin Organizations of Quebec (ROBVQ), with Ducks Unlimited Canada, the First Nations of Quebec and Labrador’s Sustainable Development Institute, the Association of the Regional Land Use Planners of Quebec and the Laval University Research Chair on Drinking Water.

This meeting gathered more than 170 participants from Quebec and North America.

Four big themes were selected.

- Conservation and enhancement of wetlands: different models prevail in the United States, Quebec and the Atlantic Canadian Provinces.
- Participation of First Nations in integrated water management: better understanding of the social and cultural challenges facing watershed organizations to ensure an active participation of these communities in water governance.
- Land use planning and security: floods are more and more frequent in Quebec like in many other countries in North America.
- Protection of fresh water sources.

More than 30 speakers attended this event, coming from the United States, France, Quebec, Manitoba, Prince Edward Island and Ontario.

Everyone agreed to underline the relevance of such an event.

In fact, the sharing of experiences and knowledge is fundamental, at regional, national and international level, to progress toward better integrated water management.

It seems even more evident that good water governance goes first through an increasing collaboration between all different stakeholders concerned.

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**Events 2013**

**Jordan**

"This is water", Conference on Water and Agriculture

As a continuation of the 6th World Water Forum, and under the International Year for Water Cooperation, the Royal Scientific Society of Jordan (RSS) and the French Institute of Jordan organized in Amman, from 4 to 6 June 2013, a day of roundtables on Water and Agriculture inaugurated by Her Royal Highness Princess Sumaya bint El Hassan, President of the RSS.

IOWater, INBO Secretariat, was invited to present the French system of water resources allocation between sectors and the participation of users and the public in this process.

In the context of the Arab Spring, of the growing imbalance between water needs and available resources in Jordan and, at a time when the Jordanian authorities are actively thinking about involving the users in water management, this presentation, followed by a discussion with the water authorities and representatives of the "Highland Water Forum", was particularly fruitful.

The "Highland Water Forum" is a pilot project of the Jordanian Ministry of Water and Irrigation for the implementation of the dialogue principle in the local management of scarce and shared groundwater resources, supported by GIZ, in close cooperation with the French Embassy.

**Eastern Europe - Caucasus - Central Asia**

**Eighth International Conference on "Rivers of Siberia and Far East"**

The Conference timed on the World Nature Conservation Day was held in Irkutsk City on 6-8 June 2013.

The Conference was attended by 100 representatives of organizations from 16 regions of Russia, as well as of international nature conservation organizations from China, Mongolia, USA, Australia, Central and South-East Asian countries, and by the Head of the Environmental Department of the United Nations Economic Commission for Europe.

The Executive Secretary of the Network of River Basin Organizations of Eastern Europe, Caucasus and Central Asia (EECCA-NBO), Prof. V. Dukhovny, participated in the Conference.

The key topics of the Conference were as follows:

- Biodiversity of rivers and lakes: assessment and conservation.
- Environmental monitoring of water bodies.
- Impact of hydraulic facilities and use of underground resources on water ecosystems.
- Experiences in basin management in various parts of the world (Aral Sea Basin in Central Asia, Mekong River Basin in South-East Asia, Great Lakes and St. Lawrence River in North America).
- Initiatives of local communities, municipal authorities and nongovernmental organizations for the conservation of rivers, lakes, development of ecotourism, ecological education and public awareness.
- Definition of ecological indicators for hydropower plant construction projects in the Amur River Basin.
- Opportunities for the development of ecotourism.

Four roundtables were organized on the following issues:

1. Ecological assessment of river basin development plans and programs.
2. Joint actions towards the conservation of the Selenga-Baikal, Angara and Yenisey Basins.

Prof. Victor Dukhovny
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The 9th General Assembly of the International Network of Basin Organizations took place in Fortaleza, in Brazil, from 13 to 16 August 2013. It gathered 319 delegates, coming from 49 countries. The meeting dealt with the adaptation to the world great challenges that are population growth, increasing food and energy demand or the effects of Climate Change, which were discussed during five round tables:

- Water management in the new post 2015 Sustainable Development Goals of the UN;
- Adaptation to the effects of climate change and prevention of extreme phenomena of floods and droughts;
- Institutional frameworks for action of Basin Organizations and participation of local authorities, water users and the public;
- Management of transboundary rivers, lakes and aquifers;
- Financing of water management and of basin organizations.

From the debates, it emerged that integrated water resources management in basins, whether local, national or transboundary, is essential worldwide. The experiments of integrated basin management carried out today in many countries, some of which are fifty years old, show the relevance of this approach.

The General Assembly reaffirmed some conditions to guarantee the success of basin management:

- It is compulsory to develop approaches which integrate surface, ground and coastal waters, seek cross and inter-sectoral solutions, reduce pressures on available resources, restore the hydro-morphology of rivers and protect or restore aquatic ecosystems.
- Integrated information systems should allow having knowledge on resources and their uses, on polluting pressures, ecosystems and their functioning, risks and evolution follow-up. Production and availability of reliable information and data are essential to enable a constructive dialogue between partners, facilitate decision-making and evaluate the results of the implemented policies. These information systems should take data on climate change into account.
- Basin management plans or master plans, established through dialogue with all the stakeholders should define the medium and long-term objectives to be achieved, through the development of Programs of Measures and successive multiyear priority investments.
- Sustainable financing of water resources management and of the basin organizations, that are in charge of it, must be guaranteed regarding investments and operation, and based on the application of the "polluter pays" and "user pays" principles, ensuring all necessary geographical and cross-sectoral equalizations and true solidarity between all categories of users by combining national or local administrative taxes, the pricing of community services, and taxes specific to objectives selected through dialogue.

At the side of the relevant Governmental Administrations, active participation in decision-making of the local Authorities concerned, including municipalities, representatives of different categories of users and associations for environmental protection or of public interest should be organized.

The establishment of Basin Committees or Councils seems to be the best way of ensuring all the stakeholders’ participation, provided that they have the necessary resources made available. These Basin bodies should be involved in the decision-making related to water policy in their basin, with procedures and a mandate clearly defining their role. They allow establishing the necessary cross-sectoral links for the exchange of information and dialogue among all the partners. Their establishment or their reinforcement should be a priority for the donors.

"The World PACT for better river basin management", initiated by INBO in March and signed today by 128 organizations from the whole world, is based on all these principles.
Adaptation to the effects of global and climate changes is a local and worldwide priority!
The social, economic and ecological consequences may be very significant and require a quick mobilization to prepare the necessary adaptation programs in each basin, taking account of surface and groundwater. This applies to many sectors such as hydropower and cooling of thermal and nuclear power plants, food production with irrigation, fisheries and aquaculture, urbanization with the needs for drinking water supply, sanitation and tourism or inland waterways transport, etc.

The water sector is one of the most directly affected by changes in the hydrological cycles, and thus in the spatial and temporal availability of resources and in impacts on all uses.

The assessment, using various scenarios, of the hydrological consequences of global changes, is quickly required in each basin. Research and prospective efforts should be increased and accelerated to give local field decision makers the essential elements for designing appropriate and necessary diversified programs.

It is also essential to prepare future generations by developing educational tools and youth participation, relying particularly on Youth Water Parliaments.

Anticipation, the taking into account of uncertainty and the capacity to plan on the long term should be the new bases of water management policies.

The exchange of information on good practices is essential. UNECE and INBO have started to establish a network of pilot basin organizations to test measures for adapting to climate change.

With regard to floods, the “upstream-downstream common cause” should be the basis of consistent and coordinated management on the scale of basins and sub-basins both for prevention and protection. This is especially true in transboundary basins where cooperation between riparian States should be promoted.

The prevention of droughts must be planned in the long term in each basin, by solving the structural problems which occur, in order to prevent, in the best possible way, their effects and to avoid the total degradation of water resources.

All the uses are concerned, especially water use in agriculture, which must be rationalized as well as possible. Pressures on water resources require looking for new ways, such as the use of non-conventional water and reuse of treated water. Mobilizing new resources and creating new reserves are needed; this should be done after making sure that water demands are rationalized and that projects are ecologically acceptable and economically reasonable. “No regret” approaches should be sufficiently flexible to adapt to highly fluctuating situations in the future.

Cooperation between riparian Countries of transboundary rivers, lakes and aquifers should be improved.

It is urgent that existing cooperation agreements, conventions or treaties be broadened and strengthened.

Where there is no agreement yet, it is essential that the riparian countries establish one and create common institutions necessary for its implementation.


In addition, the European Water Framework Directive (WFD) proposes regional cooperation in the field of water based on the principles of integrated basin management. It may inspire other regions of the World.

While thinking has started for defining the UN post 2015 Sustainable Development Goals, INBO considers essential to include water resources management in the top priorities, as this more and more scarce resource is essential for economic, social and environmental development.

It intends to get mobilized for the next major world events on water, especially for the 7th World Water Forum, the United Nations Climate Conferences and the first International Forum on Environment and Basin Organizations, organized by UNEP in November 2014 in Bangkok.

INBO member organizations have more and more recognized experience and know-how which they intend to share, disseminate and put at the disposal of all the countries and institutions which would like to follow them in an effective basin management approach.

The General Assembly thanked the National Water Agency (ANA) and the Brazilian Network of Basin Organizations (REBOB) for their outstanding welcoming in Fortaleza.

It congratulated the Organization for the Development of the Senegal River (OMVS) and its two High Commissioners, Their Excellencies M.S Ould Merzoug and K. Komara, for the masterful way in which they have assumed the World Presidency of INBO since the General Assembly in Dakar in 2010.

Mr. Lupercio Ziroldo Antonio, President of the Brazilian Network of Basin Organizations, was elected new INBO President until the next General Assembly that will take place in Mexico in 2016.
CONAGUA and INBO are strengthening their cooperation

Messrs. David Korenfeld, Director-General of the National Water Commission of Mexico (CONAGUA), and Jean-François Donzier, Permanent Technical Secretary of the International Network of Basin Organizations (INBO), agreed to strengthen their cooperation, started a long time ago by the two institutions, in order to exchange knowledge, experiences and technology developed by more than 80 INBO Member Countries and achieve better management of water resources in River Basins.

During a meeting in Mexico late August 2013, Mr. David Korenfeld affirmed that “cooperation between Mexico and INBO is benefitting both parties and allows responding to the Mexican priorities”.

Especially, he proposed to promote projects for the technical training of operating personnel and decision-makers, in order to improve water management and services in Mexico.

Mr. Jean-François Donzier confirmed that INBO is ready to strengthen its relationship with Mexico to develop innovative models for integrated water resources management in river basins. He offered INBO support for developing exchanges of experiences and knowledge of the principles and means of water management at basin level in the cooperation programs, facilitating the implementation of water resources management tools, and in information and training programs for the people involved in the management of Mexican Basin Organizations.

David Korenfeld reiterated CONAGUA’s commitment to actively participate in INBO, in order to collect the best international experiences and enrich the Mexican national water policy.

Mexico has been Founder Member of INBO since 1994.

3rd National Congress on River Basin Management

The 3rd Mexican National Congress on River Basin Management was held in Morelia (State of Michoacán) from 27 to 30 August 2013, at the initiative of the Mexican River Basin Network (RMCH).

The main objective of the event was to advance river basin management in Mexico to meet the urgent current and future problems related to water resources.

Conferences, round tables, technical sessions allowed researchers, representatives of governmental institutions, non-governmental organizations and user communities to address important issues such as climate change, participatory management, the need for an interdisciplinary approach and knowledge sharing.

On this occasion, the third national meeting of the Operational Directorates of Basin Councils was held on August 27, with a view to improving the role and functioning of these institutions created by federal law in 1992.

Mr. Jean-François Donzier, Technical Secretary of the International Network of Basin Organizations (INBO) presented a keynote speech on best practices implemented by basin organizations in different parts of the world.


Delegates from various Mexican Basin Committees spoke about their practical field experiences.
Events 2013

European Center for River Restoration

5th European River Restoration Conference
11-13 September 2013 - Vienna - Austria

The EU life project RESTORE together with the European Center for River Restoration (ECRR), organized the 5th European River Restoration Conference held in Vienna, Austria. Mr. Janez Potocnik, EU Commissioner for the Environment, was the conference Keynote Speaker. The Conference brought together around 320 river basin managers, policy makers, practitioners and academics from around Europe and showcased inspiring examples of river restoration. Our initial conference findings are showing the priorities for practitioners and how they want to lead the way in restoring the balance between our lifestyles and the needs of the environment.

The most frequent concern of the audience is to work with communities and many felt there are gaps in this area.

There was also plenty of discussion about current scientific knowledge, and the more technical sessions brought up many gaps in relation to monitoring and evaluation in particular.

More generally, practitioners felt the need to maintain and extend existing initiatives to share best practice. The organizational capacity to support river restoration is essential.

We discussed using tools such as the RiverWiki and ‘how to use pages’ on the RESTORE website, as well the case study guide; Rivers by Design.

The conference also featured the first “European Riverprize” awarded by the International River Foundation, which was won by the International Commission for the Protection of the Rhine.

Mr. Jean-François Donzier, INBO Technical Secretary, was invited to open the session on “the rehabilitation of rivers: a collective challenge”.

Mr. Jean-François Donzier’s speech
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5th Champlain Meetings 2013
Integrated river basin management in an urban environment in Quebec

The Committee for Dialogue and Development of the Richelieu River Basin (COVABAR) organized the 5th annual meeting on integrated water management, the Champlain Meetings, in Longueuil from 12 to 14 September 2013.

The topic was: Green and blue urban infrastructure and promotion of integrated water resources management in the updating of the Metropolitan Development Plan (PMAD).

The Champlain Meetings were created in 2009, following a twinning arrangement between the Local Public Basin Authority for the Charente River, in France, and COVABAR, in Quebec, this under the TwinBasin program of INBO.

About twenty speakers and over 120 participants discussed various issues. Two major issues were identified:

- Passing from sustainable development to sustainable lifestyle;
- Involvement and mobilization of elected representatives.

The means that were specifically mentioned for doing so were, on the one hand, increased citizens’ participation, and, on the other, the commitment of elected officials to put more pressure on Governments to ensure that laws governing water are more stringent and not only integrated into the development plans of all the Regional County Municipalities (RCM) and other municipalities, but also fully complied with.

Then we can hopefully establish in the short, medium and long term, a true water culture in Quebec.

Hubert Chamberland
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EPTB Charente

www.eptb-charente.fr

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Ban Ki-moon: Water is the key to sustainable development

During the Water Summit held in Budapest last October, Mr. Ban Ki-moon, UN Secretary General, stressed the important role of water in sustainable development.

He presented three priority areas where water is essential for development: food security, adaptation to climate change and sanitation.

Mr. Jean-François Donzier, INBO Permanent Technical Secretary, was invited to lead the session on Water Governance in the Civil Society Forum organized during this Summit, in which he presented an introductory framework paper on the principles now widely recognized that govern modern basin management.

www.budapestwatersummit.hu

African Network of Basin Organizations (ANBO)

Strengthening the Institutions for Transboundary Water resources management in Africa Project (SITWA)

The "Strengthening the Institutions for Transboundary Water resources management in Africa" Project (SITWA) started in October 2012.

Its specific objectives are to have the African Network of Basin Organizations (ANBO) transformed into a sustainable and influential organization as a pillar under the African Ministers Council on Water (AMCOW) and have a technical assistance program provided through the Regional Economic Commissions (RECs).

The Project is funded by the European Union for a one-year Inception Phase and a two-year Implementation Phase. It is co-managed by the Global Water Partnership Office (GWPO) and the Organization for the Development of the Senegal River (OMVS), taking care of ANBO Secretariat and host of the Project Management Team in Dakar.

During the first phase, the project focused on:
- ANBO’s legal and institutional arrangements as a pillar under AMCOW;
- Legal frameworks of the African Basin Organizations;
- Capacity building needs of these organizations;
- Information and knowledge management needs; and
- Resource mobilization mechanisms of the African Transboundary Basin Organizations and of ANBO.

In December 2012, the Project Steering Committee met in Dakar to approve the work plan and the budget for the first one-year phase.

On 13-14 and 17-18 June 2013 about eighty (80) participants from Western, Northern, Eastern and Southern Africa attended interregional consultations and provided inputs to the five thematic study areas covered in the inception phase.

On 4 October 2013, the Inception Phase Report was validated and approved by the Project Steering Committee (PSC) meeting in Addis Ababa, Ethiopia.

The Action Plan will be implemented during Phase II of the project (2014-2015).

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Is easy water over?
The sharp increase in anthropogenic pressures on water resources and aquatic ecosystems, compounded by the effects of climate change, will have heavy social, economic and environmental consequences on all human activities by 2050-2070.

These are as many implications that are echoing the also raised concerns regarding energy.

Sounding the alarm, the workshop, organized on 21 November 2013 at INBO home office under the “Observation system of Business Energies” gave the floor to thirteen French experts, but also to OECD and UNESCO, and contributed to a greater awareness of the major water and energy challenges of the coming decades.

Alarming findings
Experts unanimously agree: rivers, lakes, aquifers, wetlands, snow and ice reserves, etc, the whole water system is affected by current changes. Deficits could worsen because the global water demand will still increase by 50% by 2050: between energy storage, cooling of thermal power plants, irrigation, industry needs, waterways navigation and cities, and low water replenishment, there is an exacerbation of the water demand.

Increased competition between water-consuming activities requires arbitration from the decision makers.

Less consumption and better management: the same imperative for water and energy
One possible answer could be summarized as a twofold imperative: less consumption and better management limiting environmental impacts. An imperative that echoes those weighing today on energy: water is essential for energy production and energy necessary for treatment, sanitation and water conveyance.

Rethinking uses
Mr. Jean-François Donzier, INBO Secretary, concluded that organizing better water governance will make it possible to share resources and reconcile uses.

Events 2013

11th European Conference ”EUROPE-INBO 2013”

A workshop on monitoring - 13 November 2013 - Plovdiv - Bulgaria

The event jointly organized by ONEMA and IOWater in Plovdiv on 13 November 2013 within the yearly EUROPE-INBO Conference (13-15 November 2013) gathered 78 participants from 16 countries, as well as the European Commission and the European Environment Agency.

This workshop gathered participants with various backgrounds, policymakers, scientists, water managers and representatives of the private sector and has been an opportunity for sharing field experiences and good practices in monitoring, in view of preparing the second cycle of WFD implementation.

To allow for a maximum of discussions and exchanges, the workshop was organized in two main sessions:

Firstly, a general introduction of the main issues and presentations from the European Commission, the European Environment Agency, Bulgaria, Sweden and France.

Then, during the second part of the workshop, the audience was divided into working groups which successively addressed three main pre-identified issues.

Each issue was introduced by a presentation on the practical experiences of a Member State:

- Theme 1 - Purpose of monitoring programs: "Vision of The Netherlands; Rijkswaterstaat experiences";
- Theme 2 - Stakeholders’ organization and role: "Monitoring in compliance with the Water Framework Directive in Austria; experiences and outlook";
- Theme 3 - Monitoring strategies: "Evolution of monitoring networks in Wallonia since 1975 according to various European Directives".

A summary report was then provided by each sub-group in plenary session, followed by discussions between all the participants.

These fruitful exchanges helped to identify and highlight issues and experiences of field practitioners.

They also led to draw conclusions and recommendations shared by all the participants of the workshop on the implementation and follow-up of the new Programs of Measures.

The detailed agenda, all presentations and a summary of the outcomes can be found on INBO website, ”EUROPE-INBO” 2013 section.
The 11th conference of the "EUROPE-INBO" group was held in Plovdiv, Bulgaria, from 13 to 16 November 2013, at the invitation of the East Aegean Basin Directorate of the Bulgarian Ministry of the Environment and Water.

It gathered 183 participants, representatives of national administrations and basin organizations as well as NGOs, companies and international and regional organizations from 21 Countries.

The conference work was organized around five major issues:

1. Feedback from the first River Basin Management Plans and the preparation of the Second Plans (2016-2021), with focus on better coherence between the level of pressures and the Programs of Measures; integration of water quantity issues (resource allocation, drought and flood management); adaptation to climate change; better coordination between the EU Directives (Flood and Marine strategy, Habitats, fauna and flora, renewable energy) and the link with other sectoral policies (agriculture, energy, hydropower, navigation...) and better involvement of stakeholders.

2. Funding of Programs of Measures, access to funds and particularly to EU Structural Funds; economic analyses for determining the most cost effective combination of measures; value of ecological services and application of cost recovery.

3. New approaches to river and aquifer restoration: natural water retention measures, ecological flow, ecological focus areas, reduction of agricultural impacts on water (buffer strips, changes in agricultural practices, etc.).

4. Water governance in transboundary basins: WFD international districts, role and means of International Commissions, Bi and Multilateral agreements and UN Conventions.

5. Implementation of WFD principles in EU neighboring countries, experiences of EECCA and Mediterranean Partner countries.

Mr. Peter Gammeltoft, Head of the DG Environment’s Water Unit of the European Commission, addressed the participants via videoconference and recalled the objectives of the "Blueprint to Safeguard Europe’s Waters".

The "EUROPE-INBO" group members made recommendations to further improve water resources management in the European Union and in the Partner Countries, relying in particular on their practical experience gained in the field.

The "EUROPE-INBO" group, CEENBO and MENBO support the initiative of the European Commission of greater involvement of Basin Authorities in the activities of the Common Implementation Strategy (CIS).

In such a background, they support INBO initiative to facilitate a real European Network of Basin Authorities for analyzing the best practices and dealing with issues raised by the implementation of the directives at basin level and report to the European Commission and to the Strategic Coordination Group (SCG) to which INBO is member.

It is imperative that issues related to floods, droughts, adaptation to climate change be addressed in the future Management Plans.

Consistency between management plans and urban planning or land use documents must be improved.

Coordination between different administrative services, that implement these directives, should be increased, Achieving the "Blueprint" goals and improving WFD implementation require:

- Increasing the prevention of agricultural pollution and continuing investments in domestic and industrial wastewater treatment;
- Achieving better integration between the Water Directives and sectoral policies (including CAP, industry, energy, transport);
- Increasing means for inspection and control of abstractions;
- Facilitating the reuse of treated wastewater;
- Improving the bond between the identification of pressures on Water Bodies and the measures to be taken;
- Grading the pressures and identifying the sectors responsible for the most significant damage.

We should recommend the use of "green infrastructure".

Water Governance in transboundary basins must be improved especially in International Districts established for WFD implementation.

It is urgent to provide operational methodological elements and additional orientations to estimate environmental and resource costs. The same applies to the assessment and quantification of the benefits expected from improved Water Body status.

New approaches to the restoration of aquatic environments, to natural retention and to the reduction of damage to the hydro-morphology of rivers, must be developed. The exchange of good practices (e.g. RESTORE) is essential.

Flood Management Plans should include the functioning of aquatic ecosystems in the planned developments and favor the use of wetlands and natural areas.

The “one out all out" or “limiting factor" principle should be adapted by the production of sub-indicators so that the citizens and their elected representatives may really see the positive results of the WFD implementation.

Very attentive participants © IOWater - C. Runel
In February 2011, the UN General Assembly declared 2013 as "International Year of Water Cooperation", in order to establish and foster initiatives in the field of water for maintaining peace and security.

Mexico is committed to water resources conservation and sustainable use.

The President Enrique Peña Nieto stated that "Mexico has a Global Responsibility".

The National Water Commission (CONAGUA) agreed with UNESCO to establish the conditions needed for the implementation of joint activities under this International Year of Water Cooperation.

A Technical Cooperation Agreement was signed by the Minister of the Environment and Natural Resources, through the National Water Commission, and UNESCO.

The document was signed by Dr. Blanca Jiménez-Cisneros, Director of UNESCO’s Division of Water Sciences and by the Director General of CONAGUA, Dr. David Korenfeld.

Among the activities carried out, the closing ceremony in Mexico in December 2013 of the International Year of Water Cooperation had an impact on the entire Latin American and Caribbean region.

A report was published to summarize and assess the main activities organized during the year and the commitments made by countries related to the management and conservation of this vital liquid: water.

The closing ceremony of the International Year of Water Cooperation took place in Mexico on 5 and 6 December 2013.

It was organized by UNESCO on behalf of UN-Water, with support from the Government of Mexico through the National Water Commission (CONAGUA).

During the first day devoted to lessons learned from the International Year, a high-level plenary session addressed "Cooperation, a key to peaceful water sharing": Mr. Jean-François Donzier, Secretary of the International Network of Basin Organizations, made an introductory speech on the best Basin Management practices used over the World.

The second day, entitled "Beyond the International Year: recommendations for action" was an opportunity to specify the action to take for the future.
The Water Governance Initiative (WGI), coordinated by the Organization for Economic Cooperation and Development (OECD), follows the commitments made during the 6th World Water Forum held in Marseille in 2012. The goal of the initiative is to firmly establish good water governance principles, based on the experience gained by institutions and countries worldwide and proposals from four working groups established in March 2013.

INBO, IOWater and UNESCO facilitate Working Group 3 on water governance in basins of national and transboundary rivers, lakes and aquifers.

This work in the basins will lead to the proposal for principles of good water governance along the following lines:

- Legislative and institutional frameworks such as treaties, regional agreements, regulations, management plans and any other legal provision for a balanced use of resources and soils;
- Strengthening and establishment of national or transboundary river, lake and aquifer basin organizations capable of achieving sustainable water resources management;
- Development of analyses and assessments allowing the orientation of decision making;
- Joint management of surface and groundwater resources;
- Establishment of a set of governance indicators at the level of basins.

This work was presented at the World Water Forum during the sessions planned on the theme “Effective Governance (4.2.)”, and more particularly during the session 4.2.3 on “strengthening basin governance to manage water resources on different scales.”

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The International Water Forum organized in Istanbul from 27 to 29 May 2014, made contributions to the next 7th World Water Forum, to be held in Daegu (Korea) in April 2015.

Water resources management and fair allocation is a more and more crucial issue. International law comes to the rescue to prevent or peacefully resolve water-related conflicts.

However, the general principles for making fair allocations and the criteria used to significantly assess the damage are often vague and need to be clarified.

The topic of this 3rd Istanbul Forum was: “Water Regulation and Safety: Risk Assessment and Challenges, Opportunities to seize”.

www.iusf.org.tr
UNECE and INBO have joined forces to materialize one of the commitments made during the World Water Forum in Marseilles on adaptation to climate change on the basin scale. For over two years, they have worked on the subject with a score of basin organizations worldwide and a dozen international partners.

A Platform of Basin Organizations working on adaptation to climate change was established both to exchange good practices, collect the first lessons learned from undertaken actions and disseminate them.

This group has also developed a document on “Water and Climate Change Adaptation in Transboundary Basins: Lessons Learned and Good Practices” for rivers, lakes and aquifers. This publication completes the “Guidance on Water and Adaptation to Climate Change” drafted by UNECE in 2009.

Different versions can be downloaded from:
- www.basins-management-publications.org
- www.inbo-news.org

Adaptation to climate change in basins
The third International Forum on Integrated Water Management took place at the University Laval (Quebec City, Canada) on May 7-9, 2014.

The event addressed the issues of transboundary water management in a context of climate change.

The event was organized by the North American Network of Basin Organizations (NANBO), the Regrouping of the River Basin Organizations of Quebec (ROBVO) and the St-François River Basin Organization (COGESAF); in collaboration with the Quebec Metropolitan Community, the University Laval Environment, Development and Society Institute and the research consortium on climatology and adaptation to climate change OURNOS.

The 500 participants addressed the following themes:
- Governance and Strengthening of Institutional Capacities;
- Water Resources and its uses management;
- Risks Management and Adaptation to Climate Change;
- Three case-studies, including the Great Lakes / St-Lawrence and the Rio Grande systems and the Rhine Basin, were presented.

Two roundtables answered the following questions:
- In a context of climate change how can we promote transboundary water management on the watershed scale and for what benefits?
- What integrated water management for the Great Lakes and St-Lawrence System?

Mr. Abel Jiménez Alcazar, The President of the Network, highlighted the objectives, services, achievements and activities that the Network is developing to promote Integrated Water Resources Management (IWRM) in Canada, the United States and Mexico. He stressed the efforts NANBO made to establish collaboration schemes between its members, to promote the transfer of knowledge and experiences that contribute to improving water governance and management.

NANBO Chief Executive, Mr. Normand Cazelaïs, presented some important experiences of the network action in processes of twinning basin organizations from the Canadian Province of Quebec, France and Mexico.

Following this presentation, the Councils of the Lerma Chapala Basin, Guerrero Coast, Balsas River Basin, Rio Grande Basin and Oaxaca Coast Councils became NANBO members.

This great meeting allowed NANBO to position itself in the Mexican and Latin American context, to strengthen its collaborative opportunities in the region.

The third International Forum on Integrated Water Management

Mexican Basin Organizations integrate NANBO

The North American Network of Basin Organizations (NANBO) organized an information forum at the 2nd Water Week of Latin America in 2014, which took place from 23 to 27 June in the City of Mexico.

Mr. Abel Jiménez Alcazar, The President of the Network, Mr. Abel Jiménez Alcazar, highlighted the objectives, services, achievements and activities that the Network is developing to promote Integrated Water Resources Management (IWRM) in Canada, the United States and Mexico.

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Africa Water Forum 2014

The Africa Water Forum 2014 was held in Ouagadougou from 12 to 14 June 2014, gathering over 650 participants around the question: “how to facilitate access to water and sanitation services for everyone in Africa?”

Faced with quick population growth and urbanization (the continent will have nearly 3 billion people by 2050, including 60% of urban people), and with the effects of increasing climate disturbance, access to safe drinking water and improved sanitation for everyone in Africa, as well as availability for other water uses, such as irrigation and energy production, are becoming, more than ever, major challenges.

In this event, jointly organized by the Government of Burkina Faso and 2IE in partnership with the African Ministers Council on Water (AMCOW) and the World Water Council, INBO Secretariat intervened as facilitator in the two following sessions:
- Cooperation and development of large hydraulic structures in transboundary basins in Africa;
- Pedagogical Innovation for increasing capacity building in the water and sanitation sector.

www.2ie-edu.org
Events 2014

SITWA: YEAR 2

Strengthening Institutions for the management of Transboundary Water resources in Africa

With financial support from the European Union, ANBO has been implementing the “Strengthening Institutions for Transboundary Water management in Africa” (SITWA) Project since 2012, with technical support from the GWP (Global Water Partnership).

The main objective is to strengthen regional cooperation at political, economic and stakeholder level for sustainable management of transboundary water resources in Africa, to contribute to peace and security, stability and poverty reduction, based on African knowledge.

The specific objectives are to make ANBO a sustainable and influential organization at the service of the African Ministers Council on Water (AMCOW), through a technical assistance program to basin organizations (RBOS) and the Regional Economic Commissions (RECs).

After validation of the 2014-2016 action plan in Addis Ababa, Ethiopia, SITWA project embarked on a second operational phase. It has completed the drafting process of the “2015-2025 10-year strategy and the 2015-2019 five-year action plan”, marked by five sub-regional consultation workshops.

The document was validated by all parties and submitted to the General Assembly for approval. Meanwhile, three studies have been validated in Kampala, Uganda in September 2014 by major basin organizations, after a consultation process held in Kigali in July 2014.

International River Symposium

For better management of great rivers

The 17th River Symposium was held in Canberra, Australia, from 15 to 18 September 2014 in the Murray-Darling River Basin.

This basin, which received a large part of the 13 billion dollars committed since 2007 by the Australian Government to the water reform, served as a background to the discussions under the general theme of “Large River Basins”.

The International River Symposium is supported by the Global Partnership for the Promotion of Integrated River Basin Management, which includes the International River Foundation, the Nature Conservancy, the World Wide Fund for Nature (WWF), the International Network of Basin Organizations, the Global Environment Fund, the International Union for Conservation of Nature, the International Commission for the Protection of the Danube and the Great Rivers Partnership and the Global Water Partnership.

The symposium is a true international platform for sharing knowledge and innovative ideas on all aspects of river management around the world. It intends to be a “think-tank” bringing out the best practices.

Mr. Jean-François Donzier, Secretary of the International Network of Basin Organizations, was invited to present the final conclusions of the Symposium.

The 2014 “International River Prize” was awarded to the International Commission for the Protection of the Rhine.

These studies concern IWRM Planning, Climate Change Adaptation and joint Infrastructure Development in African transboundary river basins.

The African Water Information System (AWIS) gathered in Saly, Senegal, its Focal Points and specified the rules to power the system.

A training program was organized on the financing of RBOS as part of a joint operation with ICA (The Infrastructure Consortium for Africa) and SIWI (Stockholm International Water Institute).

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Follow us on Facebook:

www.facebook.com/sitwsproject
The mountain people are getting mobilized to anticipate the effects of climate change on water resources.

The "4th International Conference on Water in Mountains", organized by Asters (Upper-Savoy Natural Space Conservancy), the Endowment Fund “Living Mountain”, the International Office for Water (IOWater) and the International Network of Basin Organizations (INBO) took place on 8, 9 and 10 October 2014, in Megeve (Upper Savoy - France).

Following previous meetings in 2002, 2006 and 2010, this conference issued an alert to the need to quickly adopt strategies to adapt to the impacts of global warming on water resources in the mountains, which are areas where the main large European rivers Ebro, Danube, Po, Rhine, Rhone, and Vistula... and their major tributaries, originate.

Global warming now seems to be unavoidable and the European mountains are already among the first victims!

With the decrease in snow cover and glacier melt, the water regimes of all major European rivers coming from mountains are now changing.

However, the flow regularity of these rivers is crucial for the supply of drinking water to populations and for the economic development at the foothills and in the plains (hydropower, inland navigation, irrigation, tourism or still the cooling of thermal or nuclear power plants...).

Meeting water needs in the future and for all purposes is thus everybody's business.

**Water management in the upper river basins is a strategic issue for the mountain people, but also for the populations and economies... in the plains!**

It is thus necessary to act quickly if we want our mountains to remain "Europe's Water Towers".

Flood frequency and intensity will greatly increase in autumn, winter and spring, as well as summer droughts. Climate change in mountains will also generate severe erosion, landslides, degradation in river quality and an increase in water temperature. Hydropower production could be reduced by 15%, cooling of thermal and nuclear power plants will be more difficult, river navigation will have to adapt, competition between water uses will become fiercer.

**Time is running out**: we must now identify and model these changes at local level in order to undertake the field actions that are urgently needed!

**Field experiments were presented at the "Conference on Water in Mountains". They work and produce results that can be replicated; we must disseminate them.**

- First, saving water and facilitating recycling: leak detection in drinking water supply systems, the reuse of treated wastewater, groundwater recharge, promoting the efficient use of water must become a priority.

- Next, rethinking the management of water, lakes, wetlands and mountain soils, taking into account the strategic constraints of the supply of water to the population and agricultural, industrial and tourist economies at the foothills and in plains downstream. We must develop "a new culture of risk".

- Finally, better recognizing the role of mountains for the community as a whole from upstream to downstream areas, under integrated basin policies.

This will require strengthening the institutional and financial mechanisms and refocusing them towards these new priorities, as in the case of the new French Law “GEMAPI” (Management of Aquatic Ecosystems and Flood Prevention).

Planning must be made in the basins of large rivers and based on strong intersectoral and international cooperation when river basins are transboundary as in the case of the Rhone, with French-Swiss cooperation.

With the Water Framework Directive of 2000 and its related Directives, the European Union has an effective tool to truly apply these adaptation strategies. Moreover, it requires from the Member States that they incorporate appropriate measures in the coming Basin Management Plans and Programs of Measures 2016 - 2021 then 2021-2027.

Let’s quickly implement them!

The participants also decided to establish a “Network of Water Stakeholders in Mountains” to sustain their work between two “Megeve” conferences, to exchange and promote these good practices.

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www.egem2014.org
Declaration of Bucharest

The 12th Conference of the "EUROPE-INBO" group took place in Bucharest, Romania, from 12 to 15 November 2014, at the invitation of the Romanian Ministry of Environment and Climate Change, the National Agency "APELE ROMANE" and the National Institute of Hydrology and Water Management.

It gathered 134 participants, representatives of national administrations and basin organizations as well as of NGOs, companies, international and regional organizations, coming from 33 countries.

The work of the conference was organized around four roundtables addressing the following issues:

- Natural Water Retention Measures and River Restoration,
- Implementation and funding of Programs of Measures,
- Water governance in Trans-boundary Basins.

Prior to the EUROPE-INBO conference, two workshops were organized:

- A technical workshop on river restoration and Natural Water Retention Measures,
- A workshop on the European regional process of the 7th World Water Forum.

The conference allowed reminding that the preparation of the next Basin Management Plans required integrating water quantity issues, adaptation to climate change and better coordinating the directives between themselves and ensure a link with sectoral policies (agriculture, energy, navigation…).


The participants were pleased with the holding of joint meetings between the Water, Marine Environment and Nature Directors at European level and with the organization by the European Commission of a joint workshop on water, nature and marine strategy in December 2014 to think about coordinating the directives implementation in these three sectors.

Since the release of the "Blueprint", there has been a better consideration of the quantitative issues in WFD Management Plans and tools. This is particularly the case through the production of guidance documents on water accounts. The development of scarcity and drought management plans in many countries are going in the good direction.

Communication with populations about progress made in the status of Water Bodies in 2015 is to be increased insofar as that recovering good status will take time.

Non-point source pollution and hydro-morphology are the most significant pressures affecting rivers.

To move forward, it is necessary to progress towards better integration among the European Directives (Flood Directive, Habitats Directive, Birds Directive and the Renewable Energy Directive) and improve the coordination and complete it with sectoral policies of the Union (CAP, energy, transports, etc.). Better integrated basin management is necessary to ensure the restoration and protection of water ecosystems or apply Natural Water Retention Measures.

It is necessary to better integrate the various policies, communicate on the benefits of river restoration and Natural Water Retention Measures and mobilize the partners from the different sectors concerned.

In addition, better commitment of local communities in ecosystem restoration projects is needed with a greater mobilization of the elected representatives for these projects.

The lack of knowledge of the multiple benefits of "green infrastructure" is an obstacle to its implementation on a large scale, especially in the Basin Management Plans, Flood Risk Prevention, Natura 2000 actions and Rural Development Plans.
The participants underlined the importance of consistency between the measures taken to achieve environmental objectives and the policies and practices of the agricultural sector.

The ongoing preparation of the Rural Development Plans is an opportunity for taking river hydromorphology into account. The participants asked the water managers to be closer to their colleagues of the agricultural sector to include measures for reducing agricultural pressures and pollution and to limit financing for practices having strong negative effects on the quality of Water Bodies.

The next Basin Management Plans should be based on a more exhaustive economic analysis of pressures and on quantification of costs and impacts of the measures needed to comply with the objectives of the WFD. For this purpose, it is necessary to establish clear and transparent methodologies, improve common knowledge, but also, if needed, to agree on a practical guide under the Common Implementation Strategy (CIS) to complete and update the WATECO guidance document.

The participants took note of the entry into force on 17 August 2014 of the 1997 United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses. This convention, as well as the UNECE Water Convention of 1992, is a solid basis for international cooperation in transboundary basins.

Whatever the scale, good knowledge and easy access to data and information on the status and evolution of water resources and of their use is a key to a successful water policy.

For better communicating with the decision makers and the general public, the members of “EUROPE-INBO” group insisted on the need for developing tools for data interpretation. The participants recommended increasing the exchange of experience on the ways of producing and sharing comparable data among stakeholders, as well as on the tools and methods used for the analysis and interpretation of data and the dissemination of knowledge to decision makers and the general public.

With regard to the Flood Directive, it was reminded that Flood Risk Management Plans should be developed in each basin.

The participants also reminded the importance of involving field stakeholders and the public. Appropriation by all users of water policies and of the resulting measures is essential to advance and increase efficiency.

The Monitoring Program could be a good communication tool if based on standardized methods improving the understanding, comparison and use of information.

The participants also stressed that the indicators used to characterize the status of Water Bodies are too general. They do not reflect the effectiveness of the actions undertaken during the program cycle. Less aggregated indicators, used at local and national levels, would allow a better understanding of the results of the efforts made.

The “EUROPE-INBO 2014” conference is a new important step for assessing implementation and for formulating sound proposals to improve WFD implementation in the next cycles, especially for the 2016-2021 period.

Ms. Daniela RADULESCU (Romania), was elected President of the EUROPE-INBO Group for the year to come, until the next conference in 2015.

The next “EUROPE-INBO 2015” International Conference will take place in Thessaloniki in Greece from 21 to 24 October 2015.

The delegates decided to hold next “EUROPE-INBO” conferences in 2016 in Lourdes, France, and in 2017 in Dublin, Ireland.
Events 2014

Mekong River Basin

Regional seminar for exchange of experiences on Integrated Water Resources Management
15, 16 and 17 October - Vientiane - Laos

Events 2014

Organized under the auspices of the Lao Ministry of Natural Resources and Environment, with the support of the French Embassy and financial support of the Loire-Brittany Water Agency, the seminar gathered over 100 experts from the Mekong River Basin, representatives of local and national authorities, donors and the civil society.

The Lao Vice-Minister of Natural Resources and Environment, Mr. Sisavath Vilhaxay, the French Ambassador to Laos, Mr. Yves Carmona, and the Chairman of the Loire-Brittany Basin Committee, Mr. Joel Pélicot, opened the seminar.

Three thematic sessions allowed the Cambodian, Vietnamese, Burmese, Chinese, Lao, Thai and French delegations to exchange the experiences and good practices in integrated water resources management, developed by the countries of the Mekong River Basin.

The first two days of the seminar were an opportunity to discuss recent progresses made in some countries, at the national level and in pilot river basins, to strengthen synergies with the Mekong River Commission (MRC), especially regarding institutional organization, data management and funding.

INBO, IO Water, the Rhine-Meuse Water Agency and the International Secretariat for Water (ISW) provided technical support for the success of this event.

A delegation of young representatives of the countries of the Mekong River Basin also participated in the seminar and presented the Declaration hereafter.

During the third day, the participants made a field visit to the Nam Ngum River Basin.

INBO, IO Water, the Rhine-Meuse Water Agency and the International Secretariat for Water (ISW) provided technical support for the success of this event.

All the participants received their "Blue Passport of Basin Citizen".

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"European River Restoration Conference"

Linking restoration and innovative river management

An issue was at the core of the debate: how to innovate in integrated river basin management by using, in particular, Green Infrastructure, Natural Water Retention Measures and Contemporary River Corridor Management?

A Green Infrastructure is a semi-natural space, designed and managed to provide a wide range of ecosystem services.

Natural Water Retention Measures (NWRM) aim to reduce vulnerability to floods and droughts.

"Contemporary River Corridor Management" (CRCM) requires a cross-sectoral commitment and cooperation among stakeholders at local, regional, national and international levels. The results of CRCM practices conducted on six Central European rivers were presented and are available on: www.see-river.net.

Jean-François Donzier, INBO Secretary, presented the events on Basin Management in the next World Water Forum.

Finally, the 2nd European Riverprize was awarded to the River Mur in Austria.

www.errc2014.eu

The 6th "European River Restoration Conference" was held from 27 to 29 October in Vienna. Its topic was: "Establishing relationships between restoration projects and innovative river management".

www.see-river.net
The 1st International Environment Forum for Basin Organizations was co-convened by the United Nations Environment Program (UNEP) and the International Network of Basin Organizations (INBO) in Nairobi, Kenya, from 26 to 28 November 2014.

The primary objective was to strengthen basin organizations as key building blocks for effective water environmental governance.

During a Technical Segment, on 26 and 27 November, participants shared their perspectives and presented their experience related to four main themes:
- Water Quality and Ecosystem Health,
- Water-Energy-Food Nexus and Adaptation to Climate Change,
- Environmental Laws and Regulations,
- Institutional Challenges.

A High-Level Segment took place on 28 November 2014, during which representatives of the countries and basin organizations deliberated on the way forward based on the conclusions of the Technical Segment.

Participants underscored the importance of sustainable freshwater governance under the UN post-2015 Sustainable Development Goals, in light of the current worrying state of the global resources.

They highlighted that basin management has taken a positive development in many countries and that there are many experiences worldwide which show that integrated and sound water resources management organized at the basin level is essential today.

They stressed that sustainable basin management needs ambitious and long-term commitments from Governments, regional, national and local stakeholders, as well as the international community, to deal with the great many environmental economic and social challenges ahead:
- Basin organizations are custodians of vital resources for humanity.
- The protection and the restoration of freshwater ecosystems for security should be prioritized.
- Establishing or strengthening capacities to assess and monitor freshwater resources and related ecosystems is essential.
- Cooperation between all relevant stakeholders, at the international, regional, national and local levels, and riparian countries needs to be reinforced.

Strengthening Basin Organizations

Basin organizations are in a unique position to coordinate the work of riparian countries, international development partners, local authorities, private companies and other stakeholders at the basin level to develop coherent actions for the achievement of shared environmental targets and to promote sustainable use of the world’s freshwater.
African Network of Basin Organizations (ANBO)

5th ANBO General Assembly

12 · 13 February 2015 · Addis Ababa · Ethiopia

The African Network of Basin Organizations (ANBO) gathered all its members and partners in Addis Ababa on 12 and 13 February 2015 for its fifth General Assembly whose main objective was to validate its ten-year strategy and 5-year action plan.

His Excellency Mr. Alemayehu Tegenu, Ethiopian Minister for Water and Energy, Mrs. Rhoda Peace Tumusiime, Commissioner for Economy and Agriculture in the African Union, opened the meeting.

In December 2014, the African capital had already hosted the meetings of the steering committee of the Project “Strengthening Institutions for Transboundary Water Management in Africa” (SITWA) and that of ANBO Coordination Board.

The fourth General Assembly, which had taken place in Dakar in 2010, had approved, among others:

- The development of viable financing mechanisms for the African basin organizations and their quick implementation.
- The Regional Integrated Development Program of the Fouta Djalon.

The 2015 General Assembly was the occasion to examine the new orientations of the Network, the statutory and financial reports and renew its bodies. It approved the ten-year 2015-2025 strategy by the Network, as well as the logical framework of the project for support to the Network financed by the UNDP/GEF.

Following this high-level meeting, the other significant date in ANBO diary will be the meeting with donors and partners in development, which will take place mid-2015 and make it possible to sign funding agreements for the implementation of ANBO strategy.

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Regional Water Partnership for West Africa (GWP/WA)

6th General Assembly of partners

7 · 8 May 2015 · Cotonou · Benin

The 6th General Assembly of the Regional Water Partnership for West Africa (GW /WA) was organized around the theme “Africa facing the challenges of the post-2015 development: what role for partnerships in the context of climate change?”.

The event was sponsored by the Minister for Water of Benin and the participants included the President of GWP /WA, the Executive Secretary of the Global Water Partnership (GWPO) and the President of the National Water Partnership of Benin (Benin NWP).

INBO was represented at high level by its Secretary General.

The meeting gathered nearly one hundred West African and European participants who discussed four main topics:

- Role of networks in post-crisis reconstruction;
- Global dialogue on Sustainable Development;
- Sustainable natural resources management;
- Role of youth in development.

The call invites all water stakeholders in West Africa to get moving and mobilize their national and international networks to:

- Advocate the adoption and implementation of a Sustainable Development Goal (SDG) specific to water;
- Accompany the States in the region in achieving this “Water” objective;
- Promote the integration of the “water” issue into the component on adaptation to climate change of the COP21 2015 in Paris.

The GWP/WA Technical Committee was renewed during the General Assembly. The activities of the GWP/WA President were evaluated and Professor Abel AFOUDA was reappointed to this function for the next two years.
The participants of the International Conference "Water Conservation and Effectiveness of Water Use" gathered in Minsk on 21st of May 2015 within the framework of the Network of Water-Management Organizations (NWO) from Eastern Europe, Caucasus and Central Asia (EECCA), and discussed the following topical issues:

- Growing water scarcity and security challenges;
- Application of high technologies in all areas of water regulation and use;
- Problems related to water accounting and service quality.

The participants have agreed that the main causes of water stress are:

- Increasing water consumption as a consequence of population growth, economic development and climate change;
- Poor control of water resources;
- Weak policy coordination among water-related sectors, such as agriculture, energy and the environment;
- Lack of clear planning in many countries.

There are no clearly defined mechanisms for searching tradeoffs in case of conflicting interests of water users: agriculture, land reclamation, water transport, fishery, hydropower, etc.

At all water hierarchical levels, even if water service prices are applied, there is no real interest from the stakeholders in the use of economically-based mechanism for water distribution and use.

The participants deemed it necessary to make more efforts to counteract the factors causing water stress through common organization of water-management organizations and water users. Solutions for better integrated water and land resources management should be based on reasonable water use by all users, with the help of decision making support system and water conservation technologies, reduction of water losses, reuse of wastewater in agriculture and industry, intensification of production of traditional and drought-tolerant crops.

The participants mentioned the Network work progress in 2013-2014, including:

- Collection of information and scientific publications: www.eecca-water.net;
- Extension of the knowledge base on CAWater-Info portal: www.cawater-info.net;
- Participation of EECCA NWOs’ members in international events, such as the 7th World Water Forum held in Korea on 12-17 April 2015.

The participants stressed the need of taking measures for wider involvement of Basin Organizations in the network activities.

The effectiveness of Basin Organizations can be improved strongly through public involvement.

The participants thought it necessary to intensify the Network activities by:

1. Regularly sending messages on national events on water management and information on new publications, software, methodologies and training materials.
2. Strengthening the Network’s national centers, in order to create a multi-stakeholder platform for improving national water sectors.
3. Building a bridge between the Network’s members and water and agriculture decision makers in EECCA countries.
4. Enhancing cooperation with national focal points of international networks and organizations, such as the Global Water Partnership (GWP), International Commission on Irrigation and Drainage (ICID) and others.
5. Increasing the support of the Permanent Technical Secretariat of the International Network of Basin Organizations (INBO) to water management organizations of EECCA countries.
6. Developing twinning agreements with European basins for exploring possibilities for adaptation of European Water Directives to the conditions and needs of the EECCA region.

The participants proposed to organize the Network conference in 2016 on the theme “Cultural and educational aspects of water management in EECCA countries”.

This Conference was successfully organized in Almaty from 6 to 11 February with the presence of INBO Deputy Secretary General.

Finally, the participants thanked UNECE and GWP CACENA for the support and assistance provided in the organization of this Conference as well as the Russian Government for its long standing support to the Network.

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The Water Governance Initiative (WGI), coordinated by OECD, follows the commitments made at the 6th World Water Forum held in Marseilles in 2012. The goal of the initiative is to firmly base the principles of good Water Governance on the experiences of institutions and countries from all over the world and on proposals of the four working groups established in March 2013. INBO, IOWater and UNESCO are facilitating working group 3 on Governance of the Basins of national or transboundary Rivers, Lakes and Aquifers. This work on the basins aims to propose good rules of governance around the following issues:

- Legislative and institutional frameworks;
- Strengthening and creation of Basin Organizations for national or transboundary rivers, lakes and aquifers capable of ensuring sustainable water resources management;
- Development of assessments and inventories to guide decisions;
- Establishment of good governance indicators on the basin scale.

This work was presented at the 7th World Water Forum during the meetings planned to deal with the theme “Effective Governance (4.2.)” and more specifically in session 4.2.3 on “Strengthening Basin Governance for managing water resources at different levels”.

INBO has especially contributed to the following principles:

- Principle 2: Manage water on the appropriate scale(s) within integrated basin governance systems;
- Principle 5.d: Encouraging the design of harmonized and consistent information systems on the basin scale, including in the case of transboundary water.

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This meeting, which gathered 44 OECD Initiative members, aimed to engage the delegates in a series of practical exercises on water governance to dig deeper into the role of the various stakeholders.

It allowed discovering a range of techniques based on the “Wat-A-Game” toolkit and the “CoOPLaGE” set, proposing a new strategy for the participation of stakeholder groups.

It dealt with:

- A general introduction on participatory water governance;
- An imaginary case study in which the participants were invited to choose a role and react as they would do in real operations.

Each participant had to fill in an option sheet mentioning one or two proposals and describing the implementation level, the estimated intensity of resources required and the expected impacts.

All options were then gathered into a collective matrix and discussed (consistency, feasibility, efficiency, etc.).

The participants had then to decide how the participatory process should be organized in order to get a water management plan. This participatory simulation allowed better understanding of complexities at basin level.

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It is important to maintain and cooperate efforts in the field of water resources. In many regions, riparian countries cooperate and dialogue over transboundary as well as the central lakes and aquifers, whether national or regional official sessions entirely devoted to this issue and that have required a wide preparatory mobilization for more than a year.

These sessions allowed addressing the topics of integrated management and governance in the basins of rivers, lakes and aquifers, whether national or transboundary, as well as the central issue of the now essential adaptation to the effects of climate change on water resources.

Issues, such as the statute and resources of transboundary basin organizations, planning procedures, implementation and financing of joint infrastructure, establishment of integrated water information systems and exchange of data and information among riparian countries, implementation of UN Conventions, better consideration of transboundary aquifers and joint management of surface and groundwater, users and citizens’ participation in river basin management as well as education of the populations and improvement of professional training for the different stakeholders involved, were discussed in depth and illustrated by the presentation of many very practical case studies.

As part of the regional process, and this is an innovation, two “Inter-Regional Days” were organized in Gyeongju, firstly, by the Africa - Arab Countries – Europe Regions on “cooperation to reduce conflicts and improve transboundary water management” and, secondly, by the Africa - America - Asia - Europe - Mediterranean Regions on “adaptation to the impacts of climate change on water resources”.

A regional session “Europe” showcased the implementation of the European Water Framework Directive and the preparation of the next Basin Management Plans by the 28 Member States of the European Union and associated neighboring countries.

Although there are still different sensitivities, particularly on transboundary water management, an overwhelming majority of participants converged on the relevance of national and transboundary basin approaches to address the major global challenges of water resources management.

The overall conclusions and recommendations of the debates were, for the first time in a World Water Forum, presented to the attending Ministers, who welcomed the many contributions and efforts made by the regional and thematic processes.

On the themes of basin management, these recommendations can be summarized as follows:

- It is important to maintain and recover sound water cycle through promoting relevant international cooperation as well as managing water cycle and river basins in integrated and comprehensive manner.
- Cooperation and dialogues over transboundary waters among riparian countries offer significant prospects for their sustainable development, regional integration and enhancement of mutually beneficial relations in economic, social and environmental fields.
- In many regions, riparian countries of transboundary basins have created joint commissions, authorities or international organizations, improving dialogues, exchanges of useful information, conflict resolutions and benefit sharing.
- One of the keys to building trust could be facilitating data and information exchanges among riparian countries of transboundary basins and aquifers.
- Cooperative efforts in the field of transboundary waters are strongly encouraged.
- The recent entry into force of the UN Convention on the Law of the Non-Navigational Uses of International Watercourses in August 2014, as well as the amendments for the opening of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes to all United Nations Member States are useful in this context, noting that they can only apply when appropriate.
● There is a need for reasonable and sustainable management of transboundary aquifers, and countries are encouraged to enter into effective dialogues to this end.
● Capacity building in terms of water governance is also crucial.

We will add a broad consensus to promote joint management of surface and groundwater in the same territory.

**These recommendations were the subject of the DGIC (Daegu Gyeongju Implementation Commitment), officially signed at the closing ceremony of the Forum by the 16 themes coordinators, including the International Network of Basin Organizations (INBO) under theme T4.3 - “facilitating cooperation to avoid conflict and improve transboundary water management”.

**The Forum Ministerial Declaration stressed the need to promote good governance at all levels including basin level, based on, inter alia, water planning, public participation and the sound management of physical infrastructure and natural systems as a means to effectively tackle the water security related challenges.

**The Ministers** recognized the leading role that riparian countries have on advancing cooperation on transboundary waters. They recognized that transboundary water cooperation based on win-win solutions can contribute to sustainable development and sound management of the transboundary waters between riparian countries and peace and stability of the nations.

They noted the key role of the United Nations in promoting international water cooperation at the global level. Several of the principles of the relevant international Conventions on water can be useful in this regard.

They emphasized that Integrated Water Resources Management supported by appropriate land management at the basin level is crucial to sustainable water management and planning.

... here is, finally, the official recognition that INBO has been waiting for too long!!

In parallel to the official sessions of the Forum, several side events allowed presenting a broad range of field experiments and direct exchanges among managers of basin organizations, especially the two sessions on examples of fruitful cooperation supported by the French Water Agencies, in East and Southeast Asia, on the one hand, and in Africa, on the other, as well as a session on river basin management organized at the French Pavilion, with the support of the French Water Partnership.

Of course, all the problems will not be solved as by magic, but unquestionably basin management and transboundary cooperation have scored during the World Water Forum in Korea!

All the papers and photographs of these events, organized during the last World Water Forum in Daegu and Gyeongju from 12 to 17 April 2015, are available and can be downloaded on INBO website.

www.inbo-news.org
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Events 2015

International Decade for Action

International Conference "Water for Life"

9 - 11 June 2015 · Dushanbe · Tajikistan

The UN initiative of a decade on "Water for Life" was to promote efforts to fulfill international commitments made on water between 2005 and 2015.

On the initiative of the Government of Tajikistan, an International Conference took place in Dushanbe from 9 to 11 June 2015 for reviewing the contribution of the International Decade to the implementation of the Millennium Development Goals (MDGs) and for drafting recommendations for new measures to be taken after 2015 for the development and implementation of the Sustainable Development Goals (SDGs) related to water resources.

The event gathered 1,500 participants from over 99 countries.

The Secretary General of the United Nations, Mr. Ban Ki-moon, reminded that the results of the MDGs were mixed: the huge progress made on access to safe water was much more modest in terms of adequate sanitation, still unreachable for 2.5 billion people.

INBO intervened to promote river basin management, the exchange of best practices and transboundary cooperation.

Thus, during the roundtable on "cooperation for water management: a catalyst to achieve the Millennium Development Goals", INBO called for the establishment of a Science-Policy Interface and the development of Water Information Systems at the basin level, including transboundary ones, while keeping in mind the need for interoperability of data provided by a myriad of producers.

On the occasion of the high-level session on regional perspectives of the implementation of the "Water for Life" Decade, INBO welcomed the positive role played in Europe by the Helsinki Water Convention (UNECE, 1992) and more widely by organizations working all over the world on capacity building in the water sector like the UN Water Decade Program on Capacity and the International Network of Water Training Centers.

INBO was particularly involved in the official event for the presentation of the "Lima-Paris Action Agenda (LPAA)" component of the COP21, organized by the Peruvian presidency of the COP20 and the French Ministry of the Environment, Energy and the Sea (MEEM). Its intervention aimed to present the "Paris Pact on adaptation to climate change in the basins of rivers, lakes and aquifers".

This initiative, launched by INBO on request from the LPAA organizers, summarizes the principles and actions that should be implemented to ensure adaptation to climate change in basins.

Stockholm Water Week

23 - 28 August 2015 · Stockholm · Sweden

During the 2015 edition of the Stockholm Water Week, the discussions of course largely focused on "Water for Development", chosen as the main theme before the adoption of the 2030 Agenda and its Sustainable Development Goals (including Goal 6 on water) at the United Nations General Assembly from 25 to 28 September 2015 in New York.

With the perspective of the organization of the COP21 on Climate in Paris in December 2015, adaptation to climate change was also one of the most discussed topics.

In this context, INBO was particularly involved in the official event for the presentation of the "Lima-Paris Action Agenda (LPAA)" component of the COP21, organized by the Peruvian presidency of the COP20 and the French Ministry of the Environment, Energy and the Sea (MEEM). Its intervention aimed to present the "Paris Pact on adaptation to climate change in the basins of rivers, lakes and aquifers".

This initiative, launched by INBO on request from the LPAA organizers, summarizes the principles and actions that should be implemented to ensure adaptation to climate change in basins.
The Forum “Agro-Cities and Climate Change: present and future” was organized by the Institute of the Americas (IDA), the Observatory of Changes in Latin America (LOCAL), the International Europe-Latin America-the Caribbean Network (ALEC), the “Territories, Vulnerable Populations and Public Policies” Chair of the University of Limoges, the Autonomous University of Sinaloa and the Municipality of Ciudad Juárez.

It gathered representatives from academia, companies, civil society and local and national governments to initiate a multidisciplinary debate on practices and public policies that give sustainable solutions to develop the areas facing climate change.

The thematic workshops covered the following topics:
- Territories and the environment;
- Deforestation, desertification;
- Energy transition;
- Creative economies;
- Low carbon economy;
- Eco-education system;
- Gender and the environment.

INBO presented the tools of Integrated Water Resources Management (IWRM) in basins as a key means for climate change adaptation to reconcile the different uses of water, including in situations characterized by the scarcity of water resources or frequent extreme meteorological events (droughts, floods).

It also presented the “Paris Pact on adaptation to climate change in the basins of rivers, lakes and aquifers”. This initiative, launched by INBO on the request of the Peruvian Presidency of COP20 and the French Ministry of the Environment, Energy and the Sea (MEEM) on the occasion of the “Water and Adaptation” Day of the COP21 in Paris, summarizes the principles and actions that should be implemented to ensure adaptation to climate change in the basins.

Basin organizations, local and national governments, companies, NGOs and donors are invited to join and commit themselves to apply these principles and actions through tangible projects, presented under the Lima-Paris Action Agenda (LPAA).

University of Geneva (UNIGE)

Cooperation and Benefit Sharing in the Senegal and Niger River Basins

The use of shared water resources for energy purposes is a significant challenge in the socioeconomic development of West Africa.

In order to reinforce transboundary water cooperation, riparian States sharing the Senegal and Niger River Basins established the Organization for the Development of the Senegal River (OMVS) in 1972 and the Niger Basin Authority (NBA) in 1980 to achieve equitable allocation of social, economic and environmental benefits amongst them.


Participants in the Round Table included three experts from West Africa: Mr. Tamsir Ndiaye, Director of the Agency for the Management and Exploitation of the Diama Dam, Mr. Aminou Tassiou, Former Minister for Hydraulics of the Republic of Niger, and Mr. Akambi Afouda, President of the Global Water Partnership in West Africa (GWP-West Africa).

The Round Table was divided into two sessions devoted respectively to “The Evolution of the Factors of Cooperation within the NBA and OMVS” and “Common water structures and the Sharing of Benefits in the Senegal River and Niger River”.

The experts pointed out that the two river basin organizations had different levels of cooperation.

They underlined the interest of common water structures as a factor for integration in shared basins.

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The round table
UNITE D NATIONS

Adoption of Sustainable Development Goals by the UN General Assembly

25 - 28 September 2015 - New York - USA

The eight Millennium Development Goals (MDGs) have given, from 2000 to 2015, a framework for action to the international community that aimed at reducing extreme poverty and child mortality, fighting against epidemics including AIDS, improving access to education, gender equality, and sustainable development.


It was the culmination of a long process of consultation between governments and a wide range of partners, including a large number of organizations representing the civil society.

The International Network of Basin Organizations (INBO), through its special consultative status with the UN Economic and Social Council (ECOSOC) was accredited to attend the proceedings of the Summit and participate in the many side events at the UN in New York.

INBO Secretary General was able to promote the "Paris Pact on water and adaptation to climate change in the basins of rivers, lakes and aquifers".

In his speeches, he particularly highlighted the turn that represented SDGs, and especially the adoption of a specific goal dedicated to water: Goal 6, "Ensure availability and sustainable management of water and sanitation for all."

This goal and several others related to water management and risks include the main directions that INBO has been promoting for over 20 years and open up new perspectives for integrated basin management worldwide including transboundary basins.

The Paris Pact allowed basin organizations and their partners to commit themselves at the COP21 in Paris, on the occasion of the official "Water and Adaptation" Day on 2 December 2015, towards a practical implementation of these Sustainable Development Goals.

www.un.org/sustainabledevelopment

Switzerland

First Leman Lake Meeting

2 October 2015 - Geneva - Cologny - Switzerland

INBO participated in the first Leman Meeting organized in Geneva by the Bank of Geneva (Swiss subsidiary of "Caisse d'Epargne Rhône Alpes") on the topic "The Leman and Rhone facing climate change".

This event was organized in partnership with the University of the Alps, the Living Mountain Foundation and the European Foundation for Sustainable Development of the Regions (FEDRE).

The meeting, facilitated by the journalist Marjorie Thery, was attended by Stéphanie Paix, President of the Bank of Geneva, Christian Lefaix, CEO of Leman Bank and Claude Haegi, President of the European Foundation for Sustainable Development of the Regions (FEDRE).

Organized before the Paris COP21 on Climate, the event allowed discussing water sharing and its economic consequences for Geneva and the Lake Leman area in relation to climate hazards and Mr. Jean-François Donzier, INBO Secretary General, presented operational solutions for adapting to climate change in due time. He also called for the signing of the "Paris Pact on adaptation to climate change in the basins of lakes, rivers and aquifers" before the COP21.
The "National Meetings of Basin Committees" (ENCOB) are the greatest national events on water resources in Brazil. The 17th Symposium was organized by the Brazilian Water Resources Association (ABRH), with the support of ANA (National Water Agency) and the Brazilian Network of Basin Organizations (REBOB).

It focused on "Water security and sustainable development: knowledge and management issues". It gathered representatives of administrations, researchers and decision makers to exchange good practices of Integrated Water Resources Management (IWRM) on the basin scale. The many sessions gave an opportunity to discuss, among other things, the progress of the National Program for the consolidation of the National Pact for Water Management (Progestão), the National Water Security Policy (PNSH), the Brazilian Atlas of pollution reduction in basins and the National Policy on Dam Safety.

An international seminar on "accounting water resources and uses" was held as a side event to the Symposium on 24 November, in order to present the methodologies to effectively quantify the available resources and the water consumptions of different uses. These methodologies are valuable decision making support tools to determine the allocations of water volumes attributable to these various uses and to make political arbitration.

INBO presented its experience of Integrated Water Resources Management over the World and accounting of water resource and uses. It expressed its great interest in this event gathering almost all the Brazilian stakeholders in basin management, noting that other countries could usefully replicate this kind of event model to promote the dissemination of best practices and contribute to the mobilization of field practitioners.

Coordinator of the PCJ Agency’s Information Systems, Mr. Eduardo Cuoco Leo attended the 13th "EUROPE-INBO" Conference on the implementation of the Water Directives of the European Union, held from 21 to 24 October 2015 in Thessaloniki, Greece.

A specific workshop was devoted to the "EcoCuencas" project in which the PCJ Basin Agency is a partner of the International Office for Water, the Organization for Economic Cooperation and Development (OECD), Asconit, Jucar Basin Authority (Spain), Ecologic Institute (Germany), REBOB and Irager (Peru).

The project particularly focuses on adaptation to climate change and the use of economic mechanisms. "EcoCuencas" will be a crucial project for all countries concerned to exchange experiences, good practices and discuss about obstacles to the implementation of recovery mechanisms and financial incentives for investments in water management.

The PCJ Basin Agency participated in "EUROPE-INBO" Conference in Greece
"WATEC Israel" is a biennial three-day exhibition taking place at the Israel Trade Fairs & Convention Center in Tel Aviv.

The 8th edition gathered 160 exhibitors and nearly 10,000 visitors from 90 countries.

The professional conference is the core of WATEC on issues such as drinking water production, wastewater treatment, membrane technology, water supply systems and sewerage systems, desalination and other "non conventional" water resources.

INBO Secretary General, Mr. Jean-François Donzier, was invited to give a keynote address on Integrated Water Resources Management in river basins. His presentation especially concerned transboundary water management in a context of climate change in arid countries. He presented the "Paris Pact on adaptation of water resources in the basins of rivers, lakes and aquifers" which is open for signature as part of the COP21 of December 2015 in Paris.

http://watec-israel.com
The 13th Conference of the "EUROPE-INBO" Group took place in Thessaloniki, Greece, from 21 to 24 October 2015, at the invitation of the Greek Ministry of Reconstruction, Production, Environment and Energy and the Special Secretary for Water.

It gathered 193 participants, representatives of national administrations and basin organizations as well as of international and regional organizations and NGOs, coming from 32 countries.

The Conference allowed reaffirming that integrated water resources management in the basins of lakes, rivers and aquifers is unavoidable to ensure the preservation of this resource, face the multiple identified pressures, and to adapt to the effects of climate change.

The conference was organized around four roundtables:


Actions have already been undertaken for the preparation of the 2nd River Basin Management Plans and their Programs of Measures (2016-2021).

But it is clear that, for the preparation of the 3rd cycle (2022-2027) required by the WFD, it is necessary that adaptation measures be thought of when developing the River Basin Management Plan, so that they become an integral part of the latter.

Integration with other EU Directives, such as the Flood Risk Management and Marine Strategy Framework Directives, is to be entirely achieved as quickly as possible.

Natural Water Retention Measures should be introduced when taking into account the benefit that can be expected from them for the adaptation.

A multisectoral approach is essential and stronger harmonization between the Water-related Directives and the sectoral policies of the European Union should be looked for, especially regarding agriculture, energy and waterways transport.

It is also necessary to promote and formalize the signing, at the highest level of the represented Countries and Organizations, of the "Paris Pact for adaptation to the effects of climate change in the basins of rivers, lakes and aquifers ", launched on INBO initiative on the occasion of the COP21 2015 of Paris and of the official day of December 2 dedicated to "water and climatic change".

Many experiments were undertaken for adaptation to climate change: the most significant are recorded in the publication "Water and Climate Change Adaptation in Transboundary Basins: Lessons Learned and Good Practices" published by the United Nations (UNECE) and INBO and now available in French and English.

The already established Commissions should be privileged tools for achieving appropriate governance, based on mutual trust, common understanding of the basin issues and accurate, accessible and shared data, and on the field practitioners’ involvement on both sides of the border.

The work conducted by INBO and UNESCO within the OECD’s Water Governance Initiative, may also enable progress in the governance of national and transboundary basins inside the EU and beyond, including in EU neighboring countries.

The financing of water policy and economic analyses:

The funding of Programs of Measures for the effective implementation of the WFD and its “daughter” Directives remains a concern for managers and is a condition for achieving the objectives.

The polluter-pays and user-pays principles and the need for cost recovery should guide the establishment of multi-year and stable financing systems that are up to the investment and operation needs in the basins.

"To facilitate the implementation of European Water Directives"
The EU and Member States should also maintain a high level of financial support for solidarity with the Southern and Eastern neighboring countries, to promote better governance and the realization of investments and actions that are essential, especially in shared basins.

It is also necessary to support the development of solidarity financing for access to water and sanitation both for public health purpose and for preventing the degradation of water quality.

The involvement of stakeholders and the public is crucial to improve water resources management. Their participation since the beginning in decision-making processes need to be developed for greater appropriation of the measures of River Basin Management Plans, which implies that their access to the outcomes of monitoring and to knowledge on water should be facilitated.

It is also essential to ensure the active participation of local public and private contracting authorities and economic sectors in the WFD implementation process, as they are mainly the ones in charge of applying the recommended measures.

The participants in the conference recommended that European basin organizations and decision makers promote the development of local approaches that lay out overall goals for use, development, quantitative and qualitative protection of water resources on a suitable local scale.

Cross-border local approaches can also help to ensure the consistency of actions undertaken on both sides of the borders in the same transboundary basin.

Information sharing and harmonization, including spatial information, must go beyond the EU territory and concern all the riparian countries of the same transboundary basin, thus promoting the emergence of coordination in the development of River Basin Management Plans.

The "EUROPE-INBO 2015" conference is a new important step not only for assessing the implementation of the first cycle of River Basin Management Plans (2010-2015), but also for formulating proposals to improve the implementation of the WFD and associated Directives and better take climate change into account in the next cycles, especially for the 2016-2021 period.

While welcoming the progress made in WFD implementation, as presented by Mr. Pavel Misiaga, Chief of the Water Department of the DG Environment, in his speech at the Opening Ceremony of the Conference, the "EUROPE-INBO" Members consider that the efforts made in the implementation of measures should be markedly increased so that all Water Bodies achieve “Good Status” within a reasonable time.

The "EUROPE-INBO" Group thanked Mrs. Daniela Radulescu (Romania) for the effectiveness of her Presidency (2014 - 2015).

Professor Jacques Ganoulis, Special Secretary for Water in the Ministry of Environment & Energy of Greece, was elected President of the "EUROPE-INBO" Group for the year to come, until the next conference in October 2016.

The next two EUROPE-INBO meetings will be held respectively in Lourdes, from 19 to 22 October 2016, and in Dublin in autumn 2017.
Events 2015

UNESCO

International Conference on Hydrology in the Large River Basins of Africa

26 – 30 October 2015 • Hammamet • Tunisia

More than 150 experts from 27 countries (mainly Africans and Europeans, with some representatives from Latin American and Asian countries) participated in this conference organized under the auspices of UNESCO, as part of its FRIEND-Water program. Among the other partners of this event, the “Agence Universitaire de la Francophonie” (French-speaking University Agency) and the Institute of Research for Development provided support.

The aim of the conference was to exchange experiences on the development of African basins and on the monitoring and modeling of hydrologic changes that affect them. This represents a serious challenge as the weaknesses of hydrological monitoring networks in the African countries are striking: low number of gauging stations with a very uneven geographical coverage, data not collected / recorded for decades, difficult access to weather and climate data, lack of monitoring of sediment flows and water quality with the exception of a very small number of stations managed by international bodies.

Alongside representatives of universities, NGOs, African basin organizations (OMVS, CICOS, VBA, etc.), ANBO, INBO made a speech to remind the need to exchange and share hydrological information between riparian countries of transboundary river basins, with a focus on West Africa and the Niger, Volta and Senegal Rivers.

en.unesco.org/node/239356

Working Group on Space Hydrology

A Working Group on Space Hydrology, facilitated by IOWater, INBO Secretariat, was established in 2014 and gathers the CNES, IRD, AFD, IRSTEA, BRLi and CNR.

The working group met on three occasions in 2015: in February on the premises of the CNR in Lyons, in June on the CNES site in Toulouse and in October at the BRL head office in Nimes. The last meeting took place at the AFD in Paris on 4 February 2016.

Two members of the International Congo-Ubangi-Sangha Basin Commission (CICOS) attended the meeting in Nimes for future cooperation: the Congo Basin has been chosen to be the pilot basin for the SWOT project as it has already a hydrological monitoring project funded by AFD and FFEM, and European satellite altimetry projects.

The SWOT (Surface Water and Ocean Topography) satellite program is a French-American project of Earth observation satellite that will provide for 2020 the spatial and temporal variations in the water levels of major rivers and lakes, in the flows of large rivers and in the ocean levels.

This union between space and hydrology at the service of IWRM should provide basin organizations with new tools for measurements and hydrological monitoring.

Satellite altimetry is a component among others of operational hydrology.

swot.cnes.fr

Meeting in October at BRL home office in Nimes
INBO participated in the seventh Meeting of the Parties to the UNECE Convention of 1992 on the Protection and Use of Transboundary Watercourses and International Lakes.

During the plenary session, it was especially invited to organize an event for presenting the "Paris Pact on water and adaptation to climate change in the basins of rivers, lakes and aquifers".

On this occasion, many representatives of basin organizations and governments signed the Pact. The Meeting of the Parties also reviewed the progress made in the Convention implementation activities. The 2016-2018 work program was also discussed. Among important issues, participants also approved:

- Supporting accession to and implementation of the Convention;
- Assessing the benefits of transboundary water cooperation;
- Promoting climate change adaptation in a transboundary context;
- Assessing the water-food-energy-ecosystems nexus in transboundary basins;
- Improving water governance through Dialogue on National Policies under the European Union Water Initiative (EUWI);
- Developing partnerships, in the light of the “globalization” of the UNECE Water Convention (Helsinki, 1992);

On these last points, in fact, and following the entry into force in 2013 of the amendment allowing accession by all Member States of the United Nations to the 1992 Water Convention, this session of the Meeting of the Parties marked the transition to a global legal and intergovernmental framework of the Convention for transboundary water cooperation. The meeting was distinguished from previous editions by an unprecedented participation of countries from outside the UNECE region (74 countries represented), parties to the Convention or not. Several non-member States expressed their intention to accede.

The Meeting also stressed that the implementation of the 2030 Agenda and the Sustainable Development Goals (SDGs), the Sendai Framework for Disaster Risk Reduction and the COP 21 Paris agreement will require enhanced cooperation between sectors and across borders. It therefore emphasized the important role of the Convention to support countries in their efforts to achieve the 2030 Agenda for Sustainable Development and the other global commitments. In this respect, the inclusion of a target on transboundary cooperation in the SDG on water and sanitation represents an important political recognition.

Finally, the 2016–2018 work program was adopted. Activities detailed in the latter will support countries worldwide to apply the Water Convention principles, to cooperate on transboundary water management and to address global challenges such as climate change, soil erosion, water pollution, floods and droughts.

A workshop on promoting transboundary cooperation under the provisions of the Water Convention in the Middle East Northern Africa (MENA) region was organized as a side event of the meeting of the parties.

The meeting of the parties took the opportunity to publish:

- A Policy Guidance Note on the Benefits of Transboundary Water Cooperation, which aims to help governments and all stakeholders develop a better understanding of this important issue;
- The report "Reconciling Resource Uses in Transboundary Basins: Assessment of the Water-Food-Energy-Ecosystem Nexus".

The Meeting of the Parties adopted a decision on the establishment of a reporting mechanism on the implementation of the provisions of the Convention. A pilot reporting exercise will be carried out in the year 2016-2017. This monitoring tool will assess the progress made in transboundary cooperation with respect to the Convention but also to the SDG (target 6.5).
As part of the "Lima-Paris Action Agenda", Peru, supported by France, organized on the 2nd of December 2015, the official day on “Water and Climate Change Adaptation” of the COP21 in Paris, under the joint chairmanship of Mrs. Ségolène Royal, French Minister for the Environment, Energy and the Sea, Head of the French Delegation to the COP21, and Mr. Manuel Pulgar-Vidal, Peruvian Minister for the Environment, organizer of the COP20 in Lima in 2014.

So, for the first time in the COP history, the issues of freshwater are officially taken into account!

"The Paris Pact on water and adaptation to climate change in the basins of rivers, lakes and aquifers" was presented at the day opening.

"The Paris Pact is the first concrete commitment of the COP 21: We call all water stakeholders to join it. (...) This pact will give a boost and can be considered as an innovative instrument", Mrs. Ségolène Royal said, when she formally signed the document alongside the Peruvian Minister for the Environment and Mrs. Charafat Afailal, Minister in charge of water in Morocco, the country that will be the organizer of the COP22 in 2016.

Mr. François Hollande, President of the French Republic, also declared at the official closing session of the Action Day, this last Saturday, 5th December: "It was important that initiatives be launched here in Paris (...) there is the Paris Pact for water which gathers 342 organizations and 87 countries (...)".

Drafted by the International Network of Basin Organizations (INBO) on the request of the organizers, the “Paris Pact” aims at a global mobilization of the basin organizations and all other stakeholders involved, multilateral and international organizations, governmental administrations, local authorities, companies and all economic sectors, the civil society, for starting without any delay the actions needed to adapt freshwater management to the effects of climate change: all organizations involved in integrated river basin management were invited to sign this “Pact”.

Thus to date, 342 organizations have already signed the "Paris Pact" in 87 countries, which shows that everywhere it greatly mobilized all stakeholders in water resources management, because we have to act quickly before it is too late!

Mrs. Royal has encouraged all water stakeholders to sign the Pact and “thus to add their tributary flows to swell the mainstream”.

Mr. Jean-François Donzier, INBO Secretary General, presented the Pact during the official day on “Water and adaptation to climatic change” and reminded that climate change is already affecting and will increasingly affect the quantity and quality of freshwater and aquatic ecosystems, especially through the intensity and greater frequency of extreme hydrological events, such as floods and droughts: "In these perspectives, the basins are natural areas where water flows on the surface and in the subsoil: appropriate water resources management and adaptation should be organized at that level".

The “Paris Pact” includes two components: part one is describing the context and providing general principles for adaptation to climate change in basins, and part two is listing the commitments to be made by the signatories to organize adaptation to climate change and take appropriate measures. The action of basin organizations and all other stakeholders involved is essential to increase the resilience of our societies to the risks facing water resources in the context of climate change.

The round table, organized during this "Water and Adaptation" Day and facilitated by INBO, allowed presenting real examples of adaptation projects in different basins in China (Hai River Basin), India (aquifer management), Mexico (Mexico Valley), South America (Ecocuencas project), the Senegal River (OMVS), the Niger River (NBA), the Congo River and its tributaries (CICOS) and Morocco (ABH), as well as the Mediterranean Water Information Systems and the platform of pilot basins to test adaptation measures, led by UNECE and INBO.

These projects show that we can act quickly if the stakeholders are getting mobilized!

www.inbo-news.org

A conference of donors will be organized at the end of the first half of 2016 in order to seek funding for this 10-year strategy and the action plan associated with it.

The annual meeting of ANBO Coordination Committee was organized in Dakar on 15 and 16 December 2015, with support from the team of the European project “Strengthening the Institutions for Transboundary Water management in Africa (SITWA)”. Many organizations attended the meeting alongside members of ANBO Coordination Committee, including the Directorate General for Development and International Cooperation of the European Commission (DG DEVCO), the Global Water Partnership (GWP) and INBO.

The sessions were chaired by the Secretary General of OMVS, Mr. Madine Ba and by ANBO President, Ms. Tracy S. Molefi.

The main objective of this meeting was to validate the final report on ANBO governance (which includes recommendations on new statutes and options to reorganize the Secretariat) and the selection of two basins that will be supported in strengthening their legal and institutional framework.

The Organization for the Development of the Senegal River (OMVS) confirmed that it would continue its role of ANBO Permanent Technical Secretariat.

The Coordination Committee approved the proposal to provide ANBO Secretariat with:

- A team of four people: an Executive Secretary, a Program Officer, a Director of Finance and Human Resources and an officer responsible of the administrative secretariat,
- An advisory function for support to and supervision of studies and capacity building programs,

INBO made proposals for the development of the African Water Documentation and Information System (AWIS).

Many requests for review of the proposed statutes were made during the discussions and it was therefore agreed that a new proposal would be available in March 2016 for adoption in June.

Two basins were selected to receive support for strengthening their legal and institutional framework:

- The Lake Kivu and Ruzizi River Basin has already a basin organization: the Lake Kivu and Ruzizi River Basin Authority (ABAKIR). ANBO will support the process of ratifying the Convention that was signed by the three countries: Rwanda, Burundi and DRC.
- The Mejerda Basin shared between Tunisia and Algeria: ANBO is responsible for supporting the organization of high level meetings between the two riparian States in order to advance the constitution of a basin organization.

The participants concluded their work by stressing once again the importance of having sustainable funding mechanisms.

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**Events 2016**

**Eastern Europe - Caucasus - Central Asia**

**International Conference of the Network of Basin Organizations of Eastern Europe, Caucasus and Central Asia (EECCA NBO)**

**INBO Speech**

INBO participated in the International Conference of the Network of Basin Organizations of Eastern Europe, Caucasus and Central Asia (EECCA NBO) in Almaty (Kazakhstan) on 9-10 February 2016.

This 2016 annual meeting focused on issues of culture and water-related education in the countries of the region. The participants also discussed about the need to reform the International Fund for Saving the Aral Sea (IFAS) and about getting involved in the monitoring and implementation of the water component of the Chinese “silk road 2.0” project presented during the meeting. The German-Kazakh University presented its International Master Program on Integrated Water Resource Management (IWRM) to officials from Central Asia and called for the intervention of IOWater trainers.

INBO presented the results of the COP21 for the water sector, and underlined the success of the Paris Pact on water and adaptation to climate change in basins. The stakeholders in basin management in the region were invited to join the initiative.

The Conference allowed electing the new President and Deputy Secretary of EECCA-NBO, Messrs. D.V.Kozlov (Russia) and A. D. Ryabtsev (Kazakhstan).

**Morocco**

**Preparatory meetings of the International Conference on Water & Climate**

**16 February and 14 April 2016 - Rabat - Morocco**

In preparation for the COP22, the Moroccan government will organize an international conference on “Water and Climate” on 11 and 12 July 2016 in Rabat. The Ministry for Water of Morocco supervises the preparation of the event, in partnership with the French Ministry of the Environment, Energy and the Sea (MEEM) and the World Water Council.

As part of the event planning, two preparatory meetings were held in Rabat on 16 February and 14 April 2016. INBO attended as a member of the Organization Committee.

Both sessions defined the roles of the Members of the Organization Committee, the schedule of the event preparation and its main theme, namely “Water Security for Climate Justice”.

The event program was also discussed.

It was agreed that it would include four thematic sessions on:

- Water Vulnerability to Climate Change,
- Place of Water in the Implementation of the Paris Agreement,
- The water-energy-food-safety-health-education Nexus,
- The Place of Water in the Financing Mechanisms related to Climate Change.

A round table entitled “Water in Africa: Towards Climate Justice” will also be organized.

INBO Permanent Technical Secretary is invited to speak in the first session on the need for effective Water Information Systems (WIS) to ensure that water management and the account taking of the impacts of climate change are based on sound knowledge.

As a partner of INBO, UNECE should also intervene in the second session on the Paris Pact and follow-up of the community of signatories through the platform of pilot basins working on adaptation to climate change.
The 2016 European River Symposium was organized by the International River Foundation, in association with the International Association of Waterworks in the Danube Catchment Area (IAWD).
INBO was also a partner together with the International Commissions for the Protection of the Rhine and Danube Rivers (ICPR, ICPDR), WWF, GWP, Ramsar and the European Center for River Restoration (ECRR).
The main themes of the Symposium were best practices of river basin management and the building of lasting partnerships.
It gathered 180 participants from over 30 European countries, representatives of governmental, intergovernmental, research organizations and of the civil society. INBO spoke as a panelist in a round table dedicated to building partnerships for sustainable water resources management.
The event included the award of the "European River Prize", rewarding the most outstanding restoration programs. The finalists were the restoration programs of the Trent (UK), Aragon (Spain) and Segura Rivers (Spain) and it is ultimately the latter which won the prize in 2016.

The 19th "International River Symposium" will be held in New Delhi from 12 to 14 September 2016.

Lebanon

Symposium on adaptation to climate change in the Mediterranean Basin

15 March 2016 -- Beirut - Lebanon

Following the launching of the Paris Pact on water and adaptation to climate change in basins and its signature by the Lebanese Minister for Water and Energy, Mr. Arthur Nazarian, a symposium was organized in Lebanon on the most relevant adaptation policies for the basins of the Mediterranean region.
INBO, the Mediterranean Network of Basin Organizations (MENBO) and GWP were partners of the event.
INBO was able to promote the Paris Pact and present possible variations of practical actions to be implemented for adaptation in basins.
On this occasion, many participants signed the Paris Pact and committed themselves to apply its principles and actions for adaptation to climate change.
The International Summit on African Great Lakes aims to improve coordination, build capacities and promote ecosystem management policies, based on scientific knowledge, in basins. This initiative was launched by The Nature Conservancy with support from the MacArthur Foundation, the Critical Ecosystem Partnership Fund (CEPF), the Albertine Rift Conservation Society (ARCS), the Lake Tanganyika Authority (LTA) and the United Nations Environment Program (UNEP).

INBO is partner of the event and member of the Technical Committee and of the Summit Organization Committee. To discuss the event planning, the meeting of the organization committee in March 2016 gathered thirty participants, including many basin organizations of the Great Lakes region (e.g. the Nile Basin Initiative, the Lakes Victoria, Tanganyika, Kivu Basin Commissions), intergovernmental organizations (e.g. UNEP) and nongovernmental organizations (e.g. WWF, IUCN, Friends of Lake Turkana) and universities (e.g. Nairobi, Dar Es Salaam, Bujumbura).

INBO participated in the second meeting of the World High-Level Panel on Water and Peace which took place from 5 to 7 April 2016 in Dakar, Senegal – a founder member of the initiative. The panel was launched by the Federal Department of Foreign Affairs of Switzerland and the Geneva Water Cluster on the occasion of a constitutive meeting in November 2015. It aims to facilitate a high-level political debate on water-related conflict prevention and a dialogue on water resources management as an instrument for peace and cooperation.

It gathers twelve high-level personalities, including Messrs. Danilo Türk (former Slovenian President), Andres Tarand (former Estonian Prime Minister), Mansour Faye (Water Minister of Senegal) and Prince Hassan Bin Talal of Jordan. This second meeting opened with an address by the Prime Minister of Senegal, HE Mohammad Dionne. The discussions then focused on the drafting of proposals to prevent and resolve water-related tensions internationally.

Two main topics were discussed:
- financial incentives for transboundary cooperation,
- and protection of water infrastructure against violent conflict and terrorism.

INBO presented the experience and good practices of basin organizations, members of its network. The Organization for the Development of the Senegal River (OMVS) was once again presented as a success story of trans-boundary cooperation. One of its major achievements, the Diama dam (to prevent the rise of salt water intrusion), was a technical visit at the end of the meeting.

The next meeting of the panel will be held in Latin America in 2016 and will deal with water-related intersectoral conflicts.

As an active member of the “program” and “marketing and communication” committees, INBO was also responsible for the organization of the session on “Basin Governance and Funding.”
INBO participated in the round table organized by the World Meteorological Organization (WMO) and the World Bank (WB) in partnership with the Global Framework for Climate Services (GFCS) and the Global Facility for Disaster Reduction and Recovery (GFDRR).

The event aimed to promote increased international support to the development and improvement of investment and technical assistance dedicated to National Meteorological and Hydrological Services (NMHS).

It gathered a wide range of participants, representatives of multilateral development banks (e.g. African Development Bank -AfDB, Asian Development Bank, AsDB, Islamic Development Bank -IDB), bilateral donors (e.g. DFID, AFD, JICA, USAID) and National Meteorological and Hydrological Services (NMHS) of developed and developing countries. These stakeholders initiated thinking on the principles and best practices to be used to meet the need for better coordination of the different NMHS capacity building programs, including:

- Hydromet Africa (Regional Framework Program to improve NMHSs in sub-Saharan Africa, jointly developed by AfDB, WMO, WB and GFDRR).
- The CREWS initiative (on strengthening the systems for prevention, information and warning to the risk of dangerous hydrometeorological and climate events).
- The WISER Program (strengthening of meteorological and climate services in East Africa).

The participants in the roundtable emphasized, on the one hand, the key role that the National Meteorological and Hydrological Services (NMHS) will play in achieving the Sustainable Development Goals of Agenda 2030 and, on the other, difficulties in establishing sustainable and autonomous funding mechanisms of ODA for these services. They also stressed the need to finance not only infrastructure but also capacity building of the staff, the services for end users and the infrastructure operation and maintenance.

Just Like the 2016 call for action of the INBO Paris Pact (especially targeting projects for strengthening monitoring networks and Water Information Systems), this initiative will help promote the idea that good water management is only conceivable with good knowledge of the resource: we can only manage what we know.

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Brazil

Pollutec Brazil and the 6th national water conference

For the "Pollutec" exhibition of equipment, technology and environmental services, year 2016 is not only marked by its longevity: in France (27), Algeria (12) and Morocco (8), it is also the year of the first Chinese and Brazilian exhibitions.

Pollutec Brasilia was organized by Reed Exhibitions with the support of many sponsors, including the two largest: ABES (Brazilian Federation of Sanitary and Environmental Engineering) and Suez.

Water was the main topic of the technical conference and workshop program, in this State of São Paulo that was affected by an unprecedented water crisis in 2014 and 2015. Water management is a federal priority. On average, 4.5 billion Euros are invested each year in the water cleaning sector alone.

Over 80 exhibitors from 12 countries presented their expertise, solutions and environmental innovations and nearly 4,000 people visited the exhibition.

INBO participated in Pollutec Brasilia and in the 6th national water conference. INBO Permanent Technical Secretary has notably been invited to present his principles for basin management as well as the Paris Pact for adaptation to climate change.

The HYDRUS-BRAZIL association is the Contracting Authority for the pilot training of professionals in the water sector that was launched by the Secretariat of Employment and Labor of the State of São Paolo.

The HYDRUS-BRAZIL Foundation, established at the 7th World Water Forum, aims to establish and develop a Water Training Center in São Paulo. It associates REBOB in the organization of training courses for the members of the Brazilian Basin Committees.
10th General Assembly
International Network of Basin Organizations
June 1-4, 2016
Merida, Yucatan, Mexico

Programme

Français-Anglais / French-English

Adresse de la photo

Chichen Itzá, Yucatan ›››

It is one of the main archeological sites of the Yucatan peninsula. Important and renowned relic of the Mayan civilization. The archeological site of Chichen Itza was inscribed in UNESCO's World Heritage List in 1988.

Registration is open at:
www.riob.org/inscription/riob-2016.php

Contact:
ag2016.riob@riob.org
Plan for Action and Partnership

For developing and strengthening river basin organizations

Four main outputs are expected

The goal of the "INBO Action Plan" is to support all initiatives for the organization of Integrated Water Resource Management at the level of river, lake and aquifer basins, whether national or transboundary, by using the many experiments that allow reconciling economic growth, social equity, environmental conservation, water resources protection and participation of the Civil Society.

Output 1
Organization of twinning arrangements between Basin Organizations
Proposed services:
- Direct exchanges of experiences between twin basin organizations,
- European twinning projects.

Output 2
Mobilization of professional know-how of Basin Organizations
Proposed services:
- Assistance with the implementation of institutional reforms,
- Launching of pilot projects,
- Support to countries sharing a transboundary river basin,
- Drafting of Basin Management Plans,
- Setting-up specialized teams in the new Basin Organizations,
- Establishment of institutional mechanisms for the water users’ participation in decision-making and activities of Basin Organizations,
- Financial simulation,
- Audits, ...

Output 3
Synthesis and dissemination of available knowledge and know-how
Proposed services:
- Contributing to better knowledge and know-how on Basin Organizations and IWRM,
- Making available a set of common performance indicators,
- Training to good practices,
- Publications and Handbooks,
- Promotion of basin management in international events.

Output 4
Establishment and development of water information systems
Proposed services:
- Exchange of information, documentation and data,
- Definition of common standards,
- Assistance with the structuring of Documentation Centers and Databases in each country concerned,
- Design of monitoring networks and databases,
- Dissemination of information to professionals and decision makers,
- Decision-making support tools.
Plan for Action and Partnership

Target 1: Organization of twinning arrangements between Basin Organizations

COP21: Lima-Paris Action Agenda (LPAA)

Signing of cooperation agreements on adaptation to climate change between France, China and Mexico

1. Support to the establishment of the "Greater Mexico" Metropolitan Water Organization and to the "Mexico Valley" Basin Council:
   This 4-year project was the subject of two agreements signed on 2 December at the COP21, between SEMARNAT, CONAGUA and MEEM on the one hand, and between the Mexico Valley Basin Council and the Seine-Normandy Water Agency, on the other, also involving SIAAP, Seine Great Lakes and IOWater.

2. Support to integrated management of the Hai River and its tributaries (Beijing and Tianjin basins):
   It is a new 3-year agreement, from 2016 to 2018, for the launching of the third phase of the project initiated in 2011, signed by the Hai River Conservancy Commission (HRCC) and the Seine-Normandy Water Agency and also involving SIAAP, Seine Great Lakes and IOWater.

Burkina Faso

Mouhoun Water Agency

IOWater, INBO Secretariat, is implementing a project which started in 2013 for a 2-year duration. It aims to support the Burkinabe Authorities in their approach to IWRM, through the development of methodologies and tools for knowledge and good water resources management in the Mouhoun Basin, under the partnership between the Mouhoun Water Agency (AEM) and the French Adour-Garonne and Seine-Normandy Water Agencies.

A first mission on the topics of planning and governance took place in Burkina Faso in March 2014. It was the opportunity to help in the drafting of the Masterplan for Water Development and Management (SDAGE) of the Mouhoun, which was finally adopted in July 2014.

The French partners received a high-level delegation of AEM and the Ministry of Water and Hydraulic Structures to show concretely and through case studies the French “Water Police” practices.

Finally, in the context of the gradual establishment of the "Financial Contribution to Water" adopted in Burkina Faso in 2009, a fact-finding mission took place early 2015 in Dédougou, AEM home office, to work on the recovery of this tax on water withdrawals in the basin.

Knowledge and characterization of users being a prerequisite, capacity building in data management has also been proposed.

The Mouhoun Water Agency has now a "SDAGE", the first one in Burkina. Cooperation efforts are now focusing on the implementation of a Program of Measures to achieve the selected objectives.
Target 1: Organization of twinning arrangements between Basin Organizations

Canada - Quebec

Twinning arrangements between basin organizations from France and Quebec

Three twinning arrangements were signed in February 2015 by basin organizations in France and Quebec. These agreements are the result of a twinning program jointly coordinated by the Regrouping of the River Basin Organizations of Quebec (ROBVQ) and the French Association of French Public Local Basin Authorities (AFEPVB).

A three-year collaboration
This collaboration between “ROBVQ” and “AFEPVB” was initiated on the sidelines of the World Water Forum in Marseille in 2012. In the years that followed, a partnership agreement between both networks was signed in Vöge, in France, then in Lac-Baupont, in Quebec.

Following a call for proposals, three new twinning arrangements were selected to obtain financial and technical support.

Thus, the Vidourle “EPTB” was twinned with Saguenay RBO, the Seine-Great Lakes “EPTB” with the 7 rivers Basin Agency and the Gardons “SAG” with COPERNIC, the Organization for Dialogue in the Nicolet River Basin. These twinning agreements were selected on the basis of similar interests: e.g. urban water management or flood prevention and management.

The first twinning agreement as the model
These were not the first twinning agreements between France and Quebec. Similar initiatives were undertaken by the Jacques-Cartier Basin Corporation and Dordogne “EPTB” or between Charente “EPTB” and COVABAR (RBO responsible for the Richelieu River).

The twinning charters
The twinning charters ratified by these organizations are the starting point for collaboration.

An exportable twinning program
This twinning program was made possible through a financial contribution from the Permanent Commission of Cooperation between France and Quebec. An additional objective of the program is to produce exportable tools facilitating twinning between basins.

The North American Network of Basin Organizations
has been an active contributor in the selection of twinning agreements, producing a model twinning charter and writing a twinning guide.

A guide for successful twinning projects!

Drawing on four twinning experiences between organizations from France and Quebec, the North American Network of Basin Organizations (NANBO) and the Regrouping of the River Basin Organizations of Quebec (ROBVQ) have partnered to publish a twinning guide and a trilingual model charter.

These tools will allow organizations to undertake twinning projects with similar organizations elsewhere, while benefiting from the experience of their peers.

Specifically, the guide offers a six-step method to establish a functional and beneficial twinning project for each partner involved. It also gives some advice to ensure the success of the approach.

The guide is available in French, English and Spanish at: http://bit.ly/1WBUipF

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Experience between France and Quebec
The program of ROBVQ and the French Association of Public Local Basin Authorities (AFEPVB) allowed establishing five twinning projects between basin organizations in France and Quebec to improve practices in both countries regarding dam management, adaptation to climate change, public involvement in water management or control of invasive species.
Target 1: Organization of twinning arrangements between Basin Organizations

Brazil

PCJ Consortium - "Gaúcho" Forum and the French Loire-Brittany Water Agency:
Cooperation with the "Gaúcho" Forum of Basin Committees

In 2005, the Intermunicipal Consortium of the Piracicaba, Capivari and Jundiaí River Basins (PCJ) and the French Loire Brittany Water Agency (AELB) participated in INBO-facilitated TwinBasin project. In 2006, the PCJ Consortium and AELB signed a multi-year cooperation agreement.

It has resulted in constant and fruitful exchanges between both partners and allowed disseminating the experiences of the PCJ Consortium and the Agency to other basin institutions in Brazil. The PCJ Consortium is a successful management system model implemented in the PCJ Basins and it can contribute to develop similar approaches in Brazil.

The Law for its establishment was passed in 1994.

Representatives of the PCJ Consortium, AELB and "Gaúcho" Forum of Basin Committees met on May 23rd and 24th, in Porto Alegre (RGS), to discuss the establishment of a tripartite cooperation.

The Loire Brittany Agency’s Manager, Michel Stein, remarked that the “PCJ Consortium is a successful example in Brazil, and experiences should be reproduced in other national realities”.

“The PCJ Basins took the French management system as reference, which was important for the consolidation of our management system. I believe that with our partners from Loire Brittany, we could contribute to improve water resource management in Rio Grande do Sul” recalled the PCJ Technical Manager, Alexandre Vilella.

The partners defined a cooperation program for the years 2014-2015, with the aim to help the Basin Committees of Rio Grande do Sul to overcome technical and institutional difficulties that hinder better implementation of Integrated Water Resources Management.

The following actions are planned:

- Finalization of a reference document comparing the situation of water management in the RGS and the PCJ and Loire-Brittany basins;
- Organization of seminars in the Rio Grande do Sul on the topics of governance and tools for Integrated Water Resources Management (planning, funding and monitoring systems);
- Organization of a technical visit of the Basin Committees of Rio Grande do Sul in the PCJ basins (located about 1,000 km to the north).

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Target 1: Organization of twinning arrangements between Basin Organizations

Peru

Twinning between Quilca Chili and Artois-Picardy Basins

On 26 September 2013 in Lima, the Artois-Picardy Water Agency signed an institutional cooperation agreement with the Peruvian National Water Authority (ANA) and the “Chili” River Basin (Arequipa area).

Under the agreement, French specialists went to Arequipa, to share experiences with stakeholders of the Quilca-Chili Basin.

In addition to meetings with members of the Basin’s Water Resources Council, the French experts made several field visits, especially at the water intake for the supply of Arequipa (Tomilla I station) and at the Charcani I hydropower plant.

They met with the Directorate General of SEDAPAR, which presented the wastewater treatment project of the Enlozada plant.

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Twinning arrangement with the French Water Agencies

After the Val de Loire, Normandy and Brittany in recent years, a study tour was organized in late September with our French Partners of the Loire-Brittany Water Agency in the Upper River Basins of the Loire and Allier. Our Hungarian delegation was led by Peter Kovacs, State Secretary for Water, Ministry of Rural Development.

Various visits on the topic of river development and protection against floods embellished this working week and exchanges.

Meetings with technicians and elected officials were thus planned in different flood control installations, where the flood warning system was presented.

After a visit to the trout farm of Chanteuges, the Hungarian delegation members were able to familiarize themselves with the restoration of the natural environment of the Ondaine River and with the control of invasive plants.

As part of our French-Hungarian partnership, thinking is underway to expand our cooperation to a third country, the Ukraine or Romania, for example, which share the Tisza River Basin with Hungary.

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The delegation on the site for rehabilitation of the Ondaine river

Signing of the cooperation agreement between ANA and the Artois-Picardy Water Agency
Target 1: Organization of twinning arrangements between Basin Organizations

China

French-Chinese cooperation in the Hai River Basin

China is facing many water management challenges.

To face those, the Chinese Government is developing many international cooperation activities, and, in particular, an agreement was signed on 21 December 2009 by the Chinese Ministry of Water Resources and the French Ministry of the Environment, Energy and the Sea (MEEM).

Under this agreement, the Hai River Basin, which covers 318,000 km² and includes the municipalities of Beijing and Tianjin, was selected for the implementation of a pilot project: It aims to test the application in China of some mechanisms for river basin management, water pollution control and ecosystem protection, which are used in France and in the European Union.

The project partners are, for the Chinese part, the Ministry of Water Resources, the Hai River Water Conservancy Commission and the Water Boards of Tianjin City Hall and Hebei Province, and for the French part, the Ministry of the Environment, Energy and the Sea (MEEM), the Seine Normandy Water Agency (AESN), the Public Sanitation Utility of Greater Paris (SIAAP), the Interdepartmental Institution of the Seine Great Lakes and IOWater, INBO Secretariat, that is in charge of the technical coordination of the project.

It was developed in three steps:
- Support to the completion of the basin situational analysis,
- Establishment of a coordination group,
- Support to the drafting of a Basin Management Plan and a Program of Measures.

Since October 2012, French expert missions in China have allowed an in-depth presentation of a wide range of useful technical and institutional tools for the process. Emphasis was also placed on building the capacity of the Chinese partners, who thus benefited from training sessions on Basin Management, on ecological engineering and on water quality monitoring, etc.

The pilot sub-basin of the Zhou River

The second phase of the project (October 2012 - December 2015) focused on the Zhou River Basin: 2,114 km², 1 million inhabitants and 80% of the drinking water supply of the 5th most populated city of the country, Tianjin.

Based on the conclusions drawn from the situational analysis, year 2015 allowed the drafting of a Management Plan and Program of Measures to meet the major challenges of the sub basin.

Thus, at the end of phase II in late 2015, the Chinese partners integrated all tools and processes useful to achieve the development of a true Basin Management Plan.

Given the success of this French-Chinese cooperation, the partners of both countries agreed to continue this cooperation for a three year period starting in January 2016.

In the presence of the French Ministers for the Environment and International Cooperation, this agreement was signed in Paris on 2 December 2015 at the Water Day, organized during the COP21 on the topic of adaptation and resilience to climate change.

This new phase plans an expansion of these actions to the Luan River Basin (45,000 km², 1 million inhabitants); another bigger tributary of the Hai River.

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Signatories of the French-Chinese agreement at the COP 21 in Paris © IOWater - C.Runel
**Target 1: Organization of twinning arrangements between Basin Organizations**

**Croatia - European Union**

**European institutional twinning agreements with the 28th Member State for better water management**

**Flood Directive:**
Austria, France and the Netherlands are implementing the European twinning on the Flood Directive in Croatia.

Adopted in 2007, the Flood Directive imposes the same schedule to the four countries participating in the twinning agreement, thus providing rich exchanges and allowing Croatia to adjust its practices to higher levels by benefiting from the methodological development efforts made by the most advanced countries.

The Directive schedule, which will be synchronized with that of the Water Framework Directive, thus plans the following deadlines for the 3 stages of preparation of Flood Risk Management Plans to be developed in each hydrographic basin/unit:
- Preliminary Flood Risk Assessment (PFRA) with selection of Areas with Significant Potential Flood Risk (ASPFR) by December 2011;
- Hazard and risk mapping of ASPFR by December 2013;
- Flood Risk Management Plan (FRMP) including its Program of Measures by December 2015.

The 15-month project particularly focuses on the mapping of flood risk in two priority pilot areas: The Kupa on the Black Sea Basin and the delta of the Neretva, an Adriatic River with specific flood characteristics.

A training program supports the preparation of the Flood Risk Management Plan (FRMP) with its Program of Measures and associated economic analysis.

**Water Framework Directive and pollution by hazardous substances discharged into aquatic environments:**
Many sectors of activity are producing or using these hazardous substances and release them into the environment: industry, agriculture, but also urban infrastructure and equipments, hospital and medical activities, craftsmanship and even domestic activities.

The European Directive on hazardous substances requires that those are:
- Banned for the most dangerous of them,
- Subject to measures to protect us from them and especially to reduce their discharges for the others.

For 14 months, France and Austria have successfully implemented this European twinning agreement with Croatia.

The closing ceremony took place in the prestigious hall of the Croatian Chamber of Economy on 5 July 2013 in Zagreb, illustrating the partnership forged with the interested parties in the effort needed to reduce the discharges of hazardous substances.

The twinning agreement has thus supported the Croatian partners at different levels:
- Inventory of substances used and discharged, and of their presence in surface water, groundwater and marine waters;
- Adaptation of the monitoring network to the problem of hazardous substances;
- Installation of new performing analysis equipment, with a budget of €400,000 provided by the EU through the project;
- Development of quality assurance procedures and tools to ensure the reliability and representativeness of the results. The National Laboratory, which benefited from capacity building, received its accreditation during the project;
- Improvement of governance, use and exchanges of data between the different partners.

The Croatian institutions, beneficiaries of this project, were mainly the Ministry of Agriculture and the Croatian Water Company.

On the French and Austrian sides, the twinning partners are: the French Ministry of Ecology, Sustainable Development and Energy (MEDDE), the International Office for Water, the National Institute for the Environment and Industrial Risks (INERIS), the National Laboratory of the Environment (ESA), the Geological and Mining Research Center (BRGM), the French Water Agencies, as well as the Austrian Environment Agency (UBA) and the Austrian Ministry of Agriculture, Environment, Forestry and Water.

A total of forty French and Austrian experts worked together with their Croatian colleagues to carry out the activities of this twinning agreement, which are a powerful boost for exchange and progress.

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Target 1: Organization of twinning arrangements between Basin Organizations

Croatia - European Union

Twinning agreement on the Flood Directive

Delta of the Neretva River

In April 2014, Austria, France and the Netherlands closed the twinning project on the European Flood Directive with Croatia, which became a full EU Member State in July 2013.

Adopted in 2007, the Flood Directive imposed its schedule to the four countries participating in the twinning project. The schedule of the Directive, which eventually will be synchronized with that of the Water Framework Directive, gives the following deadlines for the 3 stages of preparation of Flood Risk Management Plans to be developed in each river basin/hydrographical unit:

- Preliminary Flood Risk Assessment (PFRA) with selection of Areas with Significant Potential Flood Risk (ASPFR) by December 2011;
- Hazard and risk mapping of ASPFR by December 2013;
- Flood Risk Management Plans (FRMPs), including their Program of Measures by December 2015.

This 16-month project especially focused on the mapping of flood risk in two priority pilot areas:

- the Kupa River in the Black Sea Basin,
- the delta of the Neretva River in the Adriatic Sea Basin with specific flood characteristics.

A training program allowed supporting the preparation of the Flood Risk Management Plan (FRMP) with its Program of Measures and associated economic analysis.

A model for identifying the data necessary for preparing the plan was also developed for dissemination of this pilot experience to other Croatian basins.

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10th World General Assembly of INBO
Merida - Mexico - 1 - 4 June, 2016

"For better river basin management over the World"

- Wednesday 1st June 2016
  - ARRIVAL OF THE PARTICIPANTS - REGISTRATION
    - 09:30 Meeting of INBO Regional Networks
    - 17:00 Meeting of INBO World Liaison Bureau
    - 20:00 Welcome cocktail

- Thursday 2nd June 2016
  - FIRST OFFICIAL DAY
    - 09:30 First statutory session of INBO General Assembly
    - 11:00 Official Opening Ceremony
    - 12:00 Presentation of water issues and institutions in Mexico
    - 14:30 First topical round table: Adaptation to climate change in basins
    - 16:30 Second topical round table: Mandate, composition, role and means of the Basin Councils and Committees
    - 20:00 Official Dinner

- Friday 3rd June 2016
  - SECOND OFFICIAL DAY
    - 09:00 Third topical round table: Sustainable basin management: planning and funding
    - 11:00 Fourth topical round table: Participation of the economic sectors and citizens
    - 14:30 Forum of International Cooperation Organizations
    - 16:00 Closing of the General Assembly
      - Final resolutions
      - Merida Declaration
      - Transfer of INBO World Presidency to Mexico

- Saturday 4th June 2016
  - THIRD OFFICIAL DAY
    - 08:30 Technical Visit - Discovery of Yucatan

To participate, Please register!
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Report of Activities 2013 - 2016
Target 1: Organization of twinning arrangements between Basin Organizations

Former Yugoslav Republic of Macedonia

Institutional capacity building and improvement of legislation for water resources management

A 2-year technical assistance project for capacity building of the Ministry for the Environment of the Republic of Macedonia for the development of legislation on water was financed by the European Union.

The project especially focused on:
- The improvement of the legislative framework for water resources management in the Republic of Macedonia;
- The development of the first elements of a Basin Management Plan for the Vardar River.

A thorough analysis of the Macedonian legislation on water management was carried out to identify disparities with the obligations of the various European water-related Directives.

Recommendations for amending existing laws were proposed and the missing texts in secondary legislation were drafted.

Before their adoption by the Parliament, the Ministry for the Environment required a regulatory impact assessment of the proposed new texts.

The five initial elements developed by the project for the Vardar River Basin Management Plan include:
- Establishment of an official list of the Basin Water Bodies with definition of their typology;
- Characterization of the identified Water Bodies;
- Identification of pressures on Water Bodies and identification of those at risk;
- Inventory and mapping of protected areas;
- Development of a new Monitoring Plan.

One of the project priorities was the training and capacity building of the Ministry’s water department staff.

Many training courses of short duration were implemented, as well as training handbooks presenting the methodology used at the different stages of the preparation of the Vardar River Basin Management Plan.

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Tunisia - European Union

REACH-CLP: European twinning agreement on the management and control of chemicals

The International Office for Water, the Austrian Environment Agency, "INE-RIS" and the Swedish Chemicals Agency participate in the European twinning agreement "Institutional Support to the management and control of chemicals in Tunisia" to implement the European REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) and CLP regulations (Classification, Labeling and Packaging of dangerous chemicals).

This project aims to promote in Tunisia an industry more respectful of health and the environment while increasing its competitiveness and preparing the Tunisian industrial sector to managerial, organizational and technological changes.

The project includes actions for strengthening the legal basis, establishing an institutional organization and for the capacity building of the Tunisian Technical Chemical Center.

This project is funded by the European Union and is being carried out between March 2012 and March 2014.

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Target 1: Organization of twinning arrangements between Basin Organizations

Turkey - European Union

Success for three European institutional twinning projects

**Bathing Water Directive**

Launched in January 2013, the bathing waters twinning project with Turkey was completed in June 2015. It was coordinated by IOWater, INBO Secretariat, on behalf of the French Ministry of Social Affairs and Health, in collaboration with the Italian Minoprio Foundation, mandated by the Regional Council of Lombardy, and GIP Inter.

The overall objective was to reduce bathing-related risks to public health, through the integration of the provisions of the new European Directive 2006/7/EC into Turkish legislation and introducing innovations to strengthen monitoring.

This twinning project involved 35 specialists from French and Italian administrations and institutions that carried out more than 170 assignments on all the health and environmental aspects of bathing.

Capacity building of the Ministry of Health and Turkish Public Health Institution as well as of provincial laboratories and other Ministries and partners was developed and their assignments updated according to the innovations introduced by the new European Directive.

**Flood Directive**

The project “Capacity building for the Implementation of the Flood Directive” was launched to support the Directorate General for Water Management of the Ministry of Forestry and Water Affairs in its new coordination mission for better flood risk management in Turkey. It has been developing for over 2 years with the support of major French and Romanian Public Institutions working on this directive in their respective countries: the Directorate General for Risk Prevention of the French Ministry of Environment (MEDDE), the “CEREMA”, the National Agency Apdie Romane and its Institute of Hydrology and Water Management, coordinated by IOWater, INBO Secretariat.

The project aimed at developing the main tools planned for in the EU Directive:

- Transposition of the Flood Directive (FD) into Turkish legislation and adaptation of the institutional organization;
- Implementation of the 3 preparatory steps for a Flood Risk Management Plan in the pilot “Bati Karadeniz” Basin. The users were consulted in these key stages. A methodological guidance document was drafted to be disseminated to the 25 other Turkish basins and training activities were tested in three basins;
- Preparation of the National Flood Directive Implementation Plan, integrating economic analysis.

A key moment was the consultation with stakeholders in Karabük on 27 August 2013 on the results of the Preliminary Flood Risk Assessment (PFRA) for the pilot “Bati Karadeniz” Basin for validating the first stage of the Flood Risk Management Plan.

**Water Framework Directive**

This twinning agreement on the implementation of the Framework Directive was carried out between September 2011 and February 2014.

This project, implemented by the Netherlands, France and Spain, aimed to support the Turkish Ministry of Forestry and Water Affairs in developing monitoring plans for six pilot basins and a national monitoring plan.


In 2014, the Twinning project was completed with the finalization of the National Plan for the Implementation of Monitoring Programs, including institutional and legislative recommendations in particular, but also an estimate of the costs incurred to harmonize Turkish practices with the requirements of the EU Water Framework Directive in the monitoring of Water Bodies.

Group of experts in the seminar on monitoring for bathing waters

www.thsk.gov.tr
Target 1: Organization of twinning arrangements between Basin Organizations

Turkey - European Union

Training of trainers on WFD implementation and development of River Basin Management Plans in Turkey


Turkey has established Basin Management Committees for its 25 river basins.

In this context, an EU technical assistance project, in which IOWater, INBO Secretariat, contributed to support the Turkish Leader WYG, due to its former long cooperation with the Turkish authorities on water management, was undertaken to:

- Train the future Turkish trainers on WFD implementation and the development of River Basin Management Plans;
- Build capacities and ensure the proper operation of the Basin Management Committees.

The training courses were held from October 2014 to May 2015 with the participation of 57 representatives of various public authorities, universities and NGOs.

During the training, 9 international training experts provided more than 80 hours of training on the WFD and River Basin Management Plans for a total of 177 men-days.

Morocco - European Union

An ambitious project for Governance and Integrated Water Resources Management

The “Governance and Integrated Water Resources Management in Morocco” project was prepared by the Water Department of the Delegate Ministry in charge of Water at the Ministry of Energy, Mines, Water and the Environment (MEMEE) of the Kingdom of Morocco, to benefit from the European experience in order to advance its mission of water resources management and coordination of River Basin Agencies.

France was chosen as the leader of this twinning project in partnership with Spain and Romania and Austrian experts.

Since 1995, Morocco has had a Water Law that constitutes the legal basis for water policy and that allowed, firstly, to establish the principles of Integrated Water Resources Management and, secondly, to institutionalize water resources management at river basin level and the “user pays” principles.

A new water law is being prepared and will benefit from the experience acquired in the implementation of the Water Framework Directive (WFD) in the three EU Member States.

The project will allow:

- Improving River Basin Management Plans through a pilot experience in the Sebou Basin;
- Establishing a national program for regulatory convergence in the water sector.

This 2-year project of great importance for the entire Moroccan water sector has been implemented since October 2015, with the support of the French Water Agencies, BRGM, the International Office for Water, INBO Secretariat, and the main Spanish and Romanian public institutions working on the WFD in their respective countries.
Target 2: Mobilization of professional know-how of Basin Organizations

Volta Basin Authority (VBA)

Implementation of priority actions of the 2010-2014 Strategic Plan

The project for capacity building of the Volta Basin Authority (VBA) is funded by the European Union (ACP-EU Water Facility), the Seine-Normandy Water Agency (AESN) and the French Development Agency (AFD).

Since 2012, the International Network of Basin Organizations (INBO) has been implementing the project, which aims to build the capacity of:

- The Stakeholders Forum for Basin Development, an advisory body of VBA;
- The Experts’ Committee, VBA executive body;
- The Executive Directorate.

In January-February 2013, Members of the Experts’ Committee and Executive Directorate made a visit to France in the Seine-Normandy and Adour-Garonne Water Agencies and met in Toulouse members of the Planning Commission, DREAL (Regional Directorate for the Environment, Development and Housing) and of the Coteaux de Gascogne Development Company (CACG).

The project also allowed the participation of the VBA Executive Director in INBO World General Assembly, held in Fortaleza, Brazil, from 12 to 16 August 2013. He was able to participate in the topical round-table “Institutional frameworks for action of Basin Organizations, of local authorities, water users and the public, role of Basin Committees” and exchange with his counterparts in charge of Transboundary Basin Authorities.

The second meeting of the VBA Stakeholders’ Forum was held from 21 to 23 October 2013. It allowed strengthening the relations between the various stakeholders of the six VBA Member States. At the same time, an expert from the Adour-Garonne Water Agency presented the dialogue process in the river basin and made recommendations for the functioning of the Stakeholders’ Forum.

A mid-term review was conducted in August 2014, which validated the orientations of the project.

The next steps include a support to the Strategic Plan and to the decision-making support tool that accompanies it, as well as to the Water Charter of the Volta Basin.

The VBA Council of Ministers was held in Lome, Togo, in March 2014, before the Committee of Experts. During this statutory meeting, the Ministers of the six Member Countries adopted resolutions, including hiring experts to strengthen the team of the VBA Executive Branch, and provide more resources to fulfill its mission.

A session was organized on the preparation of the Master Plan for Water Development and Management. Particular attention will be paid to information and communication to the general public about the VBA activities.

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Capacity building of the Executive Branch

The International Network of Basin Organizations has been helping the Volta Basin Authority (VBA) since 2012 through a capacity building project for the implementation of its 2010-2014 Strategic Plan, with support from the European Union, the French Development Agency, the French Seine-Normandy and Adour-Garonne Water Agencies.

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Target 2
Target 2: Mobilization of professional know-how of Basin Organizations

Volta Basin Authority (VBA)

Towards a Master Plan and a Water Charter

Started in 2012, the Volta Basin Authority (VBA) Capacity Building Project for the implementation of priority actions of the 2010-2014 Strategic Plan was completed in 2015.

Coordinated by INBO, it received support from the Water Facility of the European Union, the French Development Agency, the Seine-Normandy and Adour-Garonne Water Agencies.

The Volta Basin Authority (VBA) has received funding from the African Water Facility, hosted by the African Development Bank, and support from the International Union for Conservation of Nature / Swedish International Development Agency (IUCN / SIDA) through the implementation of the Volta HYCOS Project.

This support includes a training component made of five modules:
- Use of satellite data for IWRM,
- Gauging with Acoustic Doppler Current Prolifer (ADCP) and reel,
- Data management by Hydromet software,
- Hydrological modeling and flood forecasting,
- Installation and Management of Data Collection Platforms.

A study was made of the future Water Charter to prepare arguments for the stakeholders. An information leaflet was published.

Volta HYCOS

In April 2015, members of the VBA Committee of Experts and Executive Directorate undertook a working visit to France. The delegation got acquainted with the activities of the Canal de Provence Company (SCP), the National Space Center (CNES), the Coteaux de Gascogne Development Company (CAGC), and IOWater’s National Water Training Center (NWTC) and National Water Information and Documentation Center (CNIDE) in Limoges.

A closing workshop was organized by VBA and INBO in Ouagadougou in April 2015.

It gathered representatives of riparian countries of the Volta, of the VBA Executive Directorate, and of its partners. The workshop allowed discussing the preparation of the Water Charter and Master Plan, two major products that VBA will develop in the coming years.

A study was made of the future Water Charter to prepare arguments for the stakeholders. An information leaflet was published.

Niger Basin Authority (NBA)

Flood control in the Niger Basin

The project for support to the Niger Basin Authority (NBA) by the German International Cooperation Agency for Development (GIZ) on flood control ends in early 2016.

The Deltares / UNESCO-IHE / IOWater group, in charge of the project implementation, has carried out:
- Mapping of flood risk in the basin and in pilot zones (Niamey in Niger and Malanville in Benin);
- Development of a flood forecasting model;
- Improvement of hydrological data management (Niger HYCOS);
- Improvement of the warning system.

Training courses are also provided by the group to strengthen the abilities of the NBA teams.

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Component 1: The exchange of experience with the Member States of Lake Chad Basin.

Component 2: The implementation of the Water Charter of Lake Chad Basin.

Component 3: Mobilization of professional know-how of Basin Organizations.

The main challenge for LCBC is to contribute to improving the quality of life of people in the basin, which passes, among other things, by controlling the drying out of the lake and its tributaries.

The “conventional” Lake Chad Basin (i.e. hydrologically active) covering 967,000 km² is under the jurisdiction of the Lake Chad Basin Commission (LCBC), which gathers six countries (Cameroon, Central African Republic, Libya, Niger, Nigeria and Chad).

In this context, the Conference of Heads of State and Government adopted on 30 April 2012 the Water Charter of Lake Chad Basin.

Various projects are implemented by LCBC, including the “Lake Chad Conservation Project - Contribution to the Development Strategy for the Lake”, funded by the French Global Environment Facility (FFEM).

This project which started in 2012 is planned for a 3-year period and has three components entrusted, among others, to the Research Institute for Development (components 1 and 2) and the International Office for Water, INBO Secretariat, (component 3):

- Component 1: Summary of knowledge and definition of management constraints;
- Component 2: Reliability of the hydrological model;
- Component 3: Support for the entry into force of the Water Charter and strengthening relations with other African basin organizations.

Component 3 should allow:

- The implementation of the Water Charter through its ratification by all the Member States and preparation of appendices;
- The signing of the United Nations Convention of 21 May 1997 on the Law on the use of international watercourses for purposes other than navigation;
- The exchange of experience with basin organizations of West and Central Africa.

Four workshops for disseminating the Charter, which gathered parliamentarians, decision-makers, practitioners and water users, took place in N’djamena (January 2013), Niamey (March 2013), Abuja (May 2013) and Yaoundé (December 2013).

These actions should allow strengthening the legal and institutional framework of LCBC to ensure better integrated water resources management in the basin.

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The Water Charter of Lake Chad Basin was adopted in N’djamena on 30 April 2012 by the 14th Summit of Heads of State and Government of the Member States of Lake Chad Basin Commission.

The Charter comprises one hundred articles and is supplemented by five appendices.

To ensure the operability of the Charter, the International Office for Water, INBO Secretariat, with funds from the French Fund for Global Environment (FFEM), has provided support to facilitate national workshops for the ratification of the Charter, for the drafting of new Terms of Reference of new annexes and exchanges with other Basin Organizations in the region.

A sub-regional workshop to share experiences on transboundary water management was held in Yaoundé (Cameroon), on 25 and 26 March 2015.

This meeting allowed exchanges, including on obstacles to the implementation of the Water Charters of the Senegal, Niger and Chad Basins.

A new Annex, on updating the missions, the responsibilities and functioning of the Lake Chad Basin Commission’s bodies, is also being drafted with the support of two regional legal advisors.

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Towards the "SDAGE"

The International Commission of the Congo-Ubangi-Sangha Basin (CICOS), which was mandated by its Member States to ensure sustainable development in the region through a fair and consistent water resources management in the basin, has developed a Master Plan for Water Development and Management (SDAGE).

Given the hugeness of its basin (3.8 Mkm²) CICOS wanted to start the process of developing the "SDAGE" on two fundamental bases:

- Good "SDAGE" ownership, ensuring the participation of the basin’s stakeholders and water users;
- The creation of a hydrological modeling to better understand the functioning of the river basin and its possible resource allocations.

Two projects are going to help this initiative:

- Project for support to water resources management in the Congo River Basin, financed by the European Union and managed by IOWater, INBO Secretariat. This project includes a training cycle on operational hydrology for the National Hydrological Services (NHS) and CICOS, and support to the implementation of the participatory component of the "SDAGE";
- Project for monitoring water resources and prospects for the Congo Basin, funded by the French Global Environment Facility and managed by CICOS, with a technical assistance from the French Development Agency. A component corresponds to the development of a resources allocation model on the basin scale. These bases being completed by early 2015, the "SDAGE" then will be initiated with the objective of giving people what they really need.

In 2013, the International Commission of the Congo-Ubangi-Sangha Basin (CICOS) carried out an audit of its activities in Integrated Water Resources Management (IWRM) and of its shipping activities. The main conclusions are as follows:

- CICOS made significant progress in recent years and should continue to assert itself as a major stakeholder in development in Central Africa, particularly through its IWRM mandate conferred in 2007.
- Although CICOS has developed its Strategic Action Plan, it still lacks the precise definition of a framework in which to place all its projects.
- The Master Plan for Water Development and Management should remedy this.
- Without prejudging the decisions of the Ministers’ Committee, various measures could be considered.

The General Secretariat should be strengthened to aim for better implementation of the mandate.

CICOS must be an active party in the implementation of large transboundary hydraulic structures. Besides the technical aspects, it also has an institutional role in this kind of project, alongside the Economic Commissions for Regional Integration (CEMAC and ECCAS).

The recent accession of Gabon allows the definition of common specific activities.

The integration of Angola would be an asset and would have significant consequences for the institution, which would see its “center of gravity” moving to the south.

Regarding the internal financing of the institution, the current mechanism appears satisfactory. Fee mechanisms will be studied in the medium term, once the national IWRM processes are sufficiently advanced.

Water Facility of the European Union: Project for helping CICOS

For three years, training courses on operational hydrology have been organized for the National Hydrological Services of the countries of the International Congo-Ubangi-Sangha Basin Commission (CICOS), and support given for the establishment of a Masterplan for Water Development and Management (SDAGE) through a participatory approach.

Several activities were organized in 2014, especially exchanges about the "SDAGE’s" objectives and their appropriation by Non-State stakeholders, with the support of IOWater, INBO Secretariat, Solidarity-Water Europe and "Eau Vive".

The CICOS representatives were also invited by "AERM" to take part in the Rhine-Meuse Basin Committee.

The project-closing workshop, co-funded by German Cooperation, which took place in November 2014, was indeed the first meeting of the Regional Consultative Hub established by CICDS for the "SDAGE" implementation.

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Target 2: Mobilization of professional know-how of Basin Organizations

Congo Basin - "CICOS"

Cartography of partners of the International Congo-Ubangi-Sangha Basin Commission

The International Congo-Ubangi-Sangha Basin Commission (CICOS) was established in 1999 by Cameroon, the Central African Republic, Congo and the Democratic Republic of Congo (DRC). Gabon and Angola joined the institution later. "CICOS" mandate is to promote inland waterway transport and develop water resources in the basin.

The implementation of projects and programs of "CICOS" and of its Member States is supported by various technical and financial partners.

To enhance the effectiveness of this support, a profile analysis of the partners operating in the sectors of inland navigation and water management was carried out at national and regional levels. This study, financed by German Cooperation (GIZ) and entrusted to IOWater, INBO Secretariat, combined a literature review, interviews with partners in each country and field investigations. A comprehensive list of partners was developed, indicating the partners’ position in relation to "CICOS" and the nature of the projects implemented.

Based on the major trends thus observed, a number of recommendations to "CICOS" for mobilizing funding were established.

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Integrated management of the Nakanbé in Burkina Faso and the White Volta Basin in Ghana

Throughout 2015, the Nakanbe Water Agency (AEN) continued its “SDAGE” elaboration, with the support of the Loire-Brittany Water Agency (AELB), by adopting the Nakanbe Basin assessment and working on Basin Development scenarios.

A training course for the members of the Basin Committee was organized as a side event of the Water Assessment Adoption session. As the White Volta is a transboundary river, an IWRM project was also started with the support of the AELB in the downstream sub-basin of the White Volta in Ghana.

The first phase of this project was completed in 2015 with a three-day workshop, led by IOWater, INBO Secretariat, and two experts from AELB, on the topics of joint planning between Burkina Faso and Ghana and sustainable financing of basin agencies. A report was drafted on this occasion and the outlines of the 2nd phase were drawn.

Burkina Faso

Mouhoun Water Agency: Towards the implementation of the “SDAGE”

After the adoption of the Mouhoun Master Plan for Water Development and Management (SDAGE) in July 2014, year 2015 was devoted to accompanying the Mouhoun Water Agency (AEM), with the support of the French Adour-Garonne and Seine-Normandy Water Agencies, in the operational implementation of the “SDAGE” and in strengthening its departments and services with assignments dealing with:

- Development of knowledge of water resources to support the Water Resources Department in the definition of monitoring;
- Drafting of the “AEM” Multi-Year Action Plan;
- Recovery of the Financial Contribution regarding water.

A pilot Water Police service was established in the Kou sub-basin.

A visit to France allowed the various stakeholders to exchange on the difficulties encountered, to participate in a Basin Committee and work with their counterparts on topics such as: communication, Programs of Measures and their funding.
Target 2: Mobilization of professional know-how of Basin Organizations

Mono Basin Authority (MBA)

On 30 December 2014, the Heads of State and Government of Benin and Togo signed the draft Convention on the Statutes of the Mono River which crosses both countries, creating the Mono Basin Authority (MBA).

Alongside ECOWAS’ Water Resources Coordination Unit, IOWater and pS-Eau, the French Rhone Mediterranean Corsica Water Agency (AERMCO) is helping the gradual process of MBA establishment.

The objectives are twofold:

- To assist in the successful implementation of Integrated Basin Management;
- To encourage the development of cooperation on water and sanitation projects supported by the French local Authorities in the whole basin.

A first pilot year allowed approaching the central government, local authorities and civil society partners to identify a set of needs and actions to be taken, both at transboundary level (MBA) and at national level in Togo and Benin: drafting of a Master Plan for Water Development and Management (SDAGE), establishment and structuring of Basin Committees and Local Water Committees, thinking about the establishment of funding mechanisms, strengthening the Information Systems, building of drinking water and sanitation infrastructure and support to the governance of services.

The originality of the approach is based on the relationship between the writing of planning documents, the programming and financing of short-term actions and the development of cooperation projects on IWRM and access to drinking water supply and sanitation services.

The participation in July 2015 of the Water Resources Directors of Togo and Benin in two meetings of exchanges and information in France took place under this framework.

SAVE THE DATE

10th GENERAL ASSEMBLY INTERNATIONAL NETWORK OF BASIN ORGANIZATIONS

June 1-4, 2016
Merida, Yucatan, Mexico

Chichen Itza, Yucatan »

It is one of the main archeological sites of the Yucatan peninsula, important and renowned relic of the Mayan civilization. The archeological site of Chichen Itza was inscribed in UNESCO’s World Heritage List in 1988.

Registration is open at: www.riob.org/incription/riob-2016.php
Contact: ag2016.riob@riob.org
**Chile**

The Chilean Ministry of Public Works (MOP) - General Directorate of Water (DGA) - is working to develop an Action Plan for improving water resources management.

It thus requested assistance from the World Bank to assess the situation and formulate a national strategy for improving the institutional framework, with a particular focus on the necessary reforms.

The Chilean model is unique as all surface water resources are distributed among the holders of water rights. The type of use is not specified and a market for water rights, without State regulation, allows the resale of these rights between private operators and users.

Aiming for integrated water resources management, having a strategic vision at basin level, promoting decentralized and participatory management, preserving the environmental flow of a river, applying the user-pays principle, are all concepts and challenges that remain very difficult to achieve with the current legal and institutional framework.

**Colombia**

**IWRM Assessment and prospects**

With the support of the French Adour-Garonne Water Agency, a cooperation program with the Colombian Government (2013-2015) focused on 3 large lines of work:

1. **Support to the implementation of the National Policy on Integrated Water Resources Management (NPIWRM) and to the establishment of the first Strategic Plan for the Magdalena River Basin, the largest river basin of the country.**

It also contributed to the organization of a "Regional Environmental Council" in the macro-basin. Financial tools were also studied to facilitate the operational implementation of the NPIWRM.

2. **Consolidation of the National Water Information System, of which the Institute of Hydrology, Meteorology and Environmental Studies of Colombia (IDEAM) is a leading technical member.**

The program highlighted the importance of the interoperability of databases and of the development of a language common to all data producers.

3. **Pollution control, and more particularly the consolidation/updating of the decrees on the tax for water use and sanitation and the organization of industrial pollution control, topics that are respectively developed with the Ministry of the Environment and the Regional Environmental Authority, the "CAR" of Cundinamarca.**

Many working sessions led to technical presentations on IWRM tools in line with the Colombian context, to training courses, to the production of reference documents supporting the proposed guidelines. These sessions involved nearly 140 officials coming from 17 Colombian organizations.

During the assessment made in March 2015, the Vice-Minister of the Environment expressed his interest in continuing this cooperation project, in the very particular context of a possible Colombia’s integration into OECD.

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www.minambiente.gov.co
Ecuador - "SENAGUA"

The recent Constitution declares “a right to water for all”, in which water is a strategic national heritage, for public use, unalienable, indefeasible, imperceptible and essential for life. It also establishes a single "Water Authority" for water resources planning and management: the National Secretariat for Water (SENAGUA) is thus responsible for the implementation of integrated water management policies.

The new water law, enacted on 6 August 2014, structures the territory into 9 River Basin Districts and plans the establishment of Basin Councils.

Each district is managed by a decentralized division of "SENAGUA".

On the occasion of the French-Ecuadorian Water Days in October 2014, the Adour-Garonne Water Agency (AEAG) and IOWater, INBO Secretariat, signed a cooperation agreement with "SENAGUA" for the following:

- Establishment of a pilot Basin Council and organization of an inter-ministerial technical secretariat of this Basin Council;
- Methodological support to the drafting of the Basin Management Plan;
- Participatory Review of the program funding mechanisms;
- Development of a Water Information and Data Management System.

The assignments already carried out in this context allowed:

- Interactive work with all partners of the "National Strategic Water System" to facilitate data exchange;
- Proposals for the training of stakeholders, widening the consultation circle, organizing commissions and working groups.

The strong political will and population support are major assets for the country and will facilitate achieving the objectives of this cooperation.
Target 2: Mobilization of professional know-how of Basin Organizations

Peru - National Water Authority

The World Bank supports "ANA"

The National Water Authority (ANA), established in 2008 and attached to the Ministry of Agriculture, has for mission to develop policies and strategies for integrated water resources management in Peru.

The field implementation of "ANA's" missions is relayed by three levels of decentralized organizations, according to a geographic distribution by major river basins:

- 14 Administrative Water Authorities (AAA);
- 72 Local Water Authorities (ALA);
- 17 Water Resources Basin Councils (CRHC).

"AAAs" and "ALAs" have more than 900 staff members.

The main objective of the World Bank study, in which the International Office for Water, INBO Secretariat, contributed, was to identify a set of recommendations for "ANA" to better fulfill its missions.

"ANA" needs to have adequate financial resources, based, in particular, on the new system of economic fees, that has just been implemented in Peru.

www.ana.gob.pe

In Peru, there are now economic fees for water use!

Under the institutional cooperation agreement signed in September 2013 with the National Water Authority of Peru, the French Artois-Picardy Water Agency is providing support to a project aiming to:

- Implement an ecological tax system (economic fees for water abstraction and wastewater discharges);
- Develop Water Resources Basin Councils (CRHC) and Management Plans.

The Chili River Basin was selected as pilot area for this project.

Today, the implementation of economic fees in Peru is effective, based on the calculation method recommended in the World Bank study.

The amounts collected are growing, from 50 Million Sols (1 € = 3.5 sols) in 2012 to more than 100 million in 2013.

The "Cuenca del Chili" Basin Council is operational and a first Management Plan is developed.

The mission of experts who went there could identify the priorities of this cooperation:

- Better structuring of their Basin Council (method for appointing members, internal rules ...);
- Development of a Technical Secretariat (embryo of a Water Agency);
- Limitation of informal activities without a land license or without any authorization for water abstraction/pollution;
- Public consultation and involvement of stakeholders.

The new 2015 cooperation phase plans to develop:

- A paper in Spanish on the Basin Committee: statute, role, method for appointing members, operation, thematic and geographical working groups;
- A paper and a poster on the economic fee system and river basin management in Peru;
- A study tour of a Peruvian delegation in France.

www.ana.gob.pe

Economic incentives for water use

As part of this project funded by the World Bank and then by the Artois-Picardy Water Agency, the International Office for Water, INBO Secretariat, advised "ANA" for the implementation of these financial mechanisms.

Thus, pragmatic elements were proposed for the implementation of the "user-pays" and "polluter-pays" principles.

How to calculate economic incentives? What economic basis to justify them to future taxpayers?

Adjustments are now needed to answer the following questions: What destination for the levied amounts? In which financial circuits and what are the eligibility criteria?

This is why the project will continue with support from the Artois Picardy Water Agency for answering these new questions.

www.ana.gob.pe

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www.ana.gob.pe

In Peru, there are now economic fees for water use!
EcoCuencas’s partners: a project that involves two continents

In such a context and under its “WATERCLIMA LAC” program, the European Commission selected the "EcoCuencas project", coordinated by IOWater, INBO Secretariat, in December 2014. Activities are planned over 3 years and have a budget of €2.5 million financed at about 75% by the European Union and by counterparts from the nine European and Latin American partners, to promote the development of financial mechanisms for climate change adaptation.

The project plans to design and develop financial tools (fees, payments for environmental services, etc.) in three strategic pilot basins that illustrate the diversity of cases encountered on the continent: 

- The Brazilian "Piracicaba Capivari Jundiaí" basin (PCJ), in the States of São Paulo and Minas Gerais, which are experiencing a historic drought;
- The "Chira-Catamayo" Basin, located between Peru and Ecuador, underlines the challenges of managing shared resources in a transboundary context;
- The Colombian Basin of the "Rio Grande II" dam reservoir that supplies drinking water to Medellín.

The project includes four steps: 

1. An inventory of the effects of climate change on basin water resources, taking into account existing institutional responses;
2. The publication of a guide of good practices;
3. The implementation of measures recommended in the three pilot basins;
4. The dissemination of the lessons learned during these stages.

This project is based on the logic of experience sharing from the local level to the intercontinental level, with a concern of appropriation and sustainability.

www.aquacoope.org/ecocuencas
Target 2: Mobilization of professional know-how of Basin Organizations

Mekong River Basin

Evaluation of the sediment monitoring project

Sediment dynamics is an essential process of river balance, and therefore a key issue in the management of large rivers such as the Mekong.

A program for the measurement of flows and sediment transport (Discharge and Sediment Monitoring Project) was funded by the French Fund for Global Environment (FFEM).

This project has received funds amounting to € 800,000 for a 3-year period (2012-2014) and is usually integrated into the “Information and Knowledge Management Program” of the Mekong River Commission (MRC), also supported by other partners.

The MRC asked two experts from IOWater, INBO Secretariat, and IRSTE A to evaluate the project results. This assessment was based on many project reports provided by the MRC and on a visit made to the main parties involved in this program: MRC centers in Vientiane, Phnom Penh, Ho Chi Minh City and WWF.

www.mrcmekong.org

Cambodia

Stung Sen Basin pilot Project

The second phase of this project aims to improve Water Resources Governance in the Stung Sen River Basin, main tributary of Lake Tonle Sap, with the support of the Loire-Brittany and Rhine-Meuse Water Agencies.

The results of the first phase (2012-2014) were very encouraging and helped the Cambodian Administration, including the Tonle Sap Authority (TSA) and the Ministry of Water Resources and Meteorology (MOWRAM), to make great progress in the field of Integrated Water Resources Management in the basin.

At national level, the sub-decree detailing procedures for the planning and implementation of a water resources management policy in basins was approved by the Council of Ministers in July 2015 and especially gives a framework for the official establishment of Basin Committees.

At the level of the Stung Sen River pilot Basin, the training of local representatives, selected to be part of the Stung Sen Basin Committee, and of the TSA and MOWRAM team continues in the stages of the planning process:

- Definition of goals for the Basin Management Plan;
- Establishment of the first Program of Measures;
- Cost estimates and potential funding sources;
- Articulation between different planning levels: local, river basin district and national;
- Role of the various stakeholders.

Field trips are also organized with local representatives from the entire basin to raise their awareness of the various problems encountered in urban and rural areas.

The finalization of the planning process will lead, in late 2016, to the first version of the Basin Management Plan and Program of Measures to be implemented in the Stung Sen Basin.

As the first phase allowed collecting a large number of data and identifying various sources of information, regularly updated by the partner services, the TSA wants now to develop its internal capacity to manage and make the best use of these data to produce synthetic information needed for decision-making and public information.

Thus the development of new layers in the Geographic Information System and the integration of the existing data into the databases are under way. This already allows:

- Facilitating statistical analysis and online visualization of hydrological data;
- Developing comparative analyses of data provided by radar imagery with field data;
- Studying possibilities of analysis for each sub basin.

www.tonlesap.gov.kh
**Target 2: Mobilization of professional know-how of Basin Organizations**

**Laos**

**Transposition of the results from the Nam Ngum pilot Basin**

Phase 2 of the integrated Nam Ngum pilot basin management project was completed in October 2015.

*With support from the Loire-Brittany and Rhine-Meuse Water Agencies, this phase 2 consisted in drafting a guidance document recording information on the tools and methods acquired during the project and their application to the Laotian context.*

The guidance document is composed of 9 “action sheets” that aim at the practical implementation of the National Strategy for Water Resources Management (2012 - 2020).

The technical missions organized in 2015 helped to develop the action sheets linked to three strategic lines of work for the completion of the project:

- Definition of the organizational framework for the drafting of a strategy for each basin;
- Development of an operational Water Information System;
- Organization of data management to supply information on the basin status.

These lines of work were discussed by a panel of national and regional stakeholders in seminars organized in March and September 2015 in Vientiane.

The third phase of the project (2016-2017) aims to continue supporting the Laotian Authorities in the extrapolation to the whole country of the basin management mechanisms, successfully tested in the Nam Ngum pilot Basin.

*The presence of an International Volunteer, based in Vientiane (2016) then in Phnom Penh (2017), will ensure continuity of action through a permanent and direct follow-up of the project for the local and national beneficiaries.*

**Myanmar**

**Launching of institutional cooperation**

A cooperation program has started in Myanmar with the Ministries of Environmental Conservation and Forestry (MOECAF) and Transport (MOT) with the support of the French Loire-Brittany Water Agency.

*Strictly speaking, there is currently no water law in Myanmar, but a National Policy for Water Resources was promulgated in February 2014.*

The Ministry of Transport takes care of the Secretariat of the National Water Resources Committee.

Basin management experiences mainly focused on the Irrawaddy River Basin and its navigability (MOT), and on the Inle Lake Basin and its environmental conservation (MOECAF).

Exchanges with both Ministries allowed confirming the willingness of strengthening Integrated Water Resources Management Policy, while testing control and incentive tools for water uses, the mobilization of ad hoc funding to carry out the action plan and the development of a genuine monitoring tool for following up public policy and of an indicator / management chart system.
Second phase of the Dong Nai Basin pilot project

The first phase of Dong Nai pilot project, developed under a cooperation agreement, signed in June 2007 by the French and Vietnamese Ministers for the environment, has strengthened the institutional framework for the conservation of water resources in Vietnamese river basins.

An assessment carried out in November 2012 noted significant progress made (new Vietnamese Water Act passed in June 2012, decree establishing river basin organizations being drafted), and paved the way for the preparation of a second phase of the project funded by the French Loire-Brittany Water Agency.

A kick-off seminar launching the second phase of the project was held in Ho Chi Minh City on 31 October 2013 in the presence of Dr. Lai, Vietnamese Vice-Minister of Water Resources, Mr. Jacques Oudin, honorary Senator and Member of the Loire-Brittany Basin Committee, as well as by the Director of the Loire-Brittany Water Agency, Mr. Noël Mathieu.

This seminar was an opportunity to gather the approached members of the Dong Nai Basin Committee.

The second phase of the project is articulated around three components:
- Establishment of an operational Basin Committee;
- Preparation of the Dong Nai Management Plan;
- Training in France for the technical team in charge of supporting the Dong Nai Basin Committee.

Towards the implementation of the new water policy

The development of the second phase (2013-2015) of the Dong Nai project, initiated by IW ater, INBO Secretariat, with the support of the French Loire-Brittany Water Agency, has continued cooperation with the Vietnamese Authorities.

This Phase 2 focused on the training of stakeholders involved in sustainable water resources management and supported partners to build strong institutional and legal bases for the development of Integrated Water Resources Management in Vietnamese Basins.

A circular, dealing with the water resources planning method, was drafted by the Department of Water Resources Management of the Ministry (DWRM-MONRE) and the National Center for Water Resources Planning & Investigation (NAWAPI).

It specifies the nature of basin planning and the strategy for the development of 10-year plans with revision every five years, jointly with the Socioeconomic Plan of the Ministry of Planning and Investment.

The new legislative context involves the drafting of River Basin Management Plans in 3 large areas of northern, central and southern Vietnam.

Eleven priority Basin Plans should be developed by 2020, including the Dong Nai.

This action should be accompanied by the strengthening and structuring of regional teams for water resources management. These teams have young and proficient staffs.

A training session on “Water Resources Planning: Processes and Practices” was organized for them in October 2015 in Hanoi as part of VA CI (Vietnam Water Cooperation Initiative).

At the end of this 2-day training program, a training certificate was handed to the 60 participants attesting the acquisition of specific skills in water resources planning.
Moldova

Analysis of priority options for water governance

More than twenty years after the break-up of the Soviet Union, the Republic of Moldova is still facing considerable challenges.

For more than 13 years, Swiss Cooperation has supported the development of innovative and decentralized water supply and sanitation services.

Thanks to this help, access to drinking water was improved for more than 40,000 people in Moldova.

In this context, the International Office for Water (IOWater), INBO Secretariat, was selected by the Swiss Cooperation Office in Moldova (SDC/SCO-M), in collaboration with the Coordination Office for Technical Cooperation of the Austrian Embassy (ADA), in order to conduct an in-depth analysis of the situation and present recommendations for action focusing on:

- Developing a water information management system, that provides complete and reliable data to the e-governance platform;
- Promoting integrated water resources management, according to the provisions of the new water law;
- Organizing capacity building and training, aimed at implementation of a newly adjusted regulatory framework on water supply and sanitation.

Two French and 2 Austrian experts realized a first mission between 14 and 20 September 2014, in order to analyze the situation and identify the priority needs and concrete actions that could be implemented in the coming years with SDC and ADA support on these 3 topics.

The mission report was presented and discussed during a national workshop organized on 22 October 2014 in Chisinau.

Central Asia

The Swiss Cooperation Agency is supporting water management in Central Asia

Switzerland is committed in a new program (2014-2020) for regional water resources management in Central Asia.

This new program includes:

- The strengthening of Integrated Water Resource Management (IWRM);
- The development of a Water Information System (WIS);
- The improvement of water management for irrigation (PPI);
- The training and capacity building of partners.

Under a Memorandum of Understanding between IOWater, INBO Secretariat, and the IMoMo consortium, the Swiss Cooperation Agency (SDC) supported a joint mission of experts, carried out in November 2013, to specify an Action Plan for 2014 to develop monitoring and automated data exchange between the partners involved in Kyrgyzstan.

In a transboundary pilot basin, this Action Plan includes the definition of a first hydrological frame of references (with codification of basins, rivers, lakes and canals) to develop interoperability and facilitate the exchange of water data between riparian countries. This frame of references can later be extended to the regional level.

www.aquacoope.org/sdc-ca

www.inbo-news.org

All information is available on the Web

1.50 Million visits per year
This project responds to the observations collected in the assessment made by the European Commission of the first 2009-2015 River Basin Management Plans across Europe. It has shown important differences between the EU Member States.

To better share the experience of the practitioners in charge of participative river basin management planning in their own country, the objective of the project is to set up and run a simple, voluntary and targeted system to allow mutual learning between peers about WFD implementation.

Following the first call launched at the beginning of 2015, 16 Receiving Competent Authorities (RCAs) from River Basin Districts located in 11 EU Countries (Denmark, Estonia, Finland, France, Italy, Luxembourg, Malta, Norway, Poland, Spain and Sweden) expressed their interest in having answers to some problems encountered in the implementation of their River Basin Management Plan from their colleagues in other Member States.

The Peer Review missions started in August 2015 and will continue until spring 2016.

In parallel, over 60 experts from 15 Member States have registered so far as candidates to carry out reviews by sending their Europass CV and profile form to the secretariat.

To join the community for mutual support on WFD implementation, please contact us:
peer.review@oieau.fr

Consult the project website:
www.aquacoop.org/peer.review

"EUROPE-INBO 2016": the "Cirque de Gavarnie" upstream of Lourdes

"EUROPE-INBO 2016"
For the implementation of the European Water Directives

Lourdes - France
19 - 22 October 2016
To participate, please register:
www.inbo-news.org
Plan for Action and Partnership

Target 3: Synthesis and dissemination of available knowledge and know-how

Organization for Economic Cooperation and Development (OECD)

On 4 June 2015, Ministers from OECD’s 34 member countries backed 12 OECD Principles on Water Governance, and encouraged governments to put them into action.

Meeting current and future water challenges requires robust public policies targeting measurable objectives in pre-determined time-schedules at the appropriate scale, relying on clear assignment of duties across responsible authorities and subject to regular monitoring and evaluation.

The Principles provide a framework to assess whether water-related institutions perform optimally, learning from international experience, but also to seek to catalyse reform processes that can help adjust where need be.

The Principles were developed using a multi-stakeholder approach within the OECD Water Governance Initiative, of which INBO is a co-founder.

The Principles were endorsed by a great number of public, private and non-profit organizations at the 7th World Water Forum in April 2015 in South Korea.

These Principles were translated into 15 languages.

To support the implementation of the Principles, next steps include collecting evidence and good practices at local, basin, and national levels and developing a set of indicators on governance that can help better measure the state of play of water-related institutions at different levels.

INBO will contribute to best practice identification and indicator development in relation to the Principle 2: “Manage water at the appropriate scale(s).”

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The 12 OECD Principles on Water Governance:

- **Principle 1**: Distinguish roles and responsibilities for water policymaking, policy implementation, operational management and regulation, and foster coordination across these responsible authorities.

- **Principle 2**: Manage water at the appropriate scale(s) within integrated basin governance systems to reflect local conditions, and foster coordination between the different scales.

- **Principle 3**: Encourage policy coherence through effective cross-sectoral coordination, especially between policies for water and the environment, health, energy, agriculture, industry, spatial planning and land use.

- **Principle 4**: Adapt the level of capacity of responsible authorities to the complexity of water challenges to be met, and to the set of competencies required to carry out their duties.

- **Principle 5**: Produce, update, and share timely, consistent, comparable and policy-relevant water and water-related data and information, and use it to guide, assess and improve water policy.

- **Principle 6**: Ensure that governance arrangements help mobilize water finance and allocate financial resources in an efficient, transparent and timely manner.

- **Principle 7**: Ensure that sound water management regulatory frameworks are effectively implemented and enforced in pursuit of the public interest.

- **Principle 8**: Promote the adoption and implementation of innovative water governance practices across responsible authorities, levels of government and relevant stakeholders.

- **TRUST & ENGAGEMENT**

- **Principle 9**: Mainstream integrity and transparency practices across water policies, water institutions and water governance frameworks for greater accountability and trust in decision-making.

- **Principle 10**: Promote stakeholder engagement for informed and outcome-oriented contributions to water policy design and implementation.

- **Principle 11**: Encourage water governance frameworks that help manage trade-offs across water users, rural and urban areas, and generations.

- **Principle 12**: Promote regular monitoring and evaluation of water policy and governance where appropriate, share the results with the public and make adjustments when needed.

You can download the OECD Principles on Water Governance in all languages available at: www.oecd.org/fr/gouvernance/principesdelodcdesurlagouvernan-
cedeau.htm
Good practices in Basin Management

Assessment of the experiences of five African organizations

The document "Assessment of the experiences of transboundary basin organizations - Good practices and recommendations" was presented and discussed at an exchange workshop, held in Ouagadougou (Burkina Faso) in November 2013.

The African partner institutions are the basin organizations of the Senegal (OMVS), Niger (NBA), Congo (CICOS) and Volta Rivers (VBA) and the Water Resources Coordination Center (WRCC) of the Economic Community of West African States (ECOWAS).

This assessment is built around practices related to four key topics:
- Governance;
- Search for autonomous and sustainable financing;
- Strategic planning and implementation actions;
- Optimization of monitoring.

The workshop gathered the concerned organizations, the French Development Agency (AFD), which finances projects in these organizations, the African Network of Basin Organizations (ANBO) and IOWater, INBO Secretariat.

The objective was to exchange and capitalize on best practices based on the assessment document, which was amended at the end of the meeting.

An electronic forum on monitoring was also held in September 2012.

Finally, many documents relating to the four topics will be available soon on the African Water Information System (AWIS) website, managed by ANBO.

Congo River Basin - CICOS

"Prosper’eau": a game to raise awareness on IWRM

From 10 to 12 November 2014, the workshop on the establishment of the Congo River Basin’s Regional Dialogue Platform was held in Brazzaville (Congo) and jointly funded by the European Union, the Rhine-Meuse Water Agency and German Cooperation.

About one hundred participants from Cameroon, Central African Republic, Congo, Democratic Republic of Congo and Gabon contributed by their active presence in the success of this workshop, facilitated by the International Office for Water, INBO Secretariat, Solidarity Water Europe and “Eau Vive”.

The establishment of this Regional Platform is essential to enable, through links with the International Commission of the Congo-Ubangui-Sangha Basin (CICOS), the development of the Master Plan for Water Development and Management (SDAGE) of the Congo River Basin.

But this "SDAGE" must also rely on a strong involvement of the basin’s users and populations. Integrated and sound management of the Congo River should be the key to a prosperity shared by these populations.

This principle is the origin of the "Prosper’eau" game, which has been tested with the participants of the workshop.

A "Prosper’eau" session proposes to the participants to split into three groups (Populations, Politicians and Providers). Starting from a “water” challenge for the basin (building of a dam, diminishing fish resources, climate change…) each group plays its cards and then draw, on the game board, solutions … or oppositions.

CICOS, the fourth player, acts as facilitator.

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Target 3: Synthesis and dissemination of available knowledge and know-how

"Répert’EAU":
good practices used in Quebec for water management!

River Basin Organizations (RBOs) in Quebec now have an online tool to access to the appropriate municipal practices in water management implemented throughout Quebec!

Municipalities and water resources management

Over the years, the laws, regulations and policies for water management have multiplied in Quebec and gave great responsibilities to County Regional Municipalities (CRM) and the other municipalities of the Province.

Municipal stakeholders innovate more and more to fulfill their legal obligations. In such a context, an online directory of Quebec good municipal practices in water management was developed, the "Répert’EAU" (WATER Directory)!

Disseminating examples!
The "Répert’EAU" provides practical solutions to existing problems, it creates an active community linked by the sharing of best practices and facilitates collaboration among water stakeholders to diminish the costs of project implementation.

Experience sheets of the "Répert’EAU" include a project summary and budget, photos, challenges, partners, a space for comments, etc. Some of which were carried out in partnership with River Basin Organizations (RBOs), thus demonstrating that the missions of these organizations are complementary to those of municipalities.

You can subscribe to an email alert to stay informed about the practices added.

The platform was launched on 17 October. Good practices are already online and more will be added later on, some of which were carried out in partnership with RBOs, thus demonstrating that the missions of these organizations are complementary to those of municipalities.

The directory is available on the Website and videos were produced for some good practices.

You can find them on the YouTube channel of the Quebec RBOs at:
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International Conference
on Drinking Water Source Protection

The Regrouping of the River Basin Organizations of Quebec (ROBVQ) is organizing the 4th International Forum on Integrated Water Management, to be held in Quebec City from November 1st to 3rd, 2016.

It will address the water source protection issue.

The conference will address topics such as assessment and monitoring of water sources, risk management and emergency measures, protection measures, governance and land use planning.

This international conference is organized in partnership with the Laval University and the St-François River Basin Organization (COGESAF).

http://rv-eau.ca

4th edition
International Forum
on Integrated Water Management
Tools for ACTION

Target 3
Report of Activities 2013 - 2016
75
The PIANO (Policies, Innovation And Networks for enhancing Opportunities for China-Europe Water Cooperation) project won a call for proposals of the European Framework Program for Research for 2020 (2014-2020), which aimed at promoting strategic cooperation partnerships for research and innovation between Europe and the rest of the world.

It focuses on the development of business opportunities and cooperation in research and innovation between Europe and China.

The project inception workshop was held on 9 April 2015 in Brussels. The six components of the project were presented on this occasion. The coordinators of each component are:

- International Office for Water, INBO Secretariat,
- Technical University of Denmark, (DTU);
- University of Natural Resources and Life Sciences, Vienna - (BOKU), for two components;
- Stockholm International Water Institute, (SIWI);
- Institute for Environmental Protection and Research, (ISPRA).

Among other project partners, there are the Atkins consulting firm, the National Laboratory of Civil Engineering (Portugal), the European Water Association (EWA) and the Chamber of Commerce of the European Union in China.

The first component aims at increasing Research and Innovation in the China-Europe Water Platform (CEWP) by developing the mapping and analysis of stakeholders’ networks and existing outstanding innovation projects.

European and Chinese social and professional networks (Twitter, LinkedIn, Facebook, Weibo) will contribute to the facilitation and visibility of the project.

Case studies of innovative European technologies in the water sector will also be presented.

www.project-piano.net
Target 3: Synthesis and dissemination of available knowledge and know-how

European Union - Water Research to Market

From Research to Market...

In the context of European work on "Science-Policy-Society Interface", the Water RtoM - Water Research to Market - project financed by the LIFE+ Program (2010-2013), aims to accelerate the transfer of water research results to the Market and improve the Researchers-Users dialogue.

IOWater, project coordinator, the Gdansk Water Foundation (Poland), Amphos 21 (Spain), the Romanian Water Association (Romania) and a Committee of experts have developed a strategy divided into three components:

- identifying innovative products,
- assessing them, quickly at first via the ReMAS (Research to Market Assessment Strategy) tool and then in more details by specifying, in a language understood by the water professionals, the missing steps to make these products operational and marketable,
- promoting them, free of charge, via the Web e-fair tool, e-seminars or professional meetings.

The Water RtoM strategy has been successful for 12 research results that have attracted the attention of professionals.

A good practice guide also provides tools to improve the Researchers-Users dialogue.

It describes:

- A toolbox to facilitate the dissemination and promotion of research results to the market,
- 10 good practices to improve the "science-society-users" interface, based on the Water RtoM experience
- Some recommendations.

The Guide is intended, on the one hand, for water practitioners, basin organizations, water administrations, municipal water utilities, technology providers, as well as for researchers, research donors, technology transfer institutions.

Convinced of the importance and efficiency of such a strategy, the partners propose to capitalize the Water RtoM tools and strategy through a permanent "service".

This service would provide individual support to researchers in their strategy for dissemination of their results, support to research planners by providing in particular an analysis of the distance to the market for the results of funded projects, support to SMEs through competitive clusters or SME networks by providing a watch on research products tailored to their needs.

The major difficulty, revealed by the market study carried out at the end of the project, is that, although the respondents (researchers, donors and users) are very interested, they are not willing to pay for such a service or cannot afford to do so.

The proposed Water RtoM service is in the making ... to see what it becomes in the future.

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WaterDiss

Better strategies to transfer research results in Europe

The consortium of the European WaterDiss2.0 project organized, on 2 and 3 December 2013 in Barcelona, its final conference entitled "Definition of the best strategies to transfer research: exchange of European ideas, methods and tools".

During the past three years, the WaterDiss2.0 project partners worked with a large number of beneficiaries of EU funding. They defined and tested new strategies to transfer water research to end users.

The final conference of Barcelona presented the whole work and obtained results through operational and practical examples.

The conference addressed the following main questions:

- Why is it so important to develop specific and adaptive strategies for dissemination?
- What are the responsibilities and respective roles of water managers, scientists and stakeholders in this transfer?
- Are transfer tools and methods likely to stimulate innovation?
- What are the actions to be taken by donors to optimize the quick use of research results on water?

During the conference, sharing research results between researchers and users is a slow and incomplete process: the estimated time for transferring research before integration into public policy, production of new products or services, is often more than 10 years.

www.waterdiss.eu
**Natural Water Retention Measures**

The six research projects on integrated water resources management funded in 2009 by the European IWRM-Net consortium are now complete!

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Lead Institution</th>
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| Development of an integrated model to predict abiotic habitat conditions and biota of rivers for application in climate change research and water management | DE: Potsdam Institute for Systems Biology, Germany (PDSB) – FR: IST, Lisbon, Portugal (IP) – IT: Mediterraneo Agroingenious Institute of Rail |”green infrastructure”
| WATER-2.Adapt: Resilience enhancement and water demand management for climate change adaptation | IT: IREAS, Fondazione per il Basso Adige – SP: BCI (Biocode Città per il Lago) – DE: Saarland University (University of Saarland) – DE: Saarland University (University of Saarland) |
| Water markets scenarios for Southern Europe: New solutions for coping with water scarcity and drought risk | FR: UPM: Université Polytechnique de Madrid – IT: DipSA (Department of Agricultural Sciences, University of Bologna) | 15 languages, explicit the NWRM implementation in a coherent and coordinated approach. They highlight the multiple benefits provided by the measures identified in the following four major sectors: hydro-morphology of rivers, forest management, agricultural practices and urban development. |

**A reference web platform**

The project, which ended in 2015, identifies the 53 recommended eco-engineering measures and provides answers on their implementation, their economic aspects and their biophysical impacts.

All the knowledge is available on the project website, which is now the European Reference Platform on this topic. Many technical illustrations and information, through case studies and synthesis, as well as operational tools for decision-makers and stakeholders, are proposed.

Practical guidelines, translated into 15 languages, explicit the NWRM implementation in a coherent and coordinated approach. They highlight the multiple benefits provided by the measures identified in the following four major sectors: hydro-morphology of rivers, forest management, agricultural practices and urban development.

**Management of water resources and aquatic environments: innovative solutions for adapting to climate change;**

**Socioeconomic aspects of the management of water resources and aquatic environments.**

The summary of this conference is available online at: 

www.iwrm-net.eu
The International Network of Basin Organizations has been involved in raising awareness of issues on the transfer of research results to improve the management of water resources and aquatic ecosystems, based on solid scientific information, by participating in many Science-Policy Interface (SPI) demonstration projects. IOWater, INBO Secretariat, also facilitates the European Water Community (EWC) virtual platform, in particular. A dedicated CIS-SPI action was conducted as part of the Common Implementation Strategy (CIS) of the European Water Framework Directive (WFD) and coordinated by ONEMA and the DG Environment between 2010 and 2012.

As part of this activity, the recommended SPI methods are tested, taking into account the needs of water managers in an Irish pilot basin, the Eastern River Basin District (ERBD).

Three sites around Dublin were pre-identified as having challenges related to the implementation of the WFD and Flood Directive, especially for assessing Natural Water Retention Measures with an ecosystem approach.

The “Community of Practitioners” met in October 2014 in Ireland. The testing of the method for scientific knowledge transfer took place between October and December to prepare a final report on the implementation of the recommendations in January 2015.

Preparatory meeting for SPI activities
Plovdiv - November 2013 © IOWater - C.Runel

Uzbekistan

Capacity Building for Water Professionals

The Scientific Information Center of Interstate Commission for Water Coordination (SIC ICWC) of Central Asia included the capacity building of water professionals among its priorities and help to the counties of the region (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan) for the development of training programs and organization of seminars for experts of the water sector at different levels of the water hierarchy.

So, in 2014 - 2015, SIC ICWC developed special training programs for water professionals of the Ministry of Agriculture and Water Resources (MWA MAWR) of Uzbekistan, based on modules dealing with 10 topics (National water, Transboundary water, Integrated Water Resources Management, Water accounting and measurements, Water use in Agriculture, Water Consumers Associations etc.).

Training sessions were conducted in 3 modules dealing with:
- Water resources management and basin approach (9 - 26 February 2015);
- Operation of irrigation systems and hydraulic works (16 March - 1 April, 2015);
- Improvement of irrigated lands (16 April - 2 May 2015).

The Regional Basin Water Management Administrations (BWMA) of MWA MAWR could choose in the offered training sessions the interesting themes according to the target audience and specificity of their region.

Training was delivered in 3 days: 2 days for theoretical part (lectures), the 3rd day for practical training.

All lectures were prepared and provided by experts of SIC ICWC of Central Asia. In total, more than 600 specialists were trained during the spring 2015 training session, and about 100 experts from Water Management Organizations (WMOs) of the MWA MAWR of Uzbekistan participated to improve their professional knowledge and skills.

The SIC ICWC organized again these sessions in autumn.

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Target 3: Synthesis and dissemination of available knowledge and know-how

Tajikistan

Study tour to Spain and France for a Tajik Delegation

In September 2015, a study visit was organized in Spain and France for a delegation from Tajikistan and two representatives of the World Bank. The delegation met the key administrations and organizations in charge of integrated water resources management, irrigation and Water Information Systems.

The visit allowed presenting the implementation of integrated basin management in the European Union, its legal and institutional bases, the methodology applied to work out Basin Management Plans, to outline the management of irrigation systems and the role of water users’ associations as well as the use of economic mechanisms to ensure financing.

Visit of the Carpentras Canal
France

Turkey

Study tour: Presentation of water allocation systems

The World Bank, providing technical assistance to the Turkish Ministry of Forestry and Water Affairs, wished that the operational experience of water allocation in French river basins under conditions of water scarcity, be presented.

The main organizations concerned in the South of France are: Adour-Garonne Water Agency, Canal de Provence Company, the Authorized Users’ Associations (ASA) of the Gap and Ventavon canals in particular, who testified of their experience of managers in situation of water scarcity:

- at the basin level, on the definition of allocations priority between uses and their operational implementation by the Basin Water Agency and the Regional Development Company in charge of infrastructure.
- at the local level, Authorized Users’ Unions Associations (ASA) were reinforced by the 2004 modernization Act, and keep on playing a significant role in the transmission of their water management experience and know-how in scarcity situation.

The 40 pages English paper is exploring:

- The legal and policy frameworks for French water management, including the system of permits for water abstractions, the water law enforcement activities and the latest developments in WFD implementation;
- The mechanisms for planning and allocating water at basin level according to the Adour-Garonne Water Agency experience;
- The Durance-Verdon water system for multi-purpose water infrastructure management: historical analysis, sectoral policies coordination and governance issues;
- The legal and operational conditions for water scarcity management by Users’ Associations: characteristics of the Authorized Users’ Unions Associations (ASA) of the Lower and Middle Durance, the “water rights” challenges and the specific case of restrictions organized on the Gap Canal.

The identified case studies were presented in Ankara on 30 and 31 October 2013 at the international seminar jointly organized by the World Bank and the Turkish Ministry of Water and Forestry.

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Jordan

Study tour to France

Upon the request of the Jordanian Ministry of Water Resources and Irrigation (MWI), IOWater, INBO Secretariat, organized a study tour, in France from 17 to 22 May 2015, on the system used for managing water and its scarcity, for a Jordanian delegation of senior officials, led by the Secretary General of the MWI, H.E. Basem TELFAH.

The delegation went to Orleans to examine the methods used for the participatory and operational management of the Beauce aquifer.

The study tour is part of a program established with the MWI, thanks to funding from the German Cooperation Agency, GIZ.
INBO has continued promoting the Paris Pact on water and adaptation to climate change in the basins of rivers, lakes and aquifers.

This initiative launched at the COP21 includes a document summarizing the principles and actions to be implemented and a “call for action” for those involved in basin management.

They are invited to present their best adaptation projects to experience exchanges and good practices.

The Paris Pact met with positive response: to date (May 2016) it gathers a community of over 340 signatory organizations in 87 countries.

INBO, in partnership with the Secretariat of the Water Convention of the United Nations Economic Commission for Europe (UNECE), is organizing this community of signatories of the Paris Pact, through the platform of pilot basins working on adaptation to climate change.

It aims to promote the exchange of good practices and the development, follow up and promotion of adaptation to climate change projects in basins.

The 2016 "Call for Action" was launched in early May.

It invites the stakeholders in River Basin Management to join the initiative and propose priority projects related to knowledge for adaptation: monitoring network and Water Information Systems (WIS).

Experience and good practices of identified exemplary projects will be presented and promoted in major "Water and Climate" events (INBO World General Assembly in Merida, 1-4 June, the International "Water and Climate" Conference in Rabat on 11 and 12 July, the 6th World Workshop on Water and Climate, from 13 to 15 September in Geneva, the COP22 from 7 to 18 November in Marrakech).

**Target 3:** Synthesis and dissemination of available knowledge and know-how
Plan for Action and Partnership

Target 4: Establishment and development of water information systems

EMWIS

Euro-Mediterranean Water Information System

Better management of knowledge on water in the Mediterranean area

Improving water knowledge for adaptation to climate change

The Mediterranean region is particularly vulnerable to the effects of climate change on water resources.
The preparation of adaptation plans requires good knowledge and regular monitoring of water resources and of their uses.

In such a context, the project of a Mediterranean Water Knowledge Platform was retained as a solution at the MedCop21 and presented as a Mediterranean proposal for the climate conference of Paris in December 2015 (COP21).

This platform, which was certified by the Union for the Mediterranean in 2014, is also a key element of the Water Strategy Action Plan for the Western Mediterranean region (5 + 5), adopted at ministerial level in March 2015.

Earth observation and information sharing

The Earth observation satellite programs allow considering new possibilities for knowledge of water resources and environments.
Operational services are being developed.
The recent Hydrospace workshop, organized in September 2015 at the European Space Agency, helped to make an assessment.

Such operational applications will be validated by the SWOS project as regards wetlands or river basins.

EMWIS is participating in this wetlands observation satellite system project to incorporate the needs of water resource managers in connection with the EU Water Directives.

At the same time, the European neighbor countries are preparing the implementation of Shared Environment Information Systems (SEIS).

In coordination with the European Environment Agency, EMWIS provides technical support, to Morocco in particular, for interoperability and common reference frames, to Algeria for the architecture of the information system and to Israel for environmental accounting of polluting emissions into water.

Technological innovations to meet the Mediterranean challenges

EMWIS is getting mobilized in several European projects to develop technological solutions to respond to the challenges of sustainable water management in the Mediterranean.

The OpIRIS project is working to improve irrigation efficiency thanks to online expert systems to help irrigation planning.
The WEAM4i projects aim to develop automated irrigation management systems for farms.

Given the scarcity of the resource, the reuse of treated wastewater is becoming mandatory, but it is necessary to make use of efficient and economically viable processes, tested by the demEAUmed project for the tourist sector, in particular.

The SAID project proposes a homogenous decision-making support system that integrates all the necessary parameters for optimizing the management of large hydraulic structures to meet all needs in a river basin.
The ANADRY project proposes a cheap and effective process for treating the sludge of wastewater treatment plants for its reuse as fertilizer without any health risk or for energy production.

www.emwis.net
Target 4: Establishment and development of water information systems

French-Speaking World

Facilitation of the "Water portal" of "Médiaterre"

During summer 2011, a Memorandum of Understanding was signed by the Sustainable Development Institute of the French-speaking World (IFDD), a subsidiary branch of the International Organization for the French Speaking World (OIF), and the International Office for Water, INBO Secretariat, to collaborate to the facilitation of the "Water" portal of "Médiaterre".

A new step will now be reached that will make the "Water portal" evolve towards a real educational platform.

These activities will take a new dimension.

This memorandum was renewed in January 2013 and extended to the drafting of more technical articles.

www.mediaterre.org/eau

AWIS

African Water Information System

The African Water Information System (AWIS) regroups partner organizations that gather or produce information on water and its management in the whole of Africa.

It is referencing this information and proposes free access via its web portal.

The dynamics around AWIS was revived in March 2014 by the Organization for the Development of the Senegal River (OMVS), in partnership with the European Union.

A workshop on information sharing was held in Mbour (Senegal).

It underlined the high added value of AWIS based on networking African information producers, on multilingual work in French, English and Portuguese and on its unique portal shared by thousands of users.

The Focal Points benefited from training from IOWater, Secretariat of the International Network of Basin Organizations (INBO) to independently enrich the portal.

A new workshop in videoconferencing, held on 30 October 2014, helped to consolidate knowledge and methodology.

www.african-wis.org
Target 4: Establishment and development of water information systems

Colombia

Support to the development of Water Information Systems

A reform process is underway in Colombia to improve water resources management. This process includes, among other things, the short-term development of strategic plans for 5 major hydrographic regions of the country: Magdalena-Cauca, Caribbean, Pacific, Orinoco, Amazon.

To support this reform, IOWater, INBO Secretariat, is implementing an institutional cooperation project, funded by the French Adour Garonne Water Agency, which includes:

1. An institutional and methodological assistance to the preparation of the Rio Magdalena-Cauca Strategic Plan;
2. A support to the improvement of the needed data management;
3. A local component seeking to improve industrial pollution control in the Bogota River.

Year 2014 mainly focused on the “data management” component.

After a step of exchange of experience on water information systems and of assessment of the Colombian partners’ needs, a series of recommendations was presented, in particular to improve interoperability between the various national and regional information systems.

The French experience in terms of creating language/common reference frames and improving interoperability between existing water information systems, seems quite suitable for the integration of the regional data required by the Regional Water Resources Assessment Program (ERA).

The broad lines for action have thus been identified to develop products of common interest for improving data interoperability in the context of the Cundinamarca ERA.

Improve of data management under the Environmental Information System of Colombia (SIAC) and more specifically the Water Resource Information System (SIRH), managed by the National Institute IDEAM.

The missions organized in November 2012 and March 2013, allowed presenting the French experience in water data management in terms of establishing common languages and reference frames and enhancing interoperability between existing information systems in conformity with the “SAN-DRE” standards (see page 43).

The Colombian partners wish to facilitate the integration of national and regional data under the Regional Water Resources Assessment program (ERA). An inter-administrative framework agreement was signed between the Head of IDEAM and the regional authorities in the Bogota region (CAR, Acueducto, FOPAE, SDA) in September 2013.

Following this agreement, a mission carried out in October 2013 helped organize the first exchanges with the regional partners and validate the principles of the development of a data sharing platform by increasing interoperability between systems with the first elements of a common water reference frame.

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Ecuador

Consolidation of the information system on water resources

With the adoption of a new Water Law in August 2014, the Republic of Ecuador established a new Agency for the Regulation and Control of the Water Sector (ARCA), supervised by the Secretariat of Water Resources (SENAGUA) and the Ministry of Coordination of Strategic Sectors (MICSE).

A study of the roadmap of this new agency is being made by the Aigos Consulting Firm.

In this context, the International Office for Water, INBO Secretariat, was entrusted with a specific analysis of the potential consolidation of the Information System on Water Resources in Ecuador (SIRH).

The mission on this topic, carried out in September 2014, was the occasion of meeting with the representatives of organizations involved in the production, management and enhancement of water data (ARCA, SENAGUA, SENA-PLADES, INHAMI, MAE, IGM, etc.).

These exchanges allowed specifying a series of recommendations aiming firstly to organize the establishment of “ARCA” Information System and secondly to enhance the sharing and integrated management of water data between institutions at the national, regional and local levels.

The main findings of this study were presented to H.E. the Minister, Mr. Rafael Poveda, (MICSE) at the end of the mission, as well as to Mrs. Claudia Otero (ARCA Director) and Mr. Cristobal Punina Lazano (Assistant Secretary General for Water) during their visit to IOWater in Paris on 12 September 2014.
Target 4: Establishment and development of water information systems

European Commission

River basin management supported by INSPIRE

The European Directive 2007/2/EC adopted in 2007 establishes the Infrastructure for Spatial Information in Europe (INSPIRE) which aims to provide harmonized, high quality spatial information to support environmental policies along with all policies or activities which may have an impact on the environment in Europe.

INSPIRE is a decentralized information system, based on the national spatial data infrastructures of the Member States.

The Directive does not require collection of new data, but existing and newly created spatial datasets should be interoperable and publicly accessible, through network services, within the established implementation roadmap, which should be completed by 2020. The implementation of INSPIRE enables a more efficient access and sharing of environmental spatial information among the public sector at national level and across Europe.

INSPIRE spatial data are organized into 34 themes. Each theme has its data model and application schemas, defined in the INSPIRE Technical Guidelines and Commission Regulations that assures data interoperability across Europe.

The Hydrography theme jointly with the themes Elevation (digital elevation models), Land cover (physical and biological cover of the earth's surface), Management area (areas managed, regulated or used for reporting at European, national, regional and local levels), Protected sites (areas managed for conservation objectives) and Geology, are providing spatial data models for the reference spatial information regarding river basin management.

Reference data and data modeled by the thematically more specific application schemas included in themes: Soil, Utility and governmental services, Environmental monitoring facilities, Agricultural and aquaculture facilities, Energy resources, Habitats and biotopes, etc. provide precise and efficient information for river basin management.

The INSPIRE Directive also allows data integration from different thematic communities for transboundary river basins.

Under the European INSPIRE Directive, the International Office for Water, INBO Secretariat, is a contributing member to the writing of specifications on the interchange of water data.

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EEA
European Environment Agency

A new Topic Center on Water for 5 years

The European Environment Agency (EEA) was established in 1990 to provide the European Commission and Member States with information on the status of the environment and on the implementation of EU policies in this field.

It is based in Copenhagen.

It relies on a network of 350 organizations all over Europe, EIONET, to collect environmental data.

The EEA relies on European Topic Centers (ETCs), consortia of governmental or private non-profit organizations to which it entrusts the organization of data collection, analysis of information, evaluation, production of indicators and a role of technical support to Member States to implement National Environmental Information Systems.

A consortium of 18 partners led by the German Helmholtz Center for Environmental Research (UFZ), in which IOWater, INBO Secretariat, participates, is in charge of ETC on inland, coastal and marine waters.

www.inbo-news.org
All information is available on the Web

www.eea.europa.eu
www.eionet.europa.eu

1.50 Million visits per year
**Target 4: Establishment and development of water information systems**

**European Commission - Eurostat**

**Improving European Statistics on Water**

In this context, 12 statisticians from eight nationalities participated in a training course, in France from 24 to 26 June 2015, for better understanding of the main sanitation concepts. A field visit was organized at the Downstream Seine Wastewater Treatment Plant at the invitation of SIAAP, the Public Sanitation Utility of Greater Paris (SIAAP).

**Open Geospatial Consortium (OGC)**

The international “Hydrology” sub-group of the Open Geospatial Consortium (OGC) is interested in describing and sharing geographic data on hydrology.

It produces OGC standards that are used for the dissemination of reference frames in all the partner countries.

As part of the implementation of a “data Web”, in France for example, a catalogue of “SAN DRE” resources was established. As a bar code of a product, each resource is identified by a URI (Uniform Resource Identifier).

As a logical continuation, INBO and “SAN DRE” secretariat in France developed its Master Data Management (MDM) to manage and disseminate reference frames according to this new semantic model. Very soon, the whole web will be able to link almost automatically to the references frames.

[www.sandre.eaufrance.fr](http://www.sandre.eaufrance.fr)

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Target 4: Establishment and development of water information systems

**“SANDRE”**

French National Service for Water Data and Common Reference Frames Management

Establishing a common language

Given the proliferation of the information systems used and the growing need for data, the "SANDRE" was created in 1992 to simplify the exchange of these data between the various French public and private stakeholders. It thus offers a unique exchange interface and addresses the need to establish a common language between partners from the water world.

Through "SANDRE", many tools are then developed to allow the stakeholders concerned to make their information systems interoperable: dictionaries and exchange scenarios and web services, reference data, a cartographic atlas, a metadata catalogue, audits of computer systems, compliance labels, etc.

"SANDRE" is proposing more than 20,000 pages of technical specifications. It establishes compliance labels for over 15,000 files per year and more than 30,000 interventions (taxons, substances, etc.). Its website receives more than 817,000 visits a year.

IW Water, INBO Secretariat, is entrusted with "SANDRE" Technical Secretariat since it establishment in 1992 and, now, with the support of the National Agency for Water and Aquatic Environments (ONEMA).

Adapting to the stakeholders’ needs

Publishing standards for the exchange of electronic data between computers is one priority. Following the "Hackathon" in 2014, the users of the Water Information System have expressed their need for more "SANDRE" standards adapted to office automation tools.

That is why, in 2015, many new simplified exchange scenarios were specified to deal with the administrative repository, with references on barriers to flow, pollution removal work, hydrogeology, sections for flood monitoring...

With the same objective to facilitate the use of "SANDRE", a new search engine has been integrated into the "SANDRE" website.

It allows its users to perform more research into the contents of "SANDRE" repositories. Meanwhile, descriptive sheets of parameter reference frames and designations of taxons were made more attractive by adding many images.

Freely accessible on "SANDRE" website, videos tutorials were developed to show the use of "SANDRE" repositories in different situations.

[www.sandre.eaufrance.fr](http://www.sandre.eaufrance.fr)

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**“GEST’EAU”**

The website of the SAGEs and Environmental Contracts

"Gesteau", the national website dedicated to Water Development and Management Plans (SAGEs) and Environmental Contracts has offered the testimonies of stakeholders involved in these management tools since the beginning of 2013.

A constantly changing participatory tool

Since its inception in 2002, "Gesteau" has been coordinated by the Ministry of Sustainable Development (MEDDE) and the National Agency for Water and Aquatic Environments (ONEMA).

Since its launching, the website has been collaborative by providing a forum, feedbacks, and allowing web users to work on the contents.

Since the beginning of 2013, interviews have been made to promote the participation of the stakeholders involved in SAGEs and Environmental Contracts (facilitators, officers in charge, members of Local Water Commissions, members of Syndicates, Local Public Basin Authorities, etc.).

Testimonies on local actions

The stakeholders, who speak, provide concrete evidence on actions carried out in their basins with these tools and describe practical measures to be taken.

Thus, 12 testimonies were published in 2013.

[www.gesteau.eaufrance.fr](http://www.gesteau.eaufrance.fr)
The implementation of effective policies for integrated water management requires having a comprehensive assessment of resources and uses, based on homogeneous and consistent information.

In the case of transboundary basins, the sharing of information is building trust and facilitates dialogue between the riparian countries.

Developed in collaboration with the secretariat at UNECE of the “Convention on the Protection and Use of Transboundary Watercourses and International Lakes”, the FFEM project “Capacity building in data management for assessing and monitoring transboundary water resources in Eastern Europe, Caucasus and Central Asia-ECCA” was successfully completed in October 2013.

With the support of SHMI (Slovak Hydro-Meteorological Institute), this project, coordinated by the International Office for Water, INBO Secretariat, has achieved its objectives both at the regional level and in the two pilot basins:

- The Dniester River Basin in direct collaboration with the Authorities in Ukraine and Moldova;
- The Aral Sea Basin (Amudarya and Syrdarya River Basins involving six countries of Central Asia: Kyrgyzstan, Kazakhstan, Tajikistan, Turkmenistan and Afghanistan) in collaboration with the EC-IFAS (Executive Committee of the International Fund for Saving the Aral Sea).

In 2011, after a step for preparing the tools (Web portal, multilingual catalogue) and presenting the project, an assessment was carried out in six of the concerned countries, including:

- A legislative and institutional analysis (database of the stakeholders);
- Organization of national workshops gathering the key stakeholders involved in data production and management;
- Support to the presentation of data sources by the producers (metadata catalogue);
- Elaboration of data flow charts (who exchanges what with whom?);
- An initial needs analysis.

Since early 2012, the project has entered a phase for supporting the development of pilot actions proposed by the Steering Committee, including:

**In the Dniester River Basin**

- Creation of a database on surface water quality in Moldova, with the production of quality indexes and online interactive maps of surface water quality, updated by the data producers;
- "Web Processing Services" allowing the production of useful geographic data.

**In the Aral Sea Basin**

- A first hydrological bulletin on the Syrdarya, within an action initiated by UNRCCA with EC-IFAS;
- Creation of a Web portal integrating an interactive diagram for online viewing of data on the Syrdarya, data daily updated by their producers;
- Conceptual study of the organization of the National Water Information System of Tajikistan;
- Improvement of the Turkmen legislation to promote the sharing of water data.

Finally, a document of recommendations highlighting the project feedbacks was presented during various international meetings, including:

- The 6th Meeting of the Parties of the Water Convention, in Rome on 28/29 November 2012;
- The High-Level Conference on International Water Cooperation, held in Tajikistan in August 2013;
- The last Dniester River Basin Committee on 18 September in the Ukraine.

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www.aquacoope.org/ffem-eecca
Target 4: Establishment and development of water information systems

Central Asia: iMoMo

"innovative Monitoring and Modeling of Water"

Since the beginning of 2014, IOWater, INBO Secretariat, has been collaborating in Central Asia to the iMoMo project, financed by the Swiss Agency for Development and Cooperation (SDC) and led by the "Haute Ecole Arc Ingénierie" of Neuchâtel (HE-Arc).

Quick advancements in low-cost sensor and communication technology, hardware and software integration, open up new perspectives for water data collection and exchange, analysis and knowledge dissemination.

The activities, launched in Central Asia in the pilot Chu River Basin, transboundary between Kyrgyzstan and Kazakhstan, have 3 components:

1. Improvement of water and financial accountability of Water User Associations (WUAs), with the installation of low-cost monitoring devices at the level of 2 pilot WUAs;

2. Establishment of a Water Information System (WIS) in the Chu River Basin, connected to existing databases and using technologies for sharing data/information to meet the need of better knowledge of water balances of the river and irrigation canals;

3. Modeling of an operational, web-deployed water balance for forecasting vegetation season flows, based on remotely-sensed snow cover analysis.

Considering the significant results obtained on each of these 3 components via interoperability development and modeling, it is already planned to expand this project in 2015 to other basins in Kyrgyzstan and at transboundary level in Central Asia.

Kyrgyzstan / Kazakhstan

Chu Transboundary Basin

The iMoMo (Innovative Monitoring and Modeling) Consortium has, since 2014, collaborated in the Swiss Cooperation (SDC) funded activities to strengthen water data production and management in the Chu Basin in Central Asia.

The ongoing project includes three main components:

- Monitoring and processing of data by Irrigator Associations;
- Enhancing data, produced by various national and local institutions, on the status of water resources and abstractions, that are regularly made available by 5 national and local institutions of both countries, this through:
  - Web mapping with location of monitoring stations and access to data visualization diagrams,
  - Interactive diagrams easily available on tablet computer, especially to decision-makers, with automatic calculation of balance sheets or comparative analyses at key points;
- Modules for downloading datasets, for data producing partners alone.

Specific actions allowed moving towards a situation where the public and the partners can now consult online data on the status of water resources and abstractions, that are regularly made available by 5 national and local institutions of both countries, this through:

A first quarterly newsletter, summarizing the status of resources and abstractions for the April-June 2015 period, was produced and validated during the last meeting of the Chu / Talas Transboundary Commission that congratulated the project partners and thanked the SDC for its support.
Ik-kil, Cenote of Chichen Itza - Mexico
Support to the river basin organizations of the Senegal (OMVS), Niger (NBA), Congo (CICOS), Volta (VBA), Chad (LCBC) and Mekong (MRC), to the Water Resources Coordination Center (WRCC) of the Economic Community of West African States (ECOWAS) and to the African Network of Basin Organizations (ANBO);

- Facilitation of a working group for the hydrological monitoring of major transboundary basins; capitalization of training materials and prefiguration of a sustainable funding model for WHYCOS projects;

- Establishment of a working group on satellite altimetry applied to hydrology.

As part of this activity, a first meeting of the Working Group was held at the IRD Montpellier in November 2014 at the invitation of the International Office for Water (IOWater) and under the aegis of AFD, with CNES, IRD, IRSTEA, BRL and CNR. This is a first meeting bringing together the worlds of space, hydrology and water resources management.

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Free Flow
Reaching water security through cooperation

"Water Cooperation is about fighting against poverty and hunger, as well as protecting the environment", said the Director General of UNESCO, Irina Bokova. "It is about peace on the basis of dialogue between States and Regions".

This publication, through the presentation of field experiments, demonstrates that collective commitment is required to foster a culture of cooperation in the long term between all water practitioners.

A chapter devoted to the participation of water users in the Senegal, Niger and Congo River Basins, was prepared by the Secretariat of the International Network of Basin Organizations (INBO).

www.un.org/fr/events/worldwateryear

Come and sign the Paris Pact

345 signatories from the whole World

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A partnership agreement was signed by AFD and INBO World Secretariat about various topics of collaboration:


The "Report on the Experience of Transboundary River Basin Organizations - Good Practices and Recommendations" was published in April 2014 with the support of the French Development Agency (AFD) and is available in French and English versions on the website:


We recognize that adaptation efforts should be undertaken and that the impact of climate change in the geographical and economic development of countries generates new needs. We recognize that participatory adaptation, local actions and institutional reforms are strategic and will be an essential part of the adaptation process.

We should act quickly before it is too late!

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We should act quickly before it is too late!
Cooperation among the riparian countries is becoming imperative as pressure is increasing because of the global changes which are intensifying. The integrated approach to water resources management appears as the basis for improved management of transboundary basins.

The basins of rivers, lakes and aquifers are indeed the spaces where hydrological, social, economic and environmental interdependencies better appear.

The experience gained allows today saying that it is possible to organize effective management on the basin-scale of transboundary rivers, lakes or aquifers, when there is a real willingness of the stakeholders concerned.

Nevertheless, significant progress remains to be done everywhere in the world.

To support this process, the International Network of Basin Organizations (INBO), the Global Water Partnership (GWP), UNECE, UNESCO, the GEF, EVREN and the French Development Agency drafted "the Handbook for Integrated Water Resources Management in the Basins of Transboundary Rivers, Lakes and Aquifers" presented at the World Water Forum in Marseilles.

This handbook aims to provide practical advice to improve transboundary basin management, using more than 60 practical examples of actions already successfully initiated in various basins.

The handbook itself and its English version on CD-ROM can be obtained free of charge, subject to availability, by E-mails to:

secretariat@inbo-news.org
or gwp@gwp.org

Digital versions of the English, French and Spanish Handbook can be downloaded, free of charge, on GWP and INBO website:

www.inbo-news.org

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**Guidance document on transboundary aquifer management**

Aquifer systems, which represent an important part and sometimes the only water resource available in a country, are unequally known.

Much more frequently than transboundary rivers, transboundary aquifers are shared between various countries which generally use them independently, partially for drinking water supply and for industrial uses, but mainly for irrigated agriculture.

This leads more and more to cases of overexploitation and pollution which create tensions at all levels, with a risk of crises and conflicts between countries sharing the same aquifer.

For all these reasons, it is today important to improve knowledge and promote a reasonable and sustainable integrated management of transboundary aquifer systems.

To reach this objective, a methodological approach and a guidance document were developed by UNESCO, the Water Academy, BRGM and INBO, with financing from the French Development Agency (AFD).

This approach highlights the main challenges facing transboundary aquifers, their specificities, and the need for Integrated Water Resources Management (IWRM).

It then describes the different tools available to improve knowledge and the development of this precious resource: technical, legal, institutional and economic, but also educational and cooperation instruments.

Finally, it proposes a progressive and multiform approach for joint, equitable and sustainable transboundary aquifer management and it describes the mechanisms required to create the proper institutional structure for the management of shared ground (and possibly surface) water resources.

www.unesco.org
Two new publications for better basin management

In 2015, the International Network of Basin Organizations (INBO), the UN Economic Commission for Europe (UNECE), the Global Water Partnership (GWP), the National Agency for Water and Aquatic Environments (ONEMA) and the International Office for Water (IOWater) jointly published two books entitled:

- "Water and Climate Change Adaptation in Transboundary Basins: Lessons Learned and Good Practices", in the UN collection (INBO, UNECE),
- "Management and Restoration of Aquatic Ecosystems in River and Lake Basins" (INBO, GWP, ONEMA, IOWater), in the collection of Handbooks on Water Management.

Both publications, distributed free of charge and initially published in English for the World Water Forum in Korea, have been translated into French on the occasion of the COP21 in Paris and then will be translated into other languages. They follow previous publications of the various partners involved, including the "Handbook on Integrated Water Resources Management in Basins" (2009), the "Handbook for Integrated Water Resources Management in Transboundary Basins of Rivers, Lakes and Aquifers" (2012), the "Guidance on Water and Adaptation to Climate Change" (2010) or the "Report on experiences of Transboundary Basin Organizations in Africa" (2014).

These documents are available on: www.basins-management-publications.org

Water and Adaptation to Climate Change in Transboundary Basins

In spite of local uncertainties about the intensity and variability of climate change, the frequency of extreme events that result from it, and about its impacts on water resources, it is urgent to initiate new adaptation measures in river basin management, including transboundary basins.

Thus, the drafting of multi-year Management Plans for the Basins of national and transboundary rivers, lakes and aquifers, is becoming a priority and should incorporate these adaptation measures.

In transboundary basins, strong cooperation between riparian countries is needed, and this requires attention to be paid at all levels and in all sectors.

For the adaptation plan to have solid bases, the participation of all stakeholders is essential, crossing the multiple physical, political and institutional borders, and opening it up to all sectors with water-related activities.

Some basin organizations around the world have already taken action to adapt to climate change. It is now crucial to be able to benefit from their experience and to promote exchanges among all institutions concerned by climate change adaptation.

To facilitate this exchange, this publication mobilized about sixty experts from international organizations (WMO, GWP AGWA,...) and transboundary and national basin organizations worldwide.

This publication identifies the field experiments made and aims to provide practical advice through 58 case studies and 63 "lessons learned" about how to prepare and implement a strong, realistic and operational medium-to-long-term plan for adapting to climate change in the basins.

Management and Restoration of Aquatic Ecosystems in River and Lake Basins

Freshwater resources are increasingly used, wasted and polluted; aquatic ecosystems are threatened and sometimes destroyed. In addition to their great heritage value for landscapes and biodiversity, aquatic ecosystems provide significant services in regulating water resources and flows and in the self-purification of pollution. Wetlands improve water quality by trapping sediment, filtering pollutants and absorbing nutrients.

They also play a key role in flood control and drought prevention. However, human activities, where they do not merely destroy these environments, often disrupt biotopes, cause pollution and fragment the longitudinal flow of many rivers over the world.

It is now recognized that aquatic environments play the role of "green infrastructure", which is as essential to proper water resources management as a traditional artificial infrastructure.

Examples of good practice and effective natural developments can be identified in many countries.

Today, significant progress is more than ever needed to move from theory to practice and take practical measures to preserve and restore aquatic ecosystems, by using, in particular, these successful examples coming from the field and identified in various national or transboundary basins.

This handbook identifies 45 examples of field achievements and aims to give practical advice through 25 "lessons learned" about how to use a realistic, effective and operational "green infrastructure", to restore, protect and develop aquatic ecosystems, especially in the context of Basin Management Plans including measures for adaptation to the climate change impacts on water resources.
24 issues have been published since 1994, year of INBO creation in Aix-les-Bains.

All their electronic versions can be unloaded from our website:

Publication is made in three languages: English, French and Spanish including:
12.500 copies in French
11.000 copies in English
3.500 copies in Spanish

An electronic version is translated into Russian!
It is sent to you whenever important information is available:

- Meetings organized by our network or our partners,
- News in INBO website,
- News from our Regional Networks,
- Diary of events,
- International news on water

53 issues have been sent since its inception in January 2004!

There are 22,250 recipients Subscribers to INBO newsletters:

- French: 12,720
- English: 8,050
- Spanish: 1,480
Publications - Communication

The Network’s Website

With three addresses:

in French: www.riob.org
in English: www.inbo-news.org
in Spanish: www.rioc.org

It is a major international success!
It has 1.50 Million visitors per year!

Our website has received over 11.200.000 visits since its opening in 2002!

... And over 140.000 visits / month in early 2013

Part of the website is also translated into Russian!

You will find the agendas, programs, resolutions, papers and photos of all the events organized by INBO:
you can also see information from our regional networks.
Statistics on the consultation of "INBO" websites

1.50 Million visitors in the last 12 months!
The website of basin management over the world

- The International Network of Basin Organizations
- The Regional Networks of Basin Organizations:
  - Africa - ANBO
  - Latin America - LANBO
  - North America - NANBO
  - Asia - NARBO
  - Brazil - REBOB
  - Central Europe - CEENBO
  - Eastern Europe, Caucasus, Central Asia - EECCA-NBO
  - The Mediterranean - MENBO

- "EUROPE-INBO" : European Water Directives implementation
- Handbooks for Integrated Basin Management
- The World Water Forums of Daegu-Gyeongju 2015 and 2018 in Brasilia
- COP21: "Paris Pact on water and adaptation to climate change"

Privileged links with websites:
worldwaterforum7.org / worldwatercouncil.org
 gwp.org / iowater.org / emwis.net
 unesco.org / water.europa.eu
 www.cop21.gouv.fr / newsroom.unfccc.int
 uneece.org/env/water / unep.org
 oecd.org

Flashcode

1.50 Million visitors per year