



**16th "EUROPE-INBO 2018" INTERNATIONAL CONFERENCE FOR THE
IMPLEMENTATION OF THE EUROPEAN WATER DIRECTIVES**

**EUROPE-INBO 2018
Seville, Spain
17-20 October 2018**

"DECLARATION OF SEVILLE"

The 16th conference of the "EUROPE-INBO" group, which took place in Seville, Spain, from 17 to 20 October 2018, gathered 237 participants, representatives of national administrations, basin organizations and elected officials as well as of NGOs, companies, international and regional organizations and academic institutions, coming from 42 countries.

Established within INBO in 2003 in Valencia, Spain, the "EUROPE-INBO" Group of European Basin Organizations for the implementation of the European Water Directives aims at enriching and promoting the implementation of water policies in Europe, especially through the Common Implementation Strategy (CIS) with the exchange of practical field experiences. The EUROPE-INBO group is relying on the UE Members States and also on the Candidate Countries and disseminates the principles and tools of European water-related Directives. It participates in the debates on the implementation of these Directives in the European Union, including Overseas lands, and in an enlarged territory especially towards the EU neighbouring partner countries in the Balkans, Eastern Europe, Caucasus and Central Asia and the Mediterranean. It gathers annually in one of the Member Countries, thus it gathered in Valencia (Spain) in 2003, then in Krakow, Namur, Megeve, Rome, Sibiu, Stockholm, Oporto, Istanbul, Plovdiv, Bucharest, Thessaloniki, Lourdes and Dublin in 2017. At the regional level, these exchanges are organized within the Central and Eastern European Network of Basin Organizations (CEENBO), the Mediterranean Network of Basin Organizations (MENBO), and the Network of Basin Organizations of Eastern Europe, Caucasus and Central Asia (EECCA - NBO).

At the sub-regional level, these exchanges are also organized and enlarged within the Mediterranean Network of Basin Organizations (MENBO), and the Network of Basin Organizations of Eastern Europe, the Caucasus and Central Asia (EECCA - NBO).

The work of the "EUROPE-INBO 2018" conference was organized around a workshop on Invasive Alien Species and four roundtables on the current issues hereafter:

- Prevention of Drought: Adaptation Planning at the Basin Level, Reuse and Desalination.
- Efficiency and Multiple Benefits: The Interest of Combining Hydraulic Infrastructure and Nature-Based Solutions to face the issues of climate change.

- International Cooperation: Twinning and Peer-to-Peer Exchanges, Neighbourhood Area, Transboundary Waters.
- Revision of the Water Framework Directive (WFD): Improving Coordination with other European Directives (MarineSFD, Flood, Renewable Energy Directives).

The conference is an opportunity to recall that for INBO members, the term "basin" (or basin district in Europe) covers the basins of local, national and transboundary rivers, lakes and aquifers,

42 papers were presented and discussed during the conference.

- **Roundtable 1: Prevention of Drought: Adaptation Planning at the Basin Level, Reuse and Desalination.**

One of the major impacts of climate change in river, lake and aquifer basins is that water scarcity and droughts become more and more frequent and more and more intense.

Adaptation of water resource management therefore becomes essential, and to be effective, should to be developed in river basins and their sub-basins and the underlying aquifers. Climate change adaptation measures should be planned in the short, medium and long term with Basin Management Plans as part of the implementation of the WFD and Flood Directive.

The Paris Pact on "Water and Adaptation to the Effects of Climate Change in the Basins of Rivers, Lakes and Aquifers" launched by INBO in partnership with the United Nations Economic Commission for Europe (UNECE) during COP21, the publication "Water and Adaptation to Climate Change in Transboundary Basins" (INBO / UNECE) and the UNECE/INBO Platform of Pilot Basins provide valuable elements for carrying out adaptation in basins.

Based on a shared knowledge of the basin's vulnerability to drought, preventive actions should be carried out. We should build on "win-win" measures already available in the territories. A mere agreement on the sharing of the resource often enables to reach a balance between available water and abstracted volumes. These "no regrets" measures benefit the society regardless of the magnitude of climate change, and avoid poor adaptation

Depending on the case, enabling water storage, the reduction of water flow and water retention, the control of the waterproofing of soils, water saving, the recovery of rainwater and runoff water, groundwater recharge, the reuse of treated wastewater, and in some cases the establishment of desalination units are necessary.

Each case is different and cost-benefit analyses are essential to justify the relevance and economic efficiency of the structures in the long term.

Actions to reduce the use of water resources are also to be developed, such as the reasoned irrigation of crops, water saving and recycling techniques or processes without water in industry

Water planning should be based on a suitable and effective monitoring network for surface and groundwater. The sharing of knowledge should be guaranteed by an appropriate dialogue framework, representative of all stakeholders. The measures should be taken on the scale of a relevant area and aim to reconcile the social, economic and environmental issues and the restoration of water-dependent ecosystems in particular.

Priority should be given to preventive measures and especially to water saving measures on all scales and in all sectors of activity, according to the stakes encountered in the considered areas and provided that uses are reconciled and that the principle of cost recovery (WFD) is complied with.

Actions related to land and soil management are also to be promoted: facilitate infiltration, control soil sealing, propose revegetation solutions, promote crops and plants (species and varieties) with low water requirements, restore wetlands and maintain floodplains, etc. An exchange on the "best available practices", their cost and efficiency should be organized in each basin, to mitigate conflicts over water resources, to become more effective and more resilient. Due to the interaction between surface and groundwater, groundwater-surface water models need to be developed and joint management should be considered for all basins.

Beyond adaptation, a "drought crisis" or "water scarcity" management plan should be drawn up to have a proportionate and coherent response, especially in terms of priorities for water uses. In the same transboundary basin, it should be accompanied by exchanges of quantitative data between the different riparian countries. These arrangements can be considered through International River Commissions or ad hoc bilateral or multilateral protocols, and should include agreements for transboundary aquifers.

It is imperative that the Basin Management Plans and the forthcoming Programmes of Measures (3rd WFD cycle) integrate this set of actions in consistency with the other components of these management plans and with the implementation of the Directive on flood risk management, and in accordance with the diagnosis that identifies the basin's vulnerability to drought, with the degree of uncertainty about the extreme event and taking into account the level of acceptable risk. The approach must be multisectoral involving all economic stakeholders and the civil society.

The European Union should integrate climate change as an essential component of the European water policy and common agricultural policy. It is encouraged to develop the legislative and financial tools needed to support Member States in the ecological transition. It should be a lever for innovation and the dissemination of best practices and best available techniques for water management, protection and restoration of aquatic ecosystems and preservation of biodiversity.

The integration of climate change should also include tropical climatic hazards (hurricane, tsunami, etc.) for ultramarine European basins.

The Participants in the EUROPE-INBO conference wish that these recommendations be implemented in the next cycle of the Management Plans and Programmes of Measures, while keeping in mind the long-term and uncertainties related to the evolution of knowledge of the effects of climate change.

- **Roundtable 2: Efficiency and Multiple Benefits: The Interest of Combining Hydraulic Infrastructure and Nature-Based Solutions to face the issues of climate change**

To meet future challenges on water resources, especially those related to climate change, the Nature-Based Solutions (NBS - green infrastructure), using the properties of ecosystems, are convincing tools.

Combined with "gray" hydraulic infrastructure, they improve sustainability, optimize performance and reduce costs.

The services provided by ecosystems are now better understood with regard to droughts and floods.

The restoration of wetlands, ponds, marshes, preservation and management of floodplains, actions enabling the infiltration of rainwater, the reduction of runoff are all examples that have shown the relevance of NBS.

The combination, in a global approach, of NBS and "technical" solutions can allow responding to the specific needs of the lands.

As part of the WFD implementation, it is necessary that this approach be fostered, especially to achieve the objective of Good Ecological Status of Water Bodies.

Proposed in the European Commission's Blueprint of 2012 as one of the two ways to be developed for better WFD implementation, the Natural Water Retention Measures (NWRM) are the "green" infrastructure related to water identified all over Europe. They have been defined and structured through a European web platform (nwrn.eu). The platform provides the official EU definition <http://nwrn.eu/concept/3857>, a structured framework for choosing measures according to specific local needs with 3 matrices to consider biophysical impacts, ecosystem services and political objectives, an open list of NWRM measures, conceptual framework documents and a practical guide, and 125 feedbacks from all over Europe. Reference platform for ecological engineering applied to water in Europe, it provides the harmonized framework for proposing research projects on this theme but also for benefiting from European funding (notably CAP).

In addition, the Conference participants recalled that improving coordination between "green" and "gray" infrastructure was one of the messages of World Water Day 2018 and mentioned the importance of NBS in the Sustainable Development Goals (SDGs) for 2030.

The participants in the "EUROPE-INBO 2018" conference recommend that the EU, in conjunction with the International Union for the Conservation of Nature (IUCN), provide support for disseminating guidelines on the use of NBS in sustainable water resources management, to enhance knowledge in this field and to improve their technical implementation and their financing mechanisms.

The local acceptability of NBS projects is also a subject matter that needs to be addressed, with responses found in better participation of the economic stakeholders and civil society and cooperation among stakeholders from the project initiation.

- **Roundtable 3: International Cooperation: Twinning and Peer-to-Peer Exchanges, Neighbourhood Area, Transboundary Waters**

The European Environment Agency reminds that there are 150 major rivers being or crossing borders in Europe, 25 lakes and more than 100 significant transboundary aquifers. Transboundary Basin Management is therefore a major issue in Europe. Thus, according to the WFD, there are 40 International River Basin Districts in the European Union (EU) covering more than 85% of its surface and more than half of which are involving non-EU States.

European Water Directives require international coordination (e.g. articles 4 and 5 of the Flood Risk Directive (FRD) or art. 3, 5, 11 and 13 of the WFD which explicitly mention transboundary management). The European Commission very regularly insists on the importance of international coordination and, in this context, has very recently evaluated national and regional WFD and FRD Basin Management Plans, as well as international ones, confirming its consideration of this dimension.

This international coordination has gradually been organized in Europe thanks to International River Commissions, such as those of the Rhine, the Maas, the Danube, the Scheldt, the Sava, etc., which are based on international treaties and rely on permanent secretariats to guarantee transboundary cooperation, which can take many forms. There are already more than a dozen of them in Europe, whose tasks range from the coordination of the WFD, the FRD, the MarineSFD, transboundary lakes and inland seas, navigation, adaptation to climate change, to GIS and tourism and economic activities, depending on the case. The river commissions especially contribute to a greater transboundary coherence and thus to more effective Programmes of Measures on both sides of the borders, for a common benefit.

International cooperation for the development of IWRM and the improvement of water governance in the basins are a major factor of progress. This applies to the Member States as well as to the countries of the EU's neighbourhood area, particularly the countries of Eastern Europe, Caucasus and Central Asia or of the Mediterranean region. This dynamic should also be developed for basins in European territories located in the rest of the world (French West Indies and Guyana in the American zone, the Reunion and Mayotte islands in the Indian Ocean...),

The European Union and the Member States should develop these coordination and cooperation structures with a high level of support to ensure more coherence and transboundary efficiency, and more solidarity with these southern or EU-neighbour countries. The development of structural financing should be supported to enable access to water, sanitation, protection of everyone from floods and adaptation to climate change, in accordance with Sustainable Development Goal 6 of the 2015-2030 United Nations Agenda.

Finally, the organization at international level of public participation and education of the weakest, such as women and youth through international basin committees, youth parliaments, international days dedicated to a river, considerably improves the acceptability of water policies and projects and thus their success.

Transboundary coordination and exchanges of experience should be strengthened both within the EU and between Member States and neighbouring countries.

The EUROPE-INBO Group recommends to:

- develop common databases and modelling tools,
- mobilize together European funds for cooperation projects, guaranteeing greater coherence and transboundary efficiency,
- increase the resources of river commissions and cooperation structures,
- promote the participation and education of young people, especially through transboundary youth parliaments for water,
- increase the awareness, agreements and management of transboundary aquifers,
- give particularly attention to the interconnection between rivers, lakes and aquifers and their joint management in cases of surface and groundwater transboundary waters;

It recommends:

- supporting this type of approach, especially through the international river commissions which have proved their effectiveness and the development of mutual trust, the key for better cooperation;
- promoting data exchange via bi or multilateral data exchange protocols, joint projects of exchange of know-how and of the INTERREG type;
- redeveloping twinning programmes between basins that have proved their worth in previous years.

Structuring partnership projects are also to be developed, such as the EUWI+ East project, which brings to 6 countries in the Eastern Europe and Caucasus Neighbourhood Zone (Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine) a concrete and harmonized support to the structuring of the integrated management planning of their water resources including transboundary, institutional aspects, with capacity building, legislative frameworks, the monitoring including capacity building for analyses in laboratory, and in an essential way in today's digital world, the development of tools for informing the interested parties and the public, including the drafting of plans and maps directly linked to data sets developed by the different stakeholders of water management.

Concerning the exchanges between practitioners of the Member States, the EUROPE-INBO Group invites the basin organizations to formulate proposals to the secretariat of the "Peer-to-Peer" project for a support mission to the implementation of the Water Framework and / or Flood Directives Framework, or to propose to their experts to contribute. Registration documents related to the exchange mechanism are available at: www.aquacoope.org/peertopeer/

As the meeting was held in Seville with the support of the Guadalquivir Hydrographic Confederation, it is important to highlight the European research structure, ERIC LifeWatch, whose mission is research on biodiversity and ecosystems and which has a sub-branch in this Confederation.

With the support of this structure, integrated water resources management is considered and would take into account climate change, biodiversity and ecosystems. Indeed, LifeWatch provides access to a wealth of data - in addition to those generated by the basins themselves - of services, tools and computing resources in general, which allow the construction and exploitation of Virtual Research Environments (VRE) as a decision-making support.

- **Roundtable 4: Revision of the Water Framework Directive (WFD): Improving Coordination with other European Directives (MarineSFD, Flood, Renewable Energy Directives...)**

In 2017/2018, Member States and the European Commission proceeded with the evaluation of their Basin Management Plans. In 2018, the European Environment Agency published a report on the status of water resources in the EU. Before the end of 2018, the Commission will present to the European Parliament an evaluation report on the second management cycles of the WFD and the first cycle of the Flood Directive. This report will underline the need to re-examine the WFD

The first results of the evaluation of the 2nd cycle basin management plans show that:

- Stakeholder participation has often been well assured;
- Major progress has been made in terms of knowledge of the status of water bodies, uncertainties are now low;
- The deterioration of the water status has stopped everywhere in Europe;
- The link between pressure and impact needs to be better understood;
- The monitoring of substances and the implementation of management measures remain a major challenge.
- If the monitoring networks and their coverage have been adapted, there are still some gaps, sometimes an insufficient frequency, and the monitoring of priority substances is very different depending on the Member States.
- A more systemic approach to the assessment of Water Bodies (quality of biodiversity and habitats) and a more integrative one would reduce chemical monitoring (expensive and not always relevant for continuous monitoring);
- On the latter point it should be noted that assessment systems are not always adapted to tropical and / or island basins; a work of adaptation for these specific ecosystems should be carried out.

With regard to the assessment of the Status of Water Bodies, there is progress in the method and level of trust; Efforts are needed for coastal waters and for transcribing the results of intercalibration into country methods.

The Programmes of Measures have progressed; most of the Member States have better identified insufficiencies in the significant pressures to achieve good status. For agriculture, the basic measures, especially those related to the Nitrates Directive have been taken, but in half of the cases, the assessment of the insufficiencies is not made. For other pressures, measures are usually taken.

Progress is also expected in the definition and implementation of the ecological (environmental) flow.

With regards to the economic analysis, few countries have updated their water pricing policy and the transcription of the economic analysis into a concrete measure remains to be done.

Further efforts should be made to ensure the protection and proper management of protected areas.

While water scarcity is a concern for half of the Member States, drought management plans are not yet widely applied

There are also substantial improvements in the level of knowledge and in reports that are more detailed and reliable.

Compliance with the WFD objectives is gradually increasing. Groundwater bodies widely have good status, but surface waters are lagging, although qualitative elements have increased in many cases.

As concerns the Flood Risk Management Plan (1st plan), it seems that despite the efforts made by the Member States, challenges are still to be met, e.g. the definition of more measurable objectives, the relationship between objectives and measures, a more complete cost estimate and a better prioritization of measures, a local variation of ecological continuity or links to be created with Climate Change adaptation strategies.

The implementation of the WFD and Nitrates, Urban Wastewater and Industrial Emissions Directives has had a positive effect on the water resources situation. Nevertheless, the good status of water bodies required by the directive will not be achieved everywhere by 2027. A significant effort remains to be made, especially as regards diffuse emissions.

The WFD review should include an article dedicated to tropical European basins due to their specificities. In particular, special ecosystems such as mangroves should be the subject of a dedicated treatment (*not being a coastal or transitional Water Body as described in the WFD*).

Chemical analyzes based on point samples are limited by the impossibility, from a technical and economic point of view, to search and quantify all substances (known and unknown) potentially toxic to the aquatic environment and from a scientific point of view to predict the bioavailable fraction of contaminants and therefore potentially toxic to organisms as well as the synergistic effects between these contaminants.

In this context and despite a global understanding of the functioning of the ecosystem, the assessment system, as implemented by the WFD, does not always allow establishing a causal relationship between stress factors and changes in aquatic communities, the last point being crucial for the planning and sustainable management of freshwater and marine resources.

The use of biological tools or bioassays can enable to overcome this problem. These biological methods, whether in vivo (on whole organisms) or in vitro (on cell lines), have the advantage of considering the effect of complex environmental mixtures and taking into account the bioavailability of substances, where a physico-chemical analysis most often provides a measurement of the total concentration of a substance. Finally, they allow considering a proactive monitoring action, especially vis-à-vis the new substances, and being a decision-making tool for managers.

All of these conclusions should be used for the "review" of the Directive planned for 2019.

The participants in the EUROPE INBO conference stress the need to involve the Member States and basin managers as closely as possible in the work, including at the stage of finalizing the Commission's report and the Fitness Check of European legislation on water. A questionnaire is open online until 4 March 2019. The District Authorities are invited to take part and to contribute actively to the fitness check of the WFD

The participants in the EUROPE INBO conference recall that the first challenge is the future of the Directive beyond 2027, knowing that the goal of "Good Status" of all European Water Bodies will not be achieved at this date, especially if the current criteria do not evolve towards a balanced parameterization.

Taking into account the first conclusions of the Commission, they question the operational and pragmatic implementation of the Directive. In this sense, it is essential to rely on the experts of basin organizations, keeping in mind that success also depends on the support of basin organizations, local authorities, economic stakeholders and all European citizens. Better involvement of field stakeholders is necessary by associating them to the revision of the Directive.

The Conference participants believe that there is also a need to highlight the progress made that should be widely publicized, especially by the Member States, basin organizations and the European Environment Agency.

In addition, the very penalizing "one out - all out" system should be reviewed.

The participants recall the urgency of taking new pollutants into account.

They recall the need for greater coordination and even compatibility between the European water policy and other EU economic and sectoral policies, such as the CAP, the transnational transport policy or the renewable energy policy. It is important to promote the integration of the WFD objectives into other sectoral policies in order to improve the effectiveness of the available resources.

Finally, adaptation to climate change needs to figure prominently in future work.

An adaptation of quality or discharge standards in relation to the environments is to be sought for.

It is also suggested that support to enterprises be increased to meet the goals for discharges into the environment so that the return rate is shorter.

As the revised Directive will probably not be applicable until 2021 and therefore in the 3rd cycle of Management Plans, the participants in the EUROPE- INBO conference suggest that we should be realistic to plan for an implementation in the 4th cycle Management Plans.

More generally, the EUROPE INBO participants consider that in the WFD should pass from "virtuous and theoretical concepts" to a practical approach based on the local situations.

- **Conclusions of the Workshop on Invasive Alien Species: Prevention and Management Solutions**

Invasive Alien Species (IAS) represent a major threat to native plants and animals in Europe, causing damage worth billions of Euros to the European economy every year. The EU regulation (1143/2014) on invasive alien species entered into force on 1 January 2015. It provides for a set of measures to be taken across the EU in relation to the species included on a list of IAS of Union concern.

During the dedicated workshop, 62 participants were able to benefit from presentation of experience feedbacks on strategies or case studies from various MS and basins. The practical exchanges in working groups have allowed underlining the importance of seeking synergies between the RBMP development and the IAS policies. In terms of surveillance systems, the WFD monitoring programmes are already collecting interesting data that could be used for IAS surveillance purposes.

In terms of management measures, a particular attention is to be paid to IAS while implementing restoration of management measures, in order to develop integrated and multi-purposes solutions. Those two areas of synergies could only be effective if exchanges between institutions in charge of Nature, Health and Water management are fostered and common tools are developed for governance, financing and data exchanges.

As some invasive alien species can impact the Water Body quality, the WFD should include a list of species specific to each basin as a pressure in its own right (e.g. the Sargasso Sea for the West Indies, whose impact on the Ecological Status of coastal Water Bodies is very likely).

The "EUROPE-INBO 2018" conference is the voice of the EU Basin Organizations which are key stakeholders in the implementation of the European Water Policy, relying on the experience of the EUROPE INBO Group Members. It is also a means to formulate proposals for the future of the Directive.

The participants in the EUROPE INBO conference consider that efforts made to implement the WFD need to be increased and supported so that all EU Water Bodies get closer to "Good Status" within a reasonable and realistic time frame.

The participants thanked Ireland for having fulfilled with success the EUROPE-INBO Group presidency during the year 2017/2018 since the Dublin-Malahide Conference.

The Presidency of the EUROPE-INBO Group for the coming year until the next conference in 2019 was transferred from Ireland to Spain. Mr Joaquin Paez Landa, President of the Guadalquivir Hydrographic Confederation has been appointed as President of EUROPE-INBO for 2018 - 2019.

The delegates thanked the Spanish Authorities, and especially the Guadalquivir Hydrographic Confederation and the Spanish Organizing Committee, for the perfect organization of this 16th Conference and for their excellent welcome.

The delegates acknowledged with gratitude the proposal of Finland to organize the 17th EUROPE-INBO Conference in Lahti from 11 to 13 June 2019 and of Malta for the conference in 2020.

The participants warmly praised Mr. Jean-François Donzier, INBO Secretary General for 24 years, for his serving the network with constant and effective commitment, with dynamism and enthusiasm. In recognition of the distinguished services rendered by Jean-François Donzier, and to express their gratitude, they wish to confer him the title of Honorary Secretary General of the Network.

Approved in Seville on 19 October 2018

The Final Declaration, all papers and photographs of the conference are available on the website: www.inbo-news.org