Purpose and general objective

INBO’s action is part of the global goal of improving the management of water resources and associated ecosystems in order to achieve a balanced and sustainable way of meeting human, economic and environmental water needs to improve the living conditions and quality of life of populations and their prosperity.

The river, lake or aquifer basin is a space of great relevance to develop any action that aims to achieve this purpose.

In this context, INBO’s general objective is to develop basin management, relying on structured Basin Organizations, having the skills, knowledge and financial resources necessary for integrated and sustainable water resources management.

INBO, a body for networking basin stakeholders, regardless of the type of Basin Organization, is the best global structure to promote basin entities, strengthen Basin Organizations and their governance, develop actions which improve water resources management in basins, assess water policies on the basin scale, whatever its size. Mainly based on the achievements and experience of basin organizations, the Network facilitates the exchange of knowledge, practices and know-how in all areas related to water management in river basins.

Since its establishment in 1994, INBO has played a major role in the development of national and transboundary basin organizations. By drawing on and using many experiences that combine economic growth, social justice, protection of the environment and water resources and participation of the civil society, INBO has promoted the implementation of IWRM (Integrated Water Resources Management) principles on this scale for the setting up of Water Information Systems (WIS), for the definition of basin management plans and action programmes, for the establishment of stakeholders and users’ participation in decision-making bodies and for the development of funding systems at the basin level.

The previous INBO programme has specifically achieved several results (see 2016-2018 activity report):

- Exchanges of experiences between Basin Organizations, especially through the twinning of Basin Organizations and participation in European twinning projects;
- Mobilization of the expertise capabilities of many Basin Organizations by helping the implementation of institutional reforms, by supporting the countries sharing the same basin, by assisting in the development of Basin Management Plans, by contributing to the building of mechanisms for the water users’ participation in the decision-making and actions of Basin Organizations;
- Capacity building through training in good practice, synthesis and dissemination of available knowledge and know-how, particularly by contributing to the improvement of knowledge and know-how on Basin Organizations, developing common performance indicators, and through
INBO's 6 handbooks, as well as INBO's new website, "INBO Newsletter" (27 issues) and its periodic Electronic Newsletters (56 published to date);
- Establishment and development of water information systems through the definition of collective standards, facilitating data interoperability, supporting the structuring of Documentation Centres and Databases in the countries concerned, participating in the design of monitoring networks and databases, information dissemination system and decision making support tools, as well as cooperation in regional information systems such as EMWIS, Hispagua or AWIS.

2019 – 2021 Strategy

For the next three years, INBO, relying on its network of Basin Organizations and partners, will focus on the following seven priorities:
- Water information systems;
- Adaptation to climate change;
- Improvement of governance;
- Interaction with other stakeholders;
- Strengthening of the city / basin dialogue;
- Development of participation;
- Development of partnerships and identification of research needs.

1. Improving, developing and strengthening information and data systems in basins

• Background

Information, data and knowledge are the basis of any water policy. Despite past efforts, there are still shortcomings or inadequacies in this area. In addition, with scientific progress, particularly in methods of analysis and knowledge of the functioning of ecosystems, the number of data and information to be monitored and their content have increased over the years. New parameters appear, making monitoring more and more thorough and complex. Added to this is the need to introduce "extra water" data: basin management is increasingly focusing on the management of aquatic ecosystems in a given area, which for water management leads to taking into account data on land use (agriculture, forest, urbanization), on the soil itself (erosion, sediments, pollutants); adaptation to climate change leads to a greater concern for precipitation regimes and temperature changes whose effect on the water cycle is considerable (runoff, flood, evapotranspiration, drought, etc.); other global trends such as quick population growth in some areas and concentration of populations in urban areas need to be incorporated into basin WISs so that management plans are as relevant as possible. It is also to be noted that the "nexus" approach leads to many crosses between data from very different sectors (see below). Consequently, not only has the establishment of Basin WISs become mandatory, but it is increasingly needed to extend these WISs to data fields and information to be investigated.

• Objective

The objective is therefore to assist in the development of water information systems in basins that have none and to improve existing WISs in the light of new constraints and requirements. More specifically, the aim is to strengthen the exchange of experience and provide advice to the basins that wish to build their capacities in terms of production / integrated management / processing and use of the data necessary for the monitoring / assessment of water resource management, especially with regard to new issues arising from the impacts of climate change and other global changes.
• **Activities**

As concerns this issue, INBO can constitute a working group including experts of the Permanent Technical Secretariat, operating by virtual conference, webinar and possible physical meetings (associated with other events to minimize costs), in charge of stimulating the exchange of experiences and practices, and of producing a line for action in the "Basin WIS" field. This work could usefully be based on the consolidated collection of experiences in the Handbook on Information Systems published at the World Water Forum in March 2018. This action can, among other things, feed UNECE’s concerns regarding "support for the monitoring, assessment and information exchange in transboundary basins" as part of its 2019 - 2021 programme and IWRM group, which feeds the implementation of the Convention.

The activities to be carried out are:

- Dissemination / promotion of the “Handbook on Water Information Systems: Administration, Processing and Exploitation of Water-Related Data”, especially in relation with UNECE, which plans the organization of a global workshop (in December 2019) and several regional workshops on data and information exchanges;
- Participation in the World Water Data Initiative (WWDI) Phase 2 as well as in the WMO-led Global Hydrometry Support Facility activities;
- Support to the definition and implementation of operational projects for the development and strengthening of WISs at national or transboundary basin level;
- More generally, support to the exchange of experience (i.e. via the peer-to-peer approach) on the digital theme applied to the implementation / monitoring of IWRM processes and the development of interactions between the various stakeholder levels (national / basin / local / transboundary, basin / urban services management, basin management / energy / irrigation, etc..) with integration of the various modes of data production (connected objects and in situ monitoring, crowdsourcing, remote sensing).

2. **Adapting basin management plans to the impacts of climate change**

• **Background**

Thinking about climate change at the basin level has come a long way in the past decade. Generally, the produced documents, the UNECE / INBO guide in particular, describe the challenges and measures to be taken in transboundary and national basins. Specific experiences do exist (Danube strategy, the Netherlands, the Garonne 2050 programme, the Rhone Mediterranean Corsica management plan, the climate change adaptation plan in the Syr Darya, Congo, Senegal, Sava river basins, etc.) around the world, well known by INBO.

• **Objective**

The task now is to move to an implementation phase that must be based, within the (2019 - 2021) timeframe, on developing or building capacities for adaptation to the effects of climate change and for the management of uncertainty in basin management and action plans. This action can be carried out: i/ in partnership with UNECE, which has a similar action for transboundary basins; ii/ as part of the specific dynamics initiated by the successive One Planet Summits, which have labelled the INBO incubation platform through the commitment "100 water and climate projects for Africa".

This task can widely rely on pilot basins that have acted in this area and on GAFWAC work. INBO, through its incubation platform (GAFWAC-IP), in line with the Paris Pact, directly contributes to this theme. In this respect, the strengthening of the links between the basin organizations that are members of the
network and the potential donors of "water and climate" projects will be the issue of a specific action plan. The guide jointly produced with UNECE and the World Bank on the financing of water and climate projects in transboundary basins (published in the Spring of 2018), which is available on line on INBO website, will provide a first base on which to build the capacity of basin organizations. An e-Learning on climate change in basins, adaptation to its effects in the basins and the necessary management of uncertainty will be thought of and a model developed by the Permanent Technical Secretariat with the support of its partners. In addition, the thinking carried out by INBO (working group gathering INBO voluntary members) on this issue will be exchanged with the OECD and its partners under the "Water Security and Climate Justice" project in Africa.

- Activities

The activities are articulated around the following points:

- Extending / reinforcing the exchange of experiences between basins in the drafting and implementation of a climate change adaptation strategy, especially in relation with UNECE through the network of pilot basins for adaptation to climate change (meetings, workshops, twinning projects, technical exchanges, etc.);
- Sustaining the incubation platform for water and climate projects launched in 2017 by:
  o Mobilizing new financial donors;
  o Facilitating the "100 projects for Africa" component launched in December 2017 with the support of the French Government, the World Bank and the United Nations General Secretariat during the One Planet Summit;
  o Disseminating and adapting the publication on the financing of water and climate projects in transboundary basins jointly produced with the World Bank and UNECE.
- Intensifying the action of the Global Alliances for Water and Climate: participation in international events and joint advocacy, finalization and search for funding for joint operational projects.

3. Improving Water Governance

- Background

Improved water management in basins requires a suitable and effective water governance framework. For several years, INBO has participated in the Water Governance Initiative led by OECD and has contributed to the definition of the principles of good water governance and the development of governance indicators. The problem is to move to a true implementation phase with, first of all, a "diagnosis of governance" in voluntary countries and basins. A specific area of water governance lies in the effectiveness of the "water police", i.e. the establishment of the control system for actions that impact water resources and aquatic ecosystems. The "basin" scale can be an operational level of implementation of this "water police".

- Objective

The objective is to support the countries and basins that wish so in the establishment or the reinforcement of a shared and effective governance.

- Activities
INBO is involved in the development and implementation of the Water Governance Initiative action plan coordinated by OECD. INBO, well aware of the indicators (participation in construction and testing) is participating in an Expert Task Force that will intervene over the next three years in countries and/or basins to help establish the "diagnosis of governance", the starting point of any improvement action. The results of the diagnoses will be reported to the next WWF and used collectively to improve the set of indicators and their "reading"/appreciation, interpretation for action. In particular, INBO will actively join the new initiative on Governance and Economics of Water Security for Sustainable Development in Africa.

- To document the specific field of water police, an essential part of governance related to the control of water management (water police), INBO is committed to producing a new dedicated handbook, by facilitating the contribution of a group of voluntary members and partners. The aim is to prepare this handbook for the 9th World Water Forum to take place in Dakar in March 2021.
- INBO will seek to set up peer-to-peer projects specifically dedicated to the exchange of practices on the challenges of establishing a shared and effective governance.

4. As part of IWRM, increasing interaction between water management, economic activities and environmental conservation

• Background

The last decades have led to a more inclusive approach to water management (IWRM). Nevertheless, we note that the interaction between the various sectors (agriculture, industry, urban planning, energy, land management, etc.) and the water sector has not reached its optimum efficiency. This aspect is clearer when considering the climate change approach, which too often leads to the accumulation of sectoral plans, often without careful thought about their consistency with each other and with the water sector plan.

The intersectoral approach (or Nexus) is one of the essential principles of IWRM, especially for the relationship and interaction between the water sector on the one hand, and the energy, agriculture, food, health, environment and urban planning sectors on the other.

The basin is certainly the area where this complex interaction can best be exercised (all users protect and use the same water and defend their own interests), within the general framework of integrated water resources management at the basin level.

This approach must fully consider the need to strengthen the preservation and recovery of aquatic ecosystems.

• Objective

The goal is to increase the relationships and interactions between water management, the economic sectors and the conservation of aquatic ecosystems in order to move towards a stronger and more effective IWRM. More specifically, it means progressing in the debate on water in agriculture, knowing that agriculture is the major user in all basins, that progress is possible both in irrigation and in rainfed agriculture, as well as at the level of inputs that impact water resources.

• Activities

INBO can facilitate this interaction approach, firstly by improving the understanding of interrelationships by integrating the vision of each sector (agriculture, energy, urban planning, etc.) into the "water" vision. This work can be done with real examples of national and transboundary basins.
A special line of action is to generate an operational debate on the relationship between water use in agriculture and the management of water resources and aquatic environments. For such a purpose, a working group or think platform is set up within INBO with voluntary participants. INBO Secretariat is facilitating this think tank.

Then, INBO can define new methods of work, again based on basin organizations' experiences, particularly within the institutions linked to basin organizations, which promote positive interaction ("win-win" principle), well defined by the "prisoner's dilemma"). More concretely, it means finding the dynamics that allow moving from a system, in which each sector strictly defends its interests, to a system where points of view are positively compared in order to forge a sustainable compromise. This exercise can be carried out in some (national and transboundary) basins. In a first step, a theoretical and conceptual effort is to be made (a small group of experts to be created, facilitated by INBO secretariat). Based on the report prepared by the group, the exercise is carried out in these basins with first a diagnosis of interactions (or lack of interactions) and secondly an improvement project. The setting up of support projects for basin organizations, or even peer-to-peer approaches, will also be used to accelerate this exercise dynamics.

INBO is continuing to promote nature-based solutions, to defend biodiversity and to preserve and restore aquatic environments.

5. Improving the City-Basin dialogue

- Background

Urban areas concentrate the problems of water management: pollution, water consumption, floods linked in part to urbanization, scarcity of the resource, problems related to runoff water. Water-related challenges in urban areas are increasingly becoming significant, especially as the world's population is becoming more and more urban, less and less rural. It is therefore essential that dialogue between basin management institutions and cities be instituted or, in some cases, strengthened. But today it is often too remote.

- Objective

It is to facilitate dialogue between Cities and Basin Organizations, based on the good collaboration practices used between Cities (Urban water utilities in particular but not only) and Basin Organizations, identified with Basin Organizations worldwide. It is essential to strengthen the dialogue between individuals and structures in charge of town planning and the development of cities, people and structures specifically dedicated to water management.

- Activities

INBO has been involved in the development of the Basin-connected Cities Action Agenda of the International Water Association (IWA). The INBO / IWA partnership is planning to write a handbook dedicated to this topic of the city / basin dialogue. It will help to draw up a compendium of good collaboration practices between Cities and Basin Organizations and to identify useful recommendations based on these experiences. This handbook will also be produced for the Dakar World Water Forum of March 2021.

INBO will also focus on supporting its members in the development of pilot projects on this theme, especially via peer-to-peer approaches.

INBO will support the emergence or consolidation of networks of cities wishing to cooperate on water issues. It can provide the necessary knowledge to prioritize the work themes and to facilitate the strengthening of the links between both city and basin levels.
6. Developing citizens’ participation in the management of basins and sub-basins

- **Background**

The participation of stakeholders and the civil society in water resources management is one of the pillars of the successful implementation of IWRM. Despite the progress made over several decades, participation is still far from effective, especially when it comes to involving stakeholders in decision-making.

To speed up the process, INBO recommends that this participation be organized at the basin level, in the form of Basin Committees, Commissions or Councils, based on a clear legal framework that specifies the rights, obligations and skills of the various stakeholders and interested parties involved, the possible levels of decentralization, as well as the procedures and means necessary for good governance of freshwater.

This participation must also go beyond the mere awareness of the water uses to reach the "water footprint" dimension, each consumer’s daily behaviour, including consumption outside the water sector (car, mobile, home, Web, etc.), has a more or less strong impact on the water resource.

**Activities**

After the publication in 2018 of its "Handbook for the Participation of Stakeholders and the Civil Society in the Basins of Rivers, Lakes and Aquifers", INBO will continue, during the 2019 – 2021 period, the exchange of experience with the development of a compendium of achievements in national and transboundary basins that focus on participation in the following topics:
- Definition of long-term objectives and a shared vision of the basin future;
- Drafting of Basin Management Plans;
- Choice of priorities for the management and optimum use of the available resource;
- Implementation of the Programmes of Measures and multiannual priority investments;
- Definition of the financing methods and calculation of the taxes and tariffs which concern them.

The compendium thus developed will serve to support the stakeholders’ awareness and training on the principles and means of sustainable water resources management, especially through:
- The establishment of truly representative organizations of public and private users;
- The building of the decision-making capacity in this water sector;
- Integrated and transparent Water Information Systems.

INBO will contribute to developing a way of raising the citizens’ awareness on the impact of their daily behaviour on the water resource (water footprint) with a method to be defined.

The INBO Academy, launched in 2010 to organize training sessions for the executives of the Basin Organizations or their partners, focusing on the exchange of best practices between peers and the transfer of research results, will be strengthened. It will make awareness and information tools available to a wide audience.

Communication between the Secretariat and INBO members, observers and partners will continue via the www.inbo-news.org website, "INBO Newsletter", electronic letters and new handbooks for the dissemination of best practices and will contribute to this awareness.

7. Strengthening partnerships and fostering the transfer of research results

- **Background**
Since its existence, INBO has developed partnerships with many regional or international organizations. These partnerships have proven their effectiveness in joint productions and joint work (handbooks and publications, preparation of conference sessions, joint papers, joint project support actions). In addition, water managers need to renew and improve their knowledge and tools, by mobilizing research and its results. This requires a better integration of their needs into the programmes of research funding organizations (e.g. in Europe, the European Commission’s Framework Programme - Horizon2020 and HorizonEurope, the Agenda of the Joint Water Programming Initiative - WaterJPI, that of the Water Technology Platform - WssTP, or that of the Euro-Mediterranean initiative PRIMA). Strengthening partnerships can help this integration.

INBO wishes to actively contribute to accelerating the dissemination of research results to basin organizations.

**Objective and activities**

INBO will continue to collect the needs of basin organizations and participate in the bodies of research funders (e.g. the Stakeholder Advisory Group of WaterJPI, or the coordinating mechanism of PRIMa), or influencers, such as WssTP. It will develop opportunities for exchanges among peers for basin organizations in particular.

INBO will develop exchanges with research programmes and projects that it identifies as strategic for basin organizations around the world, such as AfriAlliance in Africa, Piano in China or EuroClima in Latin America.

Over the next three years, INBO will continue and strengthen historical partnerships (UNECE, OECD, INWTC, IWRA for example). It will develop new partnerships, especially in relation with programmes or projects with IWA or Greencross for instance.

For such a purpose, INBO Secretariat will also ensure the presence of the Network in major world water events, such as the UNFCCC’s COPs on Climate, the Conventions on Biological Diversity (CBD), etc.

As part of the preparation of the 9th World Water Forum, planned in Dakar in March 2021, INBO is member of the steering group for the "Cooperation" priority, in relation with OMVS and the Korea Water Forum. Two main themes emerge: firstly, transboundary cooperation and joint management of structures, and secondly, cooperation and multi-stakeholder dialogue at all institutional levels. Several operational proposals are under consideration, with the following leading topics:

1/ Production of tools for promoting and disseminating good practices;

2/ Joint writing and promotion of a shared document of policy recommendations,

3/ Implementation of reinforced support systems for the emergence of projects, especially through exchanges of practices between peers.

Through all these partnerships and initiatives, the Permanent Technical Secretariat will pay special attention to diversifying the financial resources of the Network.