2nd INTERNATIONAL CONGRESS WATER IN MOUNTAINS

Integrated management in upper basins

MEGEVE (France) – 20, 21, 22 SEPTEMBER 2006

« EUROPE-INBO 2006 »

Droughts, floods, erosion, wastages, pollution...

All over the world, water runs down from the mountains!

WORK SUMMARY

The 2nd International Congress of Megève on « water in mountains » gathered, on last 20, 21 and 22 September, a scientific and technical conference on « integrated management of upper basins », « the Meeting of Elected Representatives from Mountainous areas », on their responsibilities in water management, and the 4th European Conference « EUROPE-INBO 2006 » of the European Group of the International Network of Basin Organizations, for a better implementation of the Water Framework Directive (WFD).

More than 400 participants, including 250 elected representatives, scientists and technicians of the water sector, as well as 165 representatives of governmental administrations responsible for water resource management, of Basin Organizations or District Authorities, coming from 33 Countries, met on this occasion.

The participants unanimously pointed out the strategic role of the mountains in water management all over the world: they concentrate a significant part of rainfall, all the large rivers and their main tributaries have their spring there and they support the low flows of these rivers, especially in summer and in drought situation. But the mountains are fragile environments and tensions appear there: these changes should be anticipated.

Climate change is likely to increase the frequency of extreme events, such as floods and droughts, by appreciably modifying winter snow levels and by accelerating the melting of the glaciers in the mountains.

From now on, it is thus imperative to implement special development and management actions in mountains for better protecting them from floods and erosion, for preserving the ecosystems, for controlling pollution and optimizing the available water resources to share them between the uses, upstream and in the downstream plains as well.

Within the European Union, the mountainous areas cover a third of the territory and 94.3 million Europeans live there. The Water Framework Directive is an ambitious and complete instrument for the protection and rehabilitation of the European water resources. It plans that the "water bodies" will have to reach a "good ecological status" in 2015, in all Europe!

The Minister for Ecology and Sustainable Development, **Mrs. Nelly OLIN**, who came to open the congress, especially insisted on the fact that water is certainly an emblematic of all the subject matters which are related to the environment and ecology in the mountains.

- « This water, insisted the Minister, must be protected, but we must adapt to its strength, sometimes devastating, sometimes a renewable source of energy ».
- « Of course, its management should be made on a basin scale, which is really where upstream-downstream common cause is practiced ».

The Minister developed several major points especially concerning the mountains and which appear in the draft water law under discussion at the Parliament: maintenance of rivers, the use of hydropower, on-site sanitation, common cause between urban and rural areas, taxes for stockbreeding, open waters and the development of tourism and fishing.

Especially addressing the elected officials from mountainous areas, Mrs. OLIN declared: « as guardians of this water tower that are your mountains, you are particularly attached to the taking of upstream-downstream common cause into account ». This is expressed in the draft law with an allocation of 1 billion euros specifically intended for rural areas for water supply and sanitation actions.

« The major challenge of our century, declared the Minister, is the climate change, which is a priority for the Government: We must prepare ourselves to daily fight against climate change on our planet. Thus, the activities, which will be carried out in mountains, will have to take into account the increase in temperature, the modification of biological rhythms or the evolution of snow levels. This is the reason why, the development of sustainable tourism in mountains, in economic, social and environmental terms, will especially constitute the main topic of the French presidency of the Alpine Convention from November 2006 onwards ».

During the three days of the congress, the participants discussed, especially in the « EUROPE-INBO 2006 » conference, about four main current topics for the implementation of the Water Framework Directive in the European River Basin Districts:

- Compatibility between WFD and large infrastructures (hydropower, protection against erosion and floods, inland waterways, etc.), Heavily Modified Water Bodies,
- The taking into account of quantitative problems (droughts, water sharing, water transfers and reservoirs, specificity of the Mediterranean climate, etc.),
- Monitoring, monitoring networks and reporting, comparisons between water bodies of various countries, inter-calibration
- Preparation of future action plans, their cost, the economic studies and financing, etc.

Special attention was paid, of course, to the characteristics of hydrological and ecological regions and water bodies in the European mountains, basin heads, and to the specific actions, which are to be considered, for achieving their good ecological status in 2015.

Generally, the representatives of basin organizations favorably considered the first stages of implementation of the Directive, which introduced new methods for very positive analysis and work.

Among the numerous recommendations which were issued, we especially will retain:

With regard to floods:

- It is first necessary to make the « upstream-downstream » common cause a main item of consistent management on the scale of basins and sub-basins,
- In the shared basins in particular, cooperation between riparian States for jointly looking for coordinated solutions and for sharing responsibilities should be promoted,
- Protection against floods must pass through a coordinated approach, combining the
 protection of people and properties, the reduction of vulnerabilities, the restoration
 of the open flows of rivers, the conservation and the re-building of the natural flood
 storage areas, the forecasting of events, the identification of zones at risk, the
 publication of « atlases » of easily flooded zones, the control of urbanization,
 warning and education.

As regards hydropower:

- The hydropower infrastructures change the ecosystems but produce renewable energy. On the one hand, the Water Framework Directive strengthens the protection of aquatic ecosystems, even their restoration, on the other, the « Renewable Energy » Directive aims at increasing the energy produced without greenhouse effect, including hydropower... (dams, micro power stations, etc.), how can we apply these two directives at the same time?,
- The modernization and optimization of the existing hydropower installations are a priority.

With regard to quantitative water management:

- The availability of fresh water, in sufficient quantity and quality, may become, in a generation from now, one of the main limiting factors of the economic and social development in many European countries and not only in the Mediterranean area.
- It is necessary to increase the thinking about and prospective on the consequences
 of the climate change. A common approach is necessary to comply with the
 obligations of the WFD in critical situations.
- The prevention of recurring droughts can no more be done on a case-by-case basis but must be planned in the long term, 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.
- Mobilizing new resources should only be planned for when they are ecologically acceptable and economically reasonable.
- Plans for the management of water scarcity should prioritize drinking water supply as compared to the other uses, making sure that water is equitably and soundly shared between the various uses, ensuring a better optimization of water and avoiding wastages.

 Water saving, leak detection, recycling, the reuse of treated water, groundwater recharge, the desalination of sea water, research on low-consumption uses must become priorities.

As regards the obligations of establishing monitoring networks and control programs:

- It is a major concern for the basin organizations, due to the close deadline given by the WFD,
- There is a methodological step to make to pass from the control of physicochemistry to that of biology, planned for in the WFD,
- It is still difficult to define the control networks because of the lack of benchmarks with the definition of what should precisely be the « good ecological status »,
- Significant financial efforts are to be made to ensure the creation and operation of these control networks,

As concerns the preparation of the future « Management Plans » and « Programs of Measures »:

- Efforts should be oriented towards the networks and wastewater treatment plants of small communities, towards the on-site sanitation sector, the livestock breeding farms, which constitute a considerable source of inputs; especially in sectors where small rivers have very low self-purification capacities, and for certain small eutrophicated reservoirs.
- A better coordination between water policy and the Common Agricultural Policy is essential. It is necessary to better identify the areas in which agricultural pressures have a significant impact on water quality and to prioritize the means necessary for restoring quality: mobilizing joint financing for these priority zones, considering financial compensations for the farmers, who change their behavior in a lasting way, etc.
- It is necessary to raise the awareness and inform the general public, to explain the stakes, so that the people can give their opinion: original approaches, based on the organization of local events or on the use of local communication supporting aids, are effective for mobilizing the citizens, the use of specialists in communication and public enquiries will be necessary to tend to maximum effectiveness and better participative interactivity, many suitable methods are still to be tested.
- These consultations will have a cost and it is necessary to plan for significant budgets to comply with the new obligations of the WFD in this field.
- It is necessary to strengthen cooperation programs with the neighboring countries of the enlarged European Union, for the management of the International Districts of transboundary rivers, in Eastern Europe and in the Balkans, and within the neighborhood policy in the Mediterranean and in the Caucasus,

- The European funds for regional cohesion will have to support the efforts of the new Member States.
- It is important to find a suited scale for work, sometimes local, to arrive at the
 development of sufficiently technically detailed measures to meet, once gathered,
 the great stakes identified in the river basin districts. Plans for sub-basins and local
 programs of measures (river contracts, etc.) should then be considered, in
 consistency with the main orientations of the District plan, by mobilizing participative
 structures either already existing or to be created.
- To meet the information needs, it is necessary to capitalize and promote Trans-European exchanges of experience between the River Basin Districts, by using more and more the new information technologies.

The participants also insisted on the need to increase prior dialogue between researchers and Basin Organizations for them to participate in the need assessment, then afterwards for applying the obtained results. it is necessary to combine the financial resources allocated to research with the means given to promote actions of demonstration, an intermediate stage between research itself and field implementation without any risk of failure.

It is also necessary to promote and develop local initiatives of partnership between the research world and the field experts (workshop areas for example).

Mr. Jacky COTTET, President of the French Rhone – Mediterranean and Corsica Water Agency, will chair the « EUROPE-INBO » group until its next plenary assembly in 2007.

The delegates retained with thanks the proposal from the Italian basin organizations to organize the next plenary meeting of « EUROPE-INBO » in Autumn 2007 in Italy.

The detailed final resolutions of the **« EUROPE-INBO 2006 »** conference, as well as the papers and photographs of the sessions are available on the website: <u>www.inbo-news.org</u>.

Information : - Pierre LACHENAL Société d'Economie Alpestre de la Haute-Savoie

Fax: +33 4 50 51 13 87 E-mail: sea74@echoalp.com

- Marie Thé CROZET Megève Tourisme

Fax: + 33 4 50 93 03 09

E-mail: marithe.crozet@megeve.com

- Christiane RUNEL International Network of Basin Organizations

and International Office for Water

Fax: + 33 1 40 08 01 45 E-mail: dg@oieau.fr riob2@wanadoo.fr

- Jean FAURE-BRAC Rhone-Mediterranean and Corsica Water Agency

Fax: + 33 4 72 71 26 01

E-mail: jean.faurebrac@eaurmc.fr