



Didactic Curriculum– Module 2 Fundamentals of IWRM by basin

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General Information

📅	05/03/2026, 2 identical webinars at 10am and 4pm CET
📍	Online
🗣️	INBO, RAOB, AMCOW, UNECE, UE, NARBO
👤	Peers, Project Partners

1/ Summary

The P2P (Peer-to-Peer) project, funded by the European Union, is the first program of the "Twin Basin Initiative" led by the International Network of Basin Organizations (INBO). Co-led by the INBO and the RAOB, its objective is to strengthen integrated and sustainable water resources management (IWRM), through exchanges between basin organizations and countries.

The P2P educational pathway aims to strengthen the expertise and capacities of beneficiaries in the main areas of IWRM.

This webinar on the fundamentals of IWRM by basin is the second introductory module of the educational course. In particular, it lays the groundwork for future webinars whose more technical content will focus on the "pillars" of IWRM and other cross-cutting themes.

2/ Agenda

Welcome remarks (Eric Tardieu, Secretary General of INBO; Niokhor Ndour, Secretary General of OMVS representing RAOB)

Introduction: Project overview (INBO - Christophe Brachet, P2P Project Manager)

Regional executives (EU, DG approx – Henriette Faegermann; AMCOW – Nelson Gomonda; RAOB – Aminata Sokhna Diop; NARBO – Anton Mardiyono; INBO – Edouard Boinet)

International staff (Secretariat of the 1992 Convention - Komlan Sangbana, UNECE)

Examples of methodological tools and approaches to IWRM (INBO / OiEau – Agathe Guittard and Rémi Boyer; RAOB / OMVS – Fawzi Bedrédine, Director of Regional Infrastructures)

Interactive exchanges (INBO / OiEau - Mélanie Fayet)



3/ Subjects and topics of the meeting

Welcome speech

Eric Tardieu: welcomes all participants to this webinar, from all geographies. A new stage in the implementation of the Peer-to-Peer project begins today, as the pairings are established and the action plans are finalized. He also congratulated all his peers on their selection. He also encourages them, as well as the project team, for the work to be done in the years to come. He thanks the European Union, the project's funder, as well as Niokhor Ndour, representing RAOB, for the quality of cooperation established within this project. The goal of P2P is to combine theory and practice, to strengthen individual and collective skills; this is what will be done today, but also at the World Basin Summit organized by the INBO in Rio de Janeiro next June.

Niokhor Ndour: on behalf of Mr. Mohamed Abdel Vetah, High Commissioner of the OMVS and secretary of the RAOB, he thanks the project partners, as well as the European Union and the INBO, for trusting the RAOB. He points out that RAOB has established itself over the past 20 years as an essential African platform. The RAOB Council met in Dakar a month ago, the organizations were renewed and the strategic action plan was adopted. He points out that of the 21 validated pairings, 15 include at least 1 African partner. Beyond these pairings, Peer-to-Peer includes an educational path of which today's webinar is the second step. In this context, RAOB will be required to offer training courses in 2026 and 2027.

Introduction, project presentation

Christophe Brachet quickly highlights the features of the project: it lasts 4 years, with a budget of €6,120,000 and is financed by the Directorate General for International Partnerships of the European Union, for basin organizations but also governmental organizations which manage water, as well as some scientific partners and even civil society. INBO is implementing this project in partnership with RAOB; it includes two main components: peer exchange and capacity building. He highlights the selection steps for component 1 on peer exchanges: following the restricted call for expressions of interest in May 2025, pairings were put forward and 21 were selected.

Regional executives

Henriette Faegermann presents the **European policy in the field of water, and in particular the Water Framework Directive (WFD)**. **The WFD** stems from the observation that water is a multi-sectoral issue. The WFD is central to European water policy, but there are **many other directives**: Urban Wastewater, Floods, Drinking Water. The basis of the WFD is the concept of a catchment area. It covers all types of water bodies and many aspects of the condition of water bodies: ecological, chemical and quantitative. The WFD provides for the development of programmes of measures, requires economic evaluations and operates on a 6-year planning cycle. **The content of river basin management plans** is also governed by the directive, as Henriette details in her presentation. She then presents how cross-border cooperation is taken into account in the WFD: Member States must



coordinate their actions on cross-border basins. **The WFD has led member states** to improve governance, planning, transparency of decision-making processes; it helps them to manage technical challenges by addressing all issues. The measurement programs have made it possible to give up unsustainable practices and focus on restoring ecosystems. **The agenda for this directive** began in 2000, with a target of good condition by 2015, 3 cycles of management plans and a deadline for exemptions in 2027. The latest assessment report of the 3rd River Basin Management Plans, published in 2025, makes recommendations: increase the level of ambition and investment, identify complementary measures such as Nature-Based Solutions, better manage water scarcity, work more on cross-border cooperation, be stricter on exemptions, improve access to information and implement new legislative instruments. **The European strategy on water resilience**, adopted in June 2025, sets new objectives and provides for actions, some of which are already included in the WFD. She invites participants to take a look at the resources whose links are included in her presentation.

Nelson Gomonda of the Secretariat of the African Ministers' Council on Water (AMCOW) presents the **African Water Vision for 2063** and its policy, which were adopted by the Council of Ministers last year and presented to the African Union in February 2026. The vision is "*A safe and resilient Africa in the field of water with access to sanitation for all.*" **The challenges of this vision are** to adapt to climate change, improve the achievement of the satisfaction indicator, meet the increase in demand, manage the urbanization crisis and manage the costs of inaction. **The vision is divided into 4 pillars:** the first focuses on the economy and society; the second on diplomacy, peace and security; the third on sustainability and resilience; and the fourth on innovation, skills and information. **This vision requires new approaches to manage long-standing problems:** first, to consider water as an economic good, then to implement a circular economy in sanitation, and finally to promote cooperative data governance. **Several steps have been defined in the implementation of this vision:** the first milestone, in 2033, should include the implementation of regional investments, the second in 2043 aims for systemic transformations and the third in 2063 for a sustainable consolidation of changes. **The first implementation plan for the 2026-2033 period must be developed by the secretariat** in conjunction with numerous partners. The objectives of this plan are to generalize the key factors of transformation, to highlight flagship initiatives, to put in place a monitoring and evaluation process, and to map the partners and actors at several scales.

Aminata Sokhna Diop, from the OMVS, secretariat of the African Network of Basin Organizations (RAOB) presents this network, starting with **the origins of the RAOB**, when the African Union adopted the African Water Vision for 2025 in 2000, and then its creation in 2002. Its objectives are also listed, as well as its 20 members. She points out that **the RAOB is the technical element of the Council of African Ministers of Water** regarding cross-border water management. The RAOB's vision, mission and overall objective are also mentioned. **She then cites two ongoing RAOB projects:** **DYNOBA**, funded by the French Development Agency, which aims to boost support for African cross-border basin organizations, and the present **Peer-to-Peer** project, a global partnership project



between basin organizations, funded by the European Union. The **RAOB** held its **9th Council /General Assembly in January 2026**, during which its strategic directions were validated, consistent with continental priorities for water governance.

During the first session of this webinar 2 at 10:00 CET, Mr. Anton Mardiyono, Director of Operations and Maintenance of Perum Jasa Tirta II, presented **NARBO (Network of Asian Basin Organisms)**. This network, created in 2004, now includes **94 members in 18 Asian countries and two secretariats**, one in Japan and one in Indonesia. Its objective is to help cross-border basin organizations implement IWRM and improve water governance. Its current chairman is Dr. Imam Santoso, President and CEO of Perum Jasa Tirta II (Indonesia). Indonesia, an archipelago comprising 8,000 catchment areas, is facing an increase in hydrological risks. Water demand is high and dominated by 4 sectors: irrigation for 74%, domestic consumption for 9%, industry for 6% and commerce for 3%. Needs are unevenly met across the territory and throughout the year. Current water storage is 10 to 20 billion m³ while the estimated need is 30 to 40 billion m³. Finally, Mr. Mardiyono presents the IWRM implementation strategy in Indonesia and the projects underway.

During the 4pm CET webinar, Mr. Edouard Boinet, from INBO, presented the **International Network of Basin Organizations and regional networks**: an NGO created in 1994 and based in Paris, whose permanent secretariat is provided by the International Office for Water. This network includes 200 members from 90 countries and brings together 7 regional networks. Its presidency is currently held by France. The 8 regional networks are: RAOB (Africa), ROBAN (North America), RELOB (Latin America), REBOB (Brazil), EURO-INBO (Europe), REMOB (Mediterranean), NARBO (Asia) and EECA-NWO (Central Asia).

International executives

Mr. Komlan Sangbana, in charge of legal affairs at the Secretariat of the Water Convention provided by the UNECE, is invited to present the 1992 UN Convention. HE begins by noting that cross-border basins are home to 40% of the world's population; their management relies on cooperation. However, **few cross-border basins are covered by operational agreements**, and this delay is particularly pronounced with regard to groundwater. He insists that trust is essential for cooperation and that "resistance" can hinder the momentum. Cooperation in the field of water must be implemented at several scales. At the global level it is governed by **the 1992 Water Convention and the 1997 Convention on International Watercourses**. Today these two conventions are at a key stage of their implementation, with the recent accession of new countries to these two conventions. He then details the complementarity of these two conventions and encourages countries to join them. These agreements **inform many regional agreements**, such as the SADC protocol, the convention on conflict prevention in Central Africa, the recent ECOWAS directive in Africa, and the WFD in Europe. The distinctive feature of the 1992 convention is that it has an institutional mechanism that supports its implementation. This allows us to provide **support to countries at various levels**, for example by



supporting the creation of basin organizations (including, for example, the ongoing initiative on the Senegalo-Mauritanian aquifer basin). He concludes by emphasizing the need to link codified principles with development in the basins, for example, water sharing rules that help to prevent conflicts. Regarding the upcoming agenda, he mentions the next global workshop scheduled for June in Budapest.

4/ Summary of questions and answers

Subject	Question	Answer
Scales of intervention	Bangladesh: The Ganges has been cited as a sub-basin, but it is in fact a basin.	Bangladesh has indeed recently joined the convention and the correction on the Ganges will be taken into account.
Scales of intervention	Can the catchment area be considered as a unit of hydro-bio-physical analysis?	Yes, we can consider it that way.
Governance	How do European member states contribute to the implementation of the Global Strategy? And how does the EU mobilize them for this?	<p>The implementation of the WFD raises a number of common technical challenges for Member States, the Commission, candidate countries and countries of the European Economic Area, as well as for stakeholders and NGOs. In order to address these challenges in a cooperative and coordinated manner, the Member States, Norway and the Commission agreed, just five months after the Directive entered into force, on a common implementation strategy (CIS). The CIS aims to ensure the consistent and harmonious implementation of the WFD and its daughter directives.</p> <p>In this context, several technical working groups are involved, for example by producing guidance documents on technical aspects, key events and additional thematic documents.</p> <p>Organizations wishing to join one of the CIS working groups can submit their application.</p> <p>EU member states and other organizations finance their own participation. Other resources are allocated by the European Commission in the form of man-days for staff members and contracts for the development of technical contributions.</p>
Quantitative management	In Asia (NARBO presentation), during the dry season demand exceeds supply. What actions have been put in place to address this challenge?	The first measure is to make water withdrawals more efficient, through the implementation of information technologies, smart technologies for cooperation and preventive and real-time management, based on forecasts, for example of droughts. A second type of action involves mitigating the impact by managing flow rates at dams. We can also improve irrigation efficiency and redistribute irrigation water quotas towards domestic uses.



Subject	Question	Answer
Governance	Can we have NARBO's governance mechanisms?	Further information can be found on the page: https://www.narbo.jp/whats.html
International executives	What are the conditions for revising the agreements related to the 1992 convention? And what role can the ABV play in streamlining the functioning of statutory bodies?	The revision of the agreements is left to the sovereign discretion of the countries and basin organizations. In fact, some of the agreements adopted no longer reflect current events; for example, they do not incorporate climate change. Some countries want to integrate climate change adaptation into the agreements. OCACOM recently revised these agreements to create a more efficient organization.
Regional frameworks: Africa	Since water is a matter of survival in Africa, significant efforts must be made to better manage water resources and develop infrastructure.	
Regional frameworks: Europe	How does the EU integrate climate change into water resource management? What climate models are used to improve the resilience of water resources?	The WFD states that climate change must be taken into account in river basin management plans and their measurement programmes. It is then up to the member states and river basin organizations to ensure that this consideration is effective and adapted to local issues. The climate models used depend on the states, or even the basin organizations. The IPCC models are generally used in combination, in order to take uncertainties into account. For example in France, the 'Explore 2' project has made it possible to update knowledge on the impact of climate change on hydrology, based on the latest IPCC publications. Explore2's hydrological projections are multi-model and multi-scenario.
Didactic curriculum	Could the pairings participate in the upcoming deadlines of the training program to share their progress?	The goal of the P2P project is precisely to value peer feedback and experiences. As shown by the interactive exchanges (see below), peers will be mobilized to co-build the next thematic modules of the educational course with the INBO and the RAOB. Interventions will be prioritized accordingly.

Examples of methodological tools and approaches to IWRM.

Mr. Rémi Boyer from INBO/ OiEau explains that the objective of their intervention is to succinctly present the pillars of IWRM, which will be described later in the educational course. Six pillars will be mentioned as a 'preview'. **The concept of catchment area and the question of the scale of intervention** is essential and must integrate all types of water resources, with upstream-downstream solidarity among users. It addresses two challenges: the overlap between administrative and hydrological boundaries and the nesting of sub-basins within larger basins, like Russian nesting dolls. Regarding **water information systems**, Ms. Agathe Guittard reminds us that knowledge is a prerequisite for action and that we can only manage what we know. In many countries, a lot of data is produced but little is used, yet there is a real need for reliable data. Implementing technical solutions for data management requires political will. She illustrates this work with the example of the



implementation of a Water Information System in Laos in 5 steps. **Governance and public participation** are necessary for the proper management of water resources. [Rémi Boyer](#) then describes the 3 pillars necessary to implement good governance: the regulatory framework, inter-institutional coordination and the participation of users. He lists examples of governance bodies in Ecuador, Madagascar, Cambodia and Vietnam. **The planning cycle** is detailed by [Agathe Guittard](#), using the example of the *Stung Sen* basin in Cambodia: situation analysis, diagnosis and objectives, development of an action plan, implementation of the action plan and monitoring and evaluation. Based on this, a new planning cycle can be launched, according to a timeframe adapted to the country. [Rémi Boyer](#) presents **the challenges of financing** the pillars of IWRM and financing the implementation of planning. A step-by-step approach helps to overcome obstacles: using available funds, using leverage, strengthening existing mechanisms and developing new ones. There are numerous financing mechanisms and they can be summarized by the OECD's '3Ts': Tariffs, Taxes, Transfers. Nature-based solutions can also often developed at a lower cost, they help to mitigate the effects of climate change and restore ecosystems. A wide variety of measures can be put in place depending on the context, with actions on ecosystems and on practices.

[Mr. Fawzi Bedredine](#), Director of Regional Infrastructures at OMVS and representing RAOB, presents a concrete example of cross-border IWRM in Africa through the example of the **Organization for the Development of the Senegal River**. The OMVS was created in 1972 and includes 4 member states. The basic principles of this organization are solidarity and sharing, dialogue and consultation, and participatory methods. To implement these principles, a suitable institutional framework has been put in place, including regional and national bodies. Initially, at the time of creation, the cooperation agreements aimed to regulate the river and were purely statist; population participation was low. In 2002, the Senegal River Water Charter placed participatory aspects at the heart of the decision-making process. The system has been revised in accordance with this charter and public participation is enabled by several bodies: the Permanent Water Commission, the National and Local Coordination Committees and the User Associations. This operation is illustrated by the validation scheme of the OMVS Strategic Action Plan and facilitated by the access portal of the Basin's Water Information System.

5/ Interactive discussions

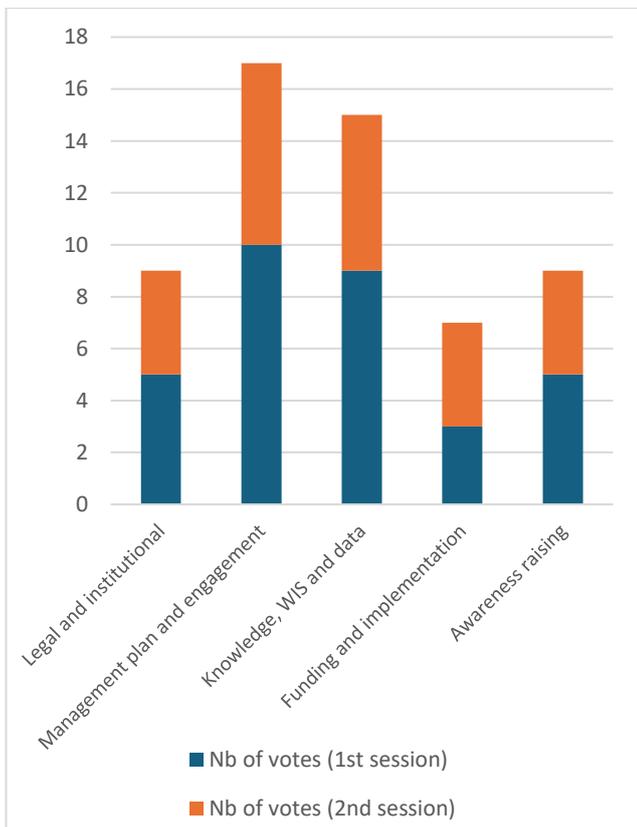
An interactive exchange using the Wooclap tool allowed participants to specify their possible contributions to the educational path. They were asked five questions about the type of presentation and the topics they are prepared to offer during the upcoming educational modules. The 46 answers and many comments collected during the webinar will allow us to co-create the next modules.

The results show potential for interventions on the topics of "Management plans and participation" and "Knowledge, water information systems and data". Participants prefer formats with concrete

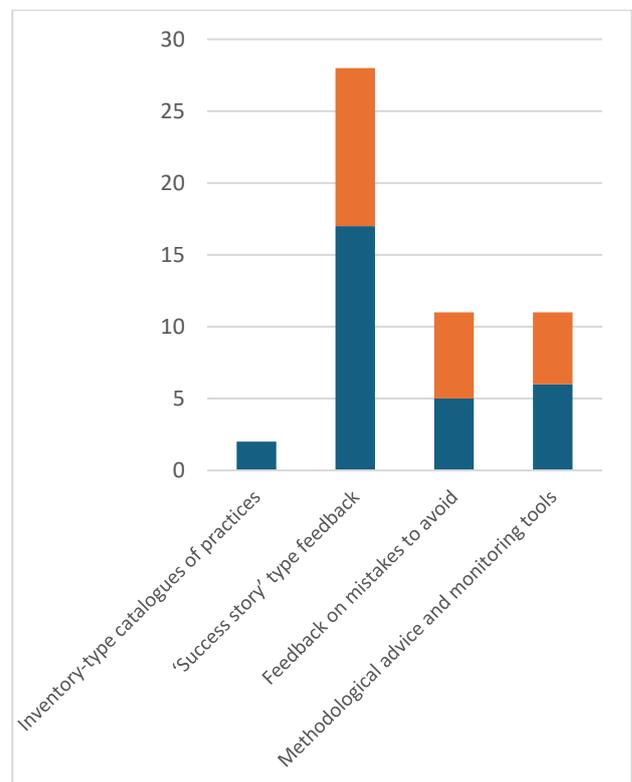


testimonials and feedback rather than more theoretical presentations. Within the topic of Information Systems and Data, the priorities focus mainly on information systems and data interoperability, as well as on decision support tools. For management plans, the planned contributions relate in particular to user participation, the development of management plans and measurement programs. Finally, other cross-cutting topics were also identified, in particular nature-based solutions, adaptation to climate change and financing of IWRM at the basin level. Overall, these results confirm the willingness of peers to actively contribute to the educational journey, mainly through feedback from their experiences in their local areas.

Q1: In which IWRM areas would you like to improve your skills?

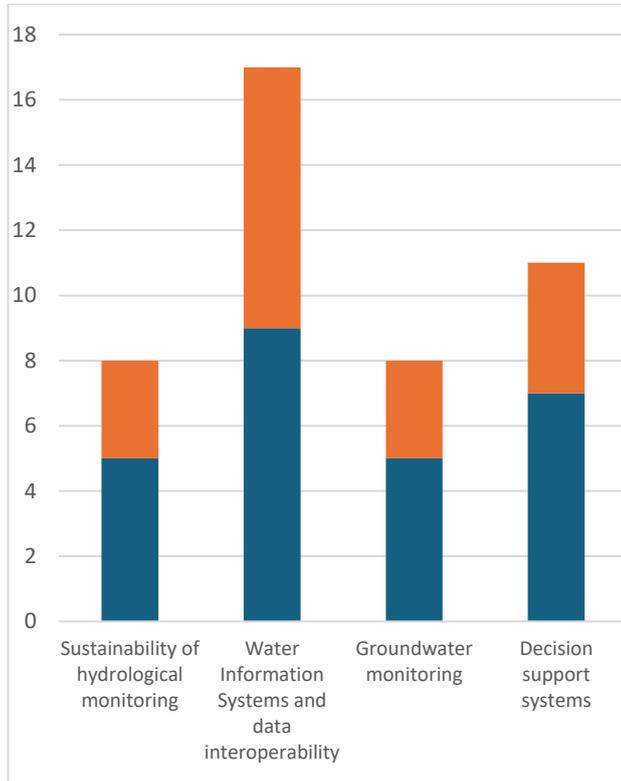


Q2: What kind of content would you be willing to provide?

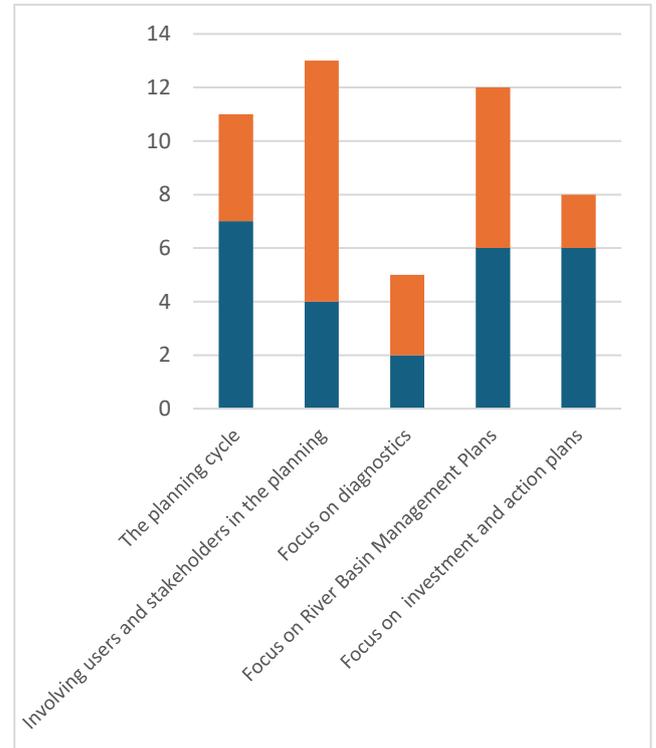




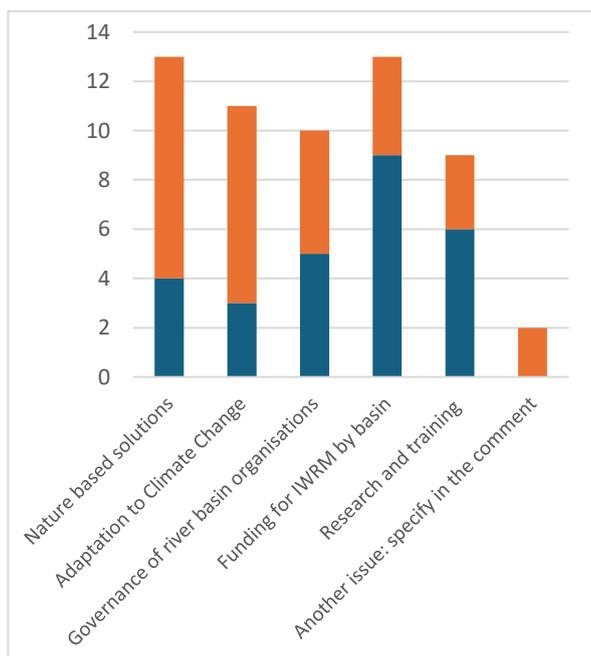
Q3: Within the theme of "Knowledge, WIS and data", about which sub-theme would you like to speak?



Q4: Within the theme of "Management plan and engagement" about which sub-theme would you like to speak?



Q5: On what other issues will you be willing to speak within the didactic curriculum?



6/ Conclusion, follow-up

The presentations, this summary and a video of the recordings are available on the INBO website.

The survey remains open for 1 month, to allow organizations that were unable to participate in this second introductory module to respond. It can be accessed via the following link:

<https://app.wooclap.com/W2P2P/questionnaires/69aaaf05b6e4dde9db83c06d>

The next thematic modules of the course will be offered during 2026 and 2027. Namely a meeting is scheduled for June 16, 2026, at the World Basin Summit in Rio, on a module giving priority to Latin America.