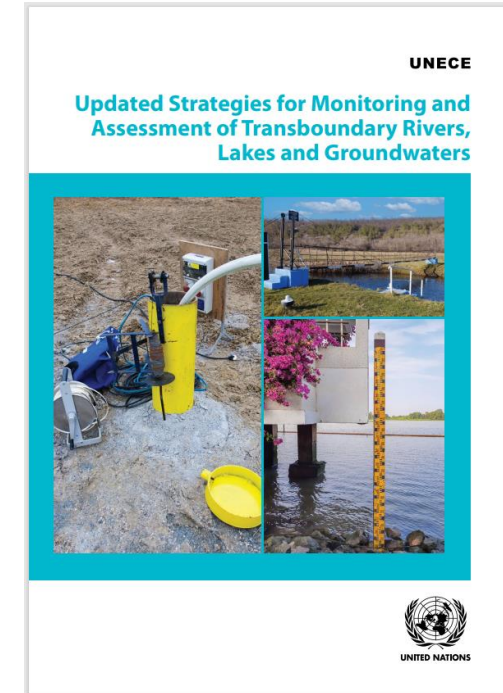


Workshop on Strengthening Legal and Institutional Arrangements for Transboundary
Water Cooperation and Data and Information Exchange
Beirut, Lebanon, 30-31 May 2023

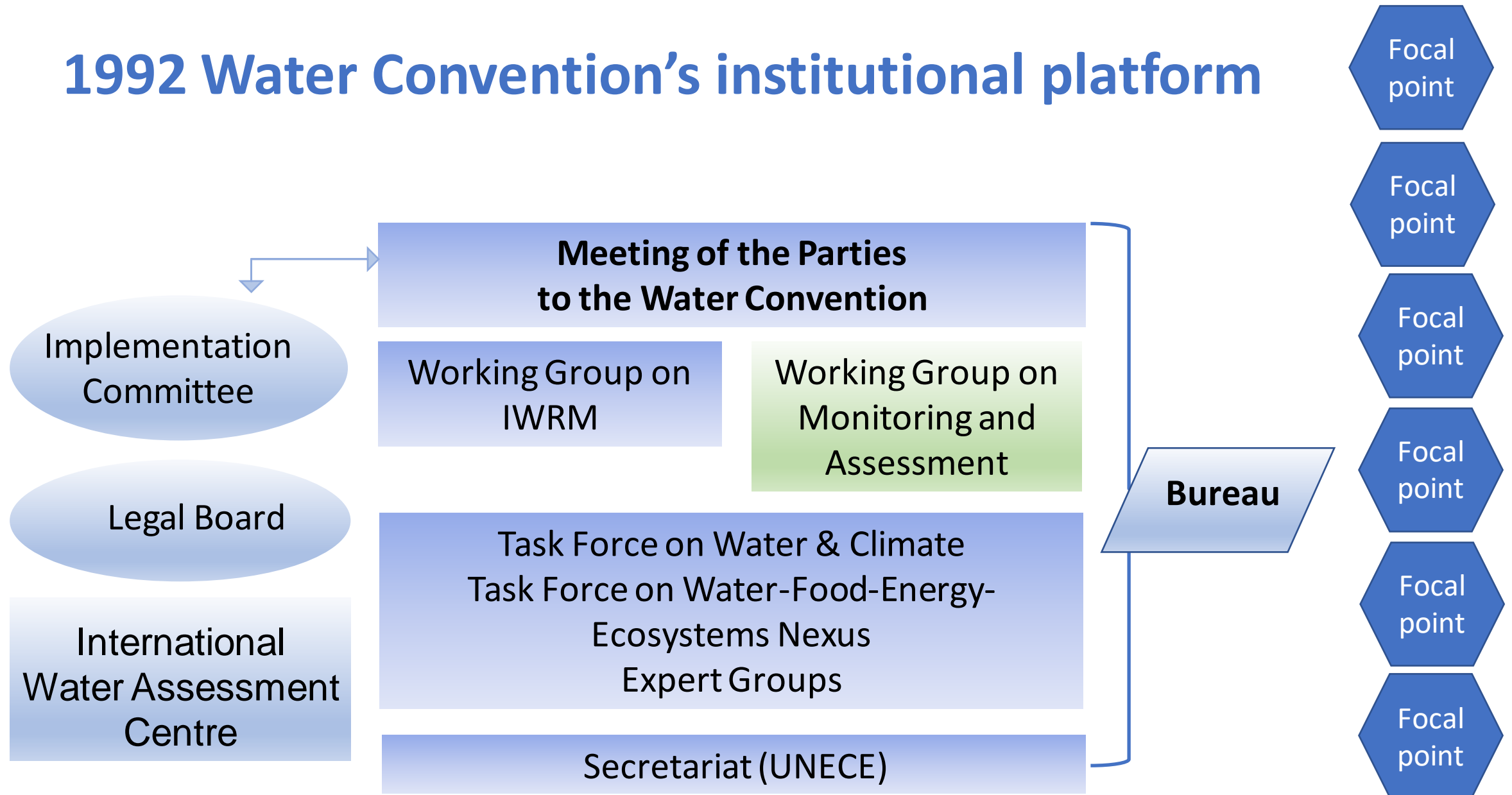
Guidelines for monitoring and assessment of transboundary rivers, lakes and groundwaters under the Water Convention:

*Updated Strategies for Monitoring and Assessment of
Transboundary Rivers, Lakes and Groundwaters* and the
process to develop a new tool on *Good practices and
lessons learned in transboundary data sharing*



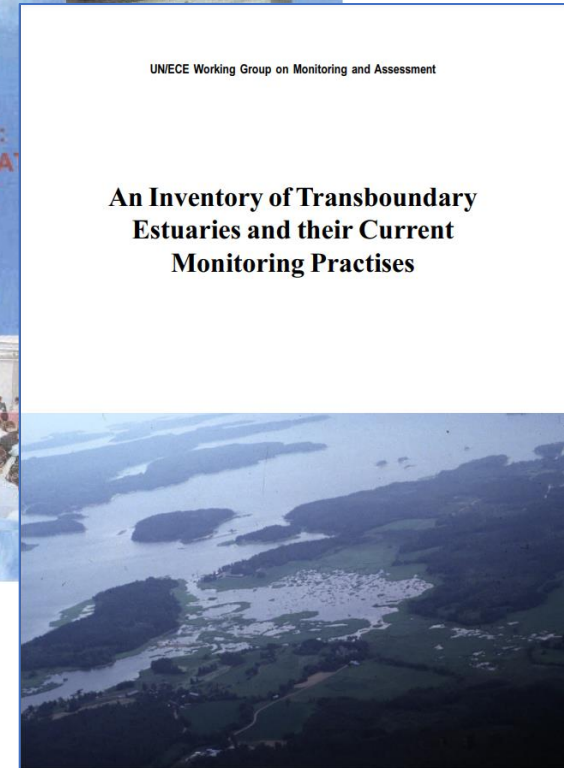
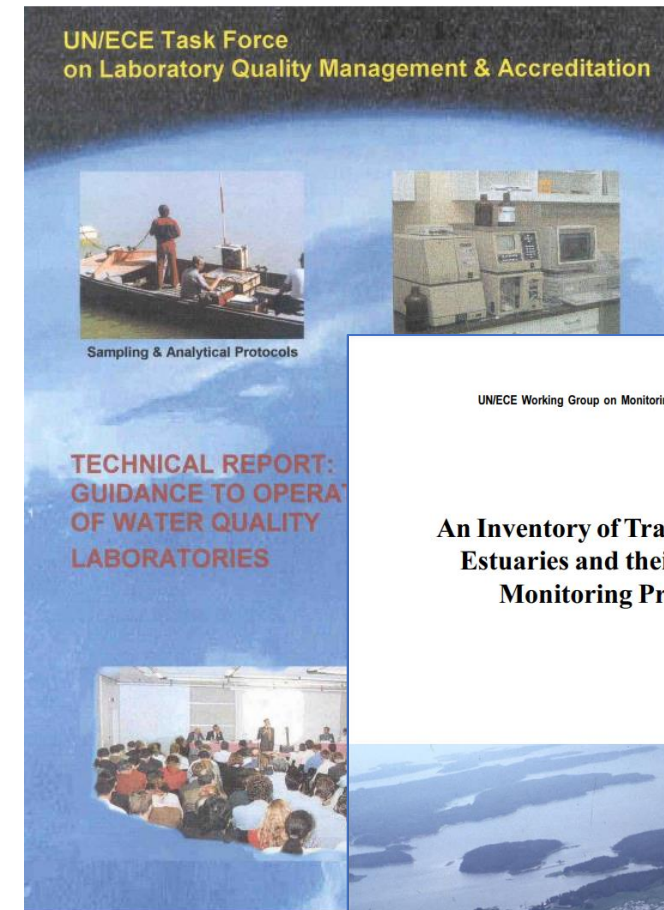
Iulia Trombitcaia, Water Convention secretariat

1992 Water Convention's institutional platform



Technical documents on monitoring and assessment under the Water Convention

- [Biological Assessment Methods for Watercourses](#) (1995)
- [State of the Art on Monitoring and Assessment of Rivers](#) (1995)
- [Quality Assurance](#) (1995)
- [Guidance to operation of water quality laboratories](#) (2002)
- [Monitoring of International Lakes: Background Paper for the Guidelines on Monitoring and Assessment of Transboundary and International Lakes](#) (2002)
- [An inventory of transboundary estuaries and their current monitoring practices](#) (2003)
- [Good Practices for Monitoring and Assessment of Transboundary Rivers, Lakes and Groundwaters](#) (2006)



Guidelines on monitoring and assessment under the Water Convention

1996

- Guidelines on M&A of Transboundary Rivers
- Guidelines on M&A of Transboundary Groundwaters

2000

- Guidelines on M&A of Transboundary Rivers
- Guidelines on M&A of Transboundary Groundwaters

2002/2003

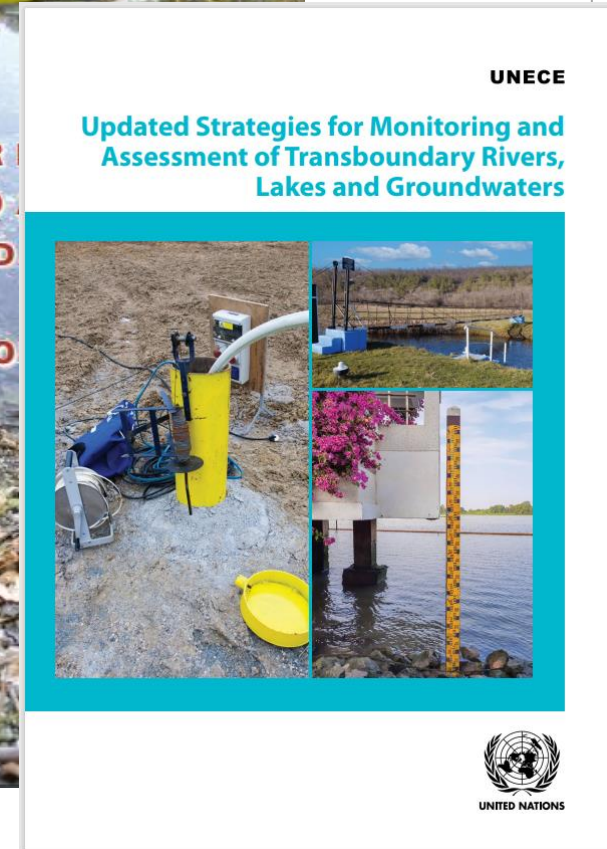
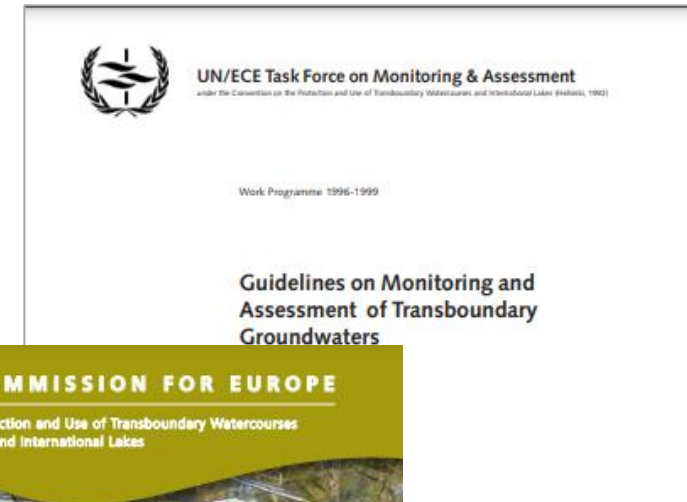
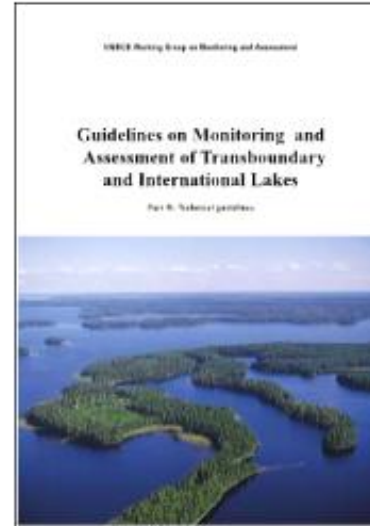
- Guidelines on M&A of Transboundary and International Lakes
 - Part A: Strategy Document
 - Part B: Technical Guidelines

2006

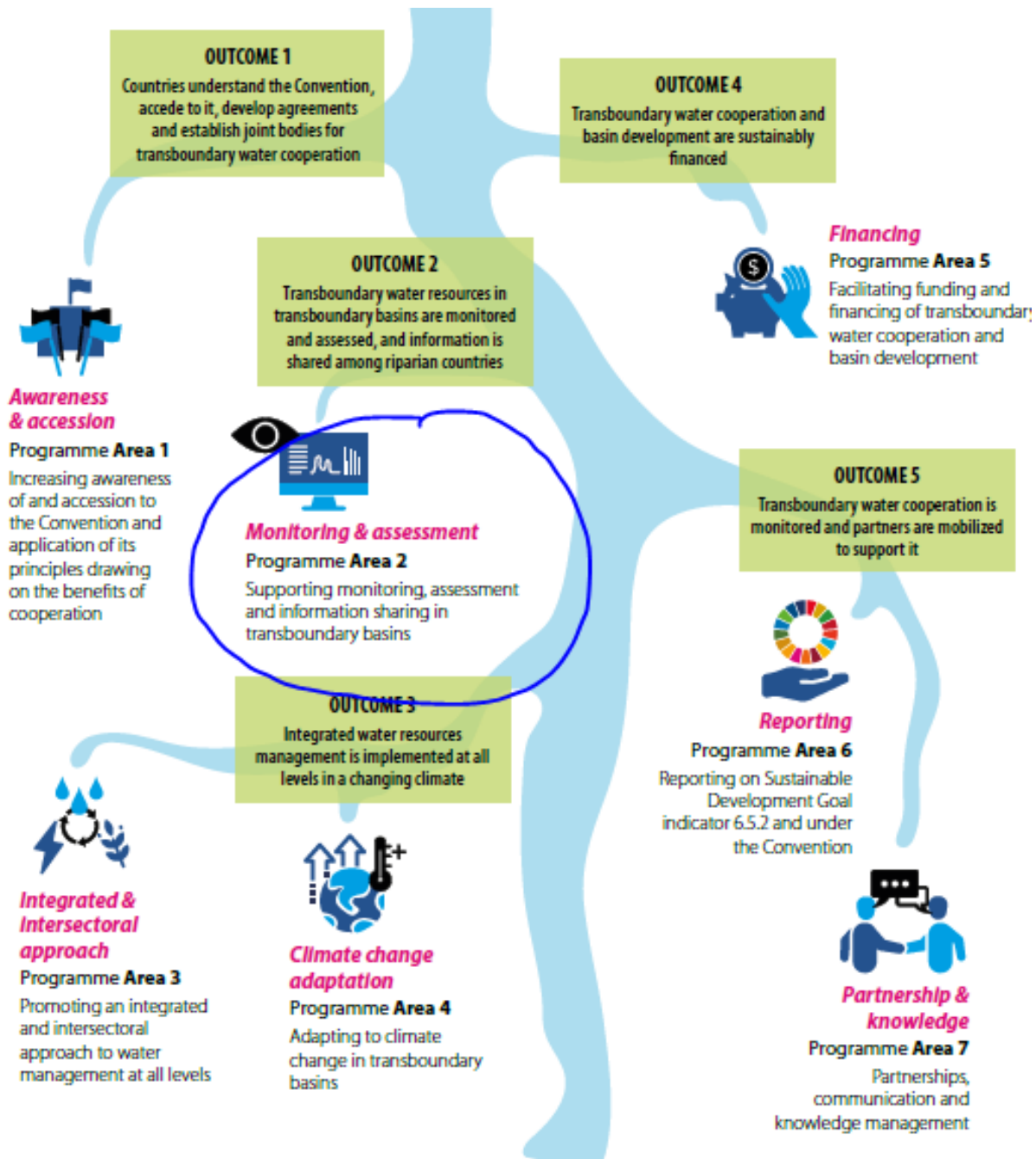
- Strategies for Monitoring and Assessment of Transboundary Rivers, Lakes and Groundwaters

2023

- Updated Strategies for Monitoring and Assessment of Transboundary Rivers, Lakes and Groundwaters (2023)



Programme of work 2022-2024

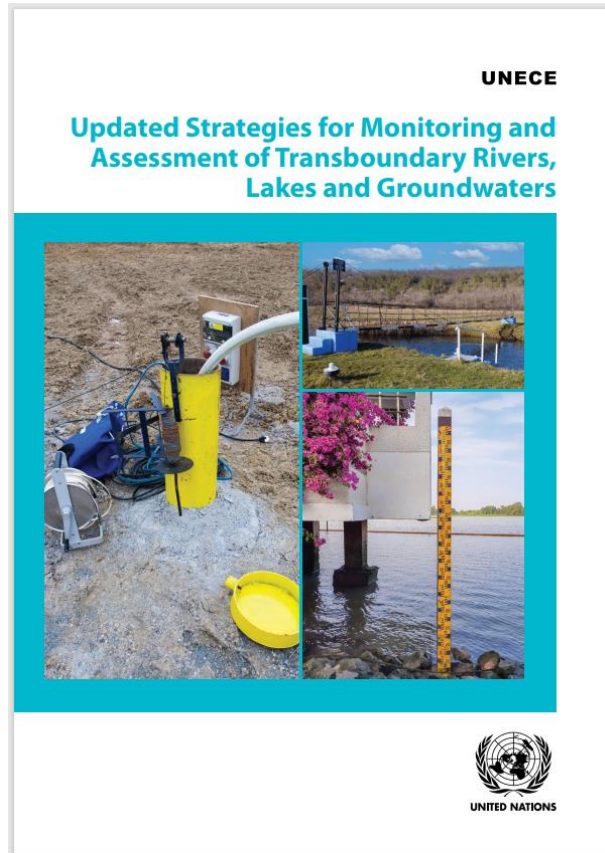


Programme Area 2: Supporting Monitoring, Assessment and Information Sharing in Transboundary Basins

Lead Parties: Finland and Senegal

- Update **Strategies for Monitoring and Assessment of Transboundary Rivers, Lakes and Groundwaters**
- Develop a **publication on good practices and lessons learnt in transboundary data sharing**
- Up to three trainings or **regional workshops** on monitoring, information and data
- **Tailored assistance** for developing joint or coordinated monitoring or information and data exchange - upon request, pending availability of resources

Updated Strategies for Monitoring and Assessment of Transboundary Rivers, Lakes and Groundwaters (2023)



Key principles and approaches to monitoring and assessing transboundary waters.

Supports the preparation of **policy actions** at local, national and transboundary levels.

Step-by-step approaches and strategies for the development of monitoring, assessment and data sharing building on **global experience**.

Takes into account **technological developments**.

Available in English. Arabic, French, Russian and Spanish translations on the way.

Link: <http://bit.ly/3X5banz>

Updated Strategies: key aspects

- Joint monitoring brings substantial benefits to countries
- Ultimate goal of monitoring is to provide information necessary for planning and decision-making at local, national and transboundary levels
- Basin approach to be considered when developing a monitoring system

Figure 1: Driving forces–Pressures–State–Impact–Responses (DPSIR) framework

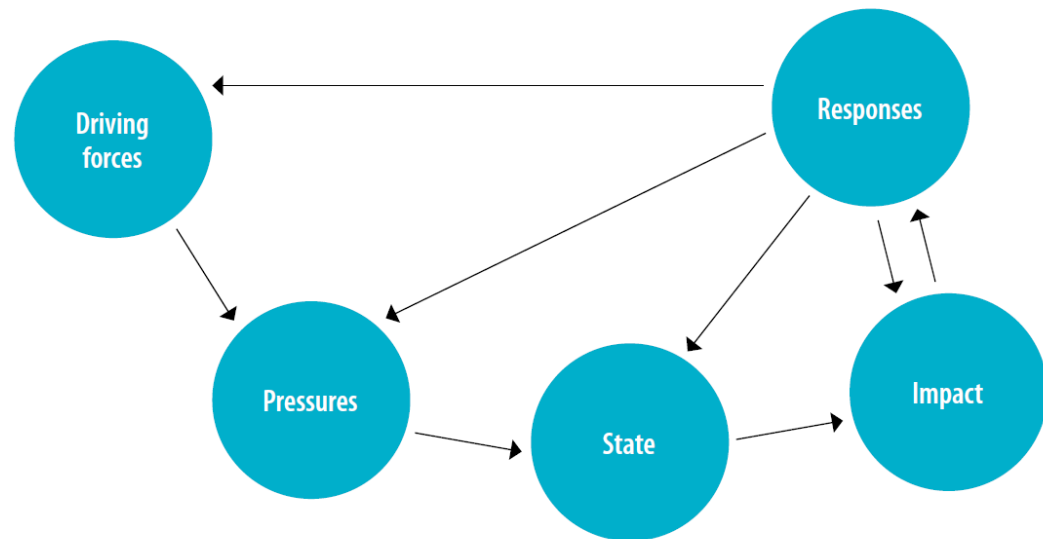
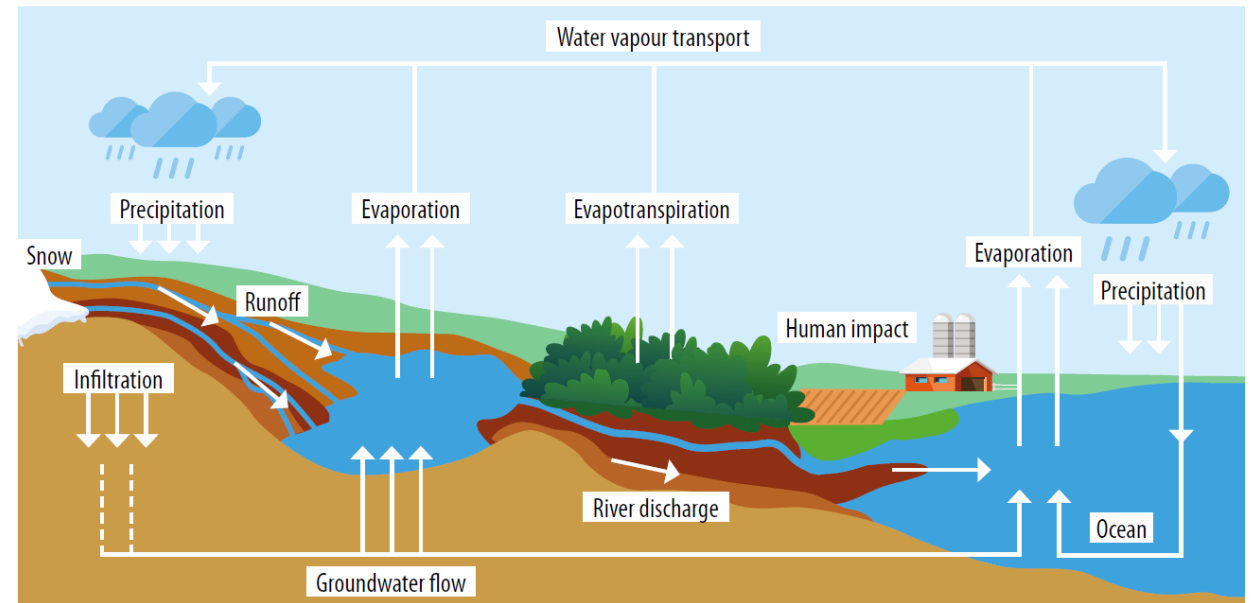


Figure 2: Key elements of the hydrological cycle of a basin



Updated Strategies: different purposes for water data

Water data and information management are essential for:

Sectorial water management

- Ecosystem/ environment
- Drinking water supply
- Agriculture
- Energy
- Health
- Transportation

Integrated Water Resource Management

- Local level
- Basin level
- National level
- Transboundary basins
- Regional level

Climate change adaptation and disaster risk reduction

- Floods
- Shortages
- Drought

Decision making

- Development of policies and legislation
- Assessment of policy impacts
- Surveillance of policy implementation

Reporting

- Global
- Regional
- National statistics
- Specific Conventions

Specific decision taking

- Operational management
- Territory management
- Emergency situations

Other water activities

- Regulatory aspects
- Partners
- Public information

Source: Modified from INBO, 2018. *The Handbook on Water Information Systems Administration: Processing and Exploitation of Water-related Data.*

Updated Strategies: Requirements for monitoring and assessment

Legal basis

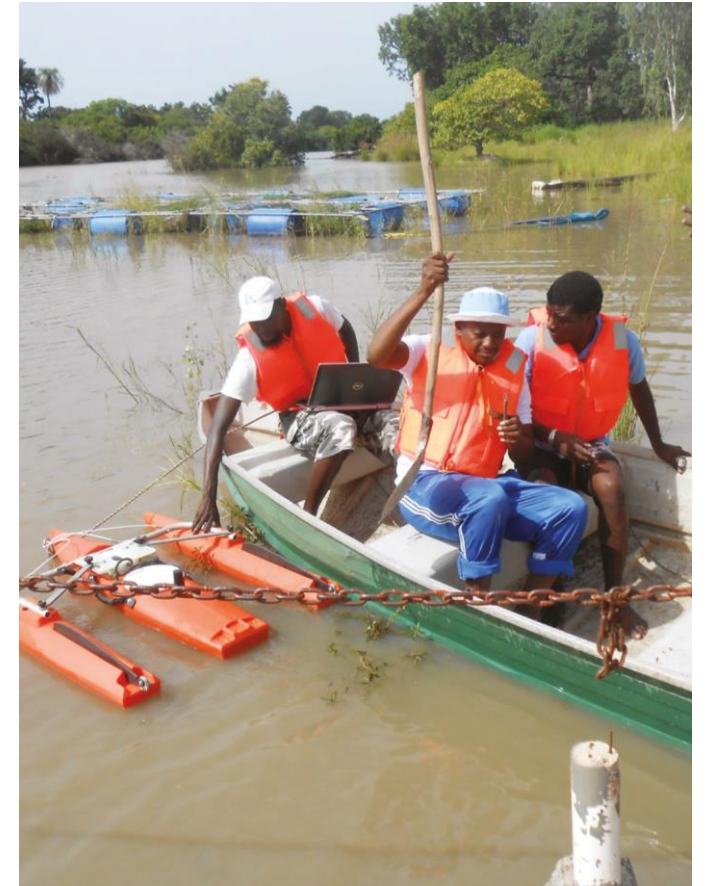
- Imperative: an adequate legal framework at national and basin level
- Global and regional instruments

Institutional set-up

- National and transboundary
- Capacity development
- Quality control
- Data exchange

Adequate funding

- Investment and operational costs
- Long-term commitment



Updated Strategies: Develop step-by-step approaches

- Do not try to do all at once
 - Build on existing elements
 - Prioritize efforts
- => Evaluate the situation and focus on the most pressing/urgent/essential
- Models (numerical, analytical or statistical) can provide support
 - Use pilot projects for new topics



Updated Strategies: Implementing monitoring programmes

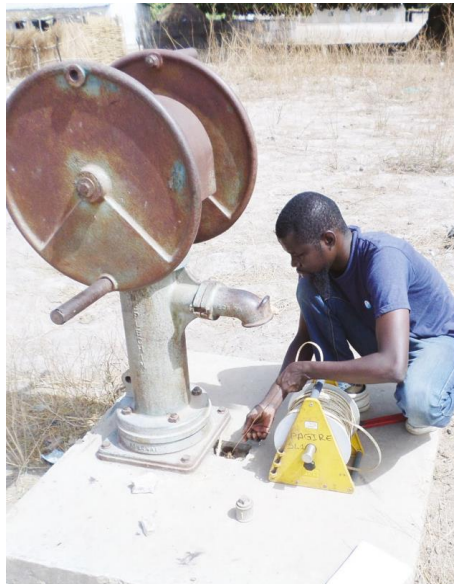
Figure 4: Monitoring and assessment cycle



Updated Strategies: manage, share and use data

Management and sharing of data

- Data dictionaries
- Data quality control
- Data analysis and interpretation - data analysis protocol (DAP)
- Data sharing



Reporting and use of data

- Environmental reporting
- Need to inform management decisions
- Reporting formats and audiences
- Use of information should feed back into the design of the monitoring programme

Updated Strategies: Annexes

1. Specific aspects of groundwater monitoring
2. Specific aspects of lake monitoring
3. Specific aspects of river monitoring
4. Specific aspects of monitoring in transitional waters
5. International programmes and information sources



New tool! Good Practices and Lessons Learned in Transboundary Data Sharing (upcoming)

9th Meeting of the Parties (2021) tasked the Working Group on Monitoring and Assessment to collect **good practices and lessons learned** in transboundary data sharing.

1st Draft : **over 50 lessons learned and over 50 case studies** from around the world collected through open call & regional workshops => Real life examples

2nd Draft to be finalized by the end of July 2023.

⇒ Publication by 10th Meeting of the Parties (Oct. 2024)

Room for more case studies from your region!

Inputs are welcome!

First draft available:

<http://bit.ly/41UL1v5>



Thank you

Secretariat:

water.convention@un.org and
iulia.trombitcaia@un.org



More information:

<https://unece.org/environment-policy/water/monitoring-assessment-and-information-sharing-transboundary-basins>



Twitter: [@UNECE_Water](https://twitter.com/UNECE_Water)



Facebook: [@UNECEWater](https://www.facebook.com/UNECEWater)



LinkedIn: [@UNECEWater](https://www.linkedin.com/company/UNECEWater)

Upcoming events:

Global workshop on conjunctive management of transboundary surface water and groundwater (Geneva/hybrid, 16 Oct 2023)

18th Working Group on Monitoring and Assessment (Geneva/hybrid, 17-18 Oct 2023)

