

**National workshop related to 1992 United Nations Water Convention,
1997 United Nations Watercourses Convention:
Zimbabwe`s accession process to the UN global water conventions**

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**Activities and Experiences from the perspective of Estonia,
Transboundary water cooperation**

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Transboundary Water Cooperation- goals and directions

The goals of joint management and cooperation of shared water bodies on the basis of equitably according to well harmonized policies, programmes and strategies:

To prevent, control and reduce pollution of waters causing or likely to cause transboundary impact;

To ensure that transboundary waters are used with the aim of ecologically sound and rational water management, conservation of water resources and environmental protection;

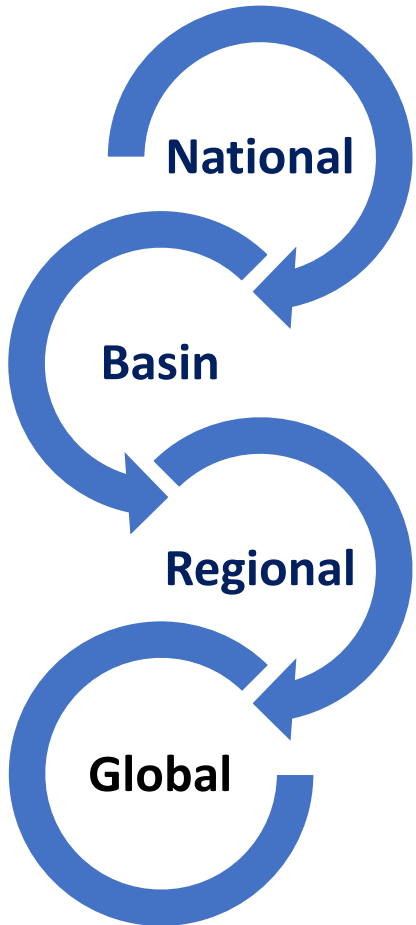
To ensure that transboundary waters are used in a reasonable and equitable way, taking into particular account their transboundary character, in the case of activities which cause or are likely to cause transboundary impact;

Estonian activity directions under convention

- To transfer International knowlege into local water management(guidances)
- To work together with different countries(EU non- EU, big and small states)
- To find joint areas of work, to find common framework
- To find balance between economic, environmental and social benefits
- To find interaction between different sectors and areas
- To use our geographical situation for better water management

Water Convention Programme of Work 2022-2024

Delivering at different levels:



Programme area 1: Increasing awareness of and accession to the Convention and application of its principles drawing on the benefits of cooperation



Programme area 2: Supporting monitoring, assessment and information sharing in transboundary basins



Programme area 3: Promoting an integrated and intersectoral approach to water management at all levels



Programme area 4: Adapting to climate change in transboundary basins



Programme area 5: Facilitating financing of transboundary water cooperation



Programme area 6: Reporting on SDG indicator 6.5.2 and under the Convention



Programme area 7: Partnerships, communication and knowledge management

Programme area 1: Increasing awareness of and accession to the Convention and application of its principles drawing on the benefits of Cooperation

- Rationale: Accession of new countries needs to be scaled up together with the implementation of the Convention's principles
- Objectives: Foster the application of the principles of the Convention and the improvement of cooperation on the management of transboundary waters
- Area 1.1: Increasing capacity for implementation of the Convention and supporting national processes towards accession, Lead Party: : Finland, France, Germany, Ghana and Hungary
- **Area 1.2: Promoting and communicating the benefits of transboundary cooperation with Lead Party: Estonia.**
- Area 1.3: Supporting the development of agreements and the establishment of joint bodies with Lead Parties: Germany and Hungary
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Benefits of transboundary water cooperation

	Benefits for economic activities	Benefits beyond economic activities
From improved water management	Economic benefits <ul style="list-style-type: none"> Expanded activity and productivity in economic sectors (agriculture, energy generation, nature-based tourism) Reduced cost of carrying out productive activities Reduced economic impacts of water-related hazards (floods, droughts) ... 	Social and environmental benefits <ul style="list-style-type: none"> Health impacts from improved water quality Employment and reduced poverty impacts Improved access to services (electricity, water supply..) Preservation of cultural resources or recreational opportunities. Increased ecological integrity
From enhanced trust	Regional economic cooperation benefits <ul style="list-style-type: none"> Development of regional markets (for goods, services & labour) Increase in cross-border investments Development transnational infrastructure networks 	Peace and security benefits <ul style="list-style-type: none"> Strengthening of international law Increased geopolitical stability New opportunities from increased trust Reduced risk and avoided cost of conflict Creation of shared basin identity

Benefit assessment can help facilitate dialogue / launch cooperation process / consolidate existing cooperation through negotiations / support realization of advanced cooperation initiatives, such as joint projects

Programme area 3. Promoting an integrated and intersectoral approach to water resources management at all levels

- Rationale: Integrated water resources management is a universally recognized best practice, which involves coordination among different uses and users of water from different sectors to maximize economic and social benefits without damaging the sustainability of ecosystems.
- Objectives: • Support the **development of transboundary basin management strategies**, joint objectives or plans (or elements for such plans), in line with the Convention and **the principles of integrated water resources management**.
- **3.1. Promoting integrated water resources management in transboundary basins Lead Parties: Estonia and Slovenia.**

Transboundary and intersectoral cooperation should be strengthened

- **Source to sea** concept- are connections between what we do on land and along rivers, and the impact this has further downstream, along coasts and in the ocean.
- **Transboundary cooperation on planning and management** for shared river basins, as well as coastal zones, should be strengthened
- **Cooperation between freshwater and marine joint bodies**
- **Regional seas conventions**, are important frameworks to work with S2S context
- **Mapping of pollution pathways from source-to-sea** can improve the understanding of common goals and support the prioritization of actions to fight pollution at the local, regional and global scale.
- **Synergies between integrated water resources management, integrated coastal zone management and marine spatial planning**, in order to ensure the **more sustainable development of coastal areas**

Urgency to accelerate source-to-sea action

- **Freshwater and ocean pollution** in different regions put at risk the achievement of other Sustainable Development Goals.
- **Source-to-sea challenges** can only be solved **through collective action**. It is essential to bring **together all stakeholders**.
- It is necessary to **reinforce the co-work of decision makers and researchers** in the performance of public policies and coordinating mechanisms among these political areas
- **Pressures from different sources increase** like: diffuse/nutrient pollution, industrial and mining pollution, microplastics and proliferation of toxic chemicals, need to be considered and addressed

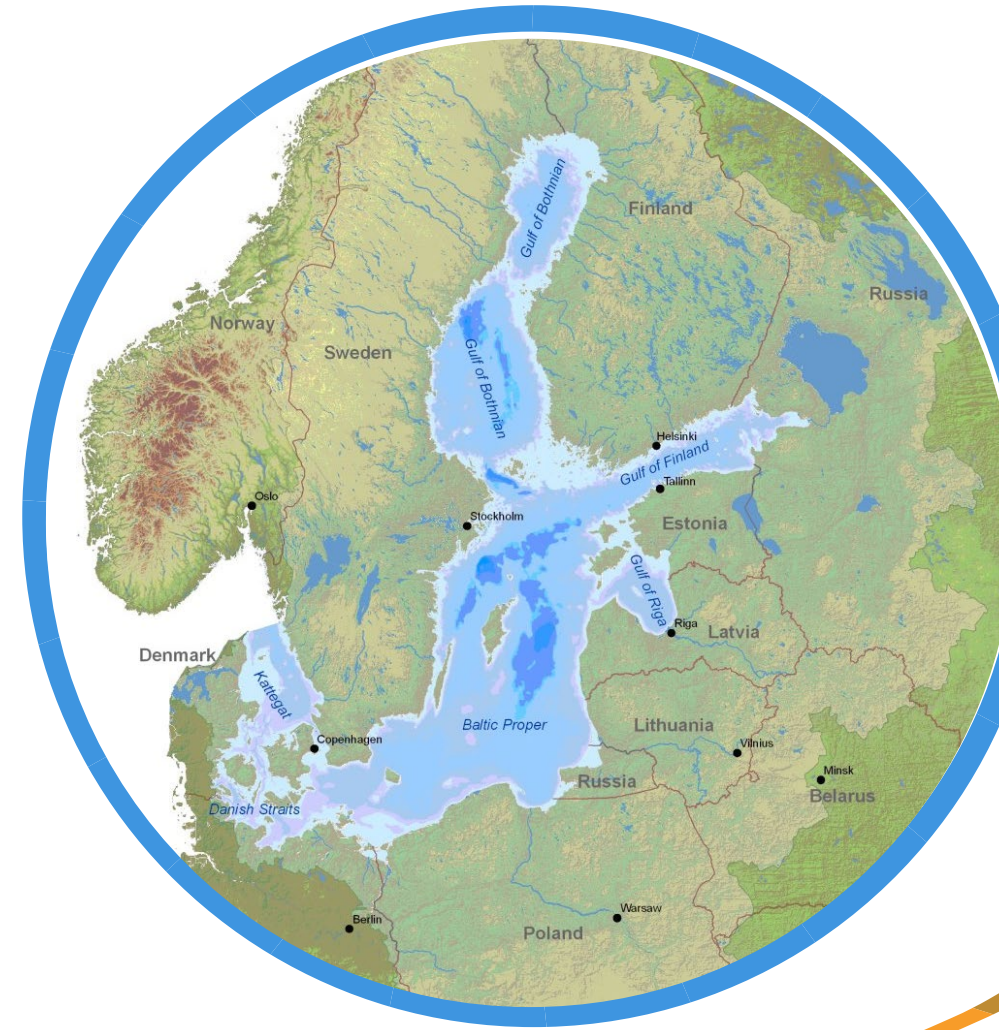
Planned future activities

1. The Water Convention can serve as a platform for building capacity, exchanging experience and providing guidance on source-to-sea management.
2. The **preparation of a guidance note** on the implementation of the source-to-sea approach.
3. The guidance note would be developed in cooperation with partners and tailored to the needs of professionals working in the respective areas.

From global to local

Shared waters - the Narva River and Lake Peipus

- The Narva River together with Lake Peipus are transboundary water bodies, discharging to the Gulf of Finland in the Baltic Sea.
- Lake Peipus is fourth largest lake in Europe and at the same time it is the largest transboundary lake in Europe.
- The basin area of the Narva River is about 57,000 sq.km (Estonia 30.4%, Russia 63.1%, Latvia 5.9%, Belarus 0.6%).
- There are about 1 million inhabitants in the basin area.



The Narva River

Basin area 57,000sq.km (Estonia 30.4%, Russia 63.1%, Latvia 5.9%, Belarus 0.6 %)

The Narva River has an energetic importance: on the river there is the Narva Hydroenergy plant, which belongs to the Russian Federation with the total capacity of 125 MW

In Estonia there are two powerful energy plants with total capacity of 2,400 MW. Water uptake from the Narva River is used for cooling purposes at the energy plants

Water uptake from the Narva River is used for drinking water in Narva (with the population of 57,130)

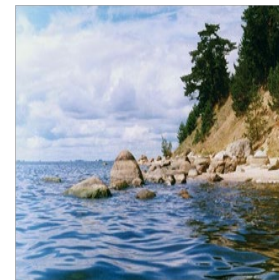


Lake Peipus

Lake Peipus is the fourth largest lake in Europe and at the same time it is the largest transboundary lake in Europe

Total area of Lake Peipus at its average water level is 3,555 sq.km, 44 % of the lake is situated in Estonia and 56 % in the Russian Federation

Lake Peipus is one of the best fish lakes in the world



Main environmental problems and plans for improvement

Problems

- High level on nutrients from land based sources into the lakes, rivers and coastal waters
- Eutrophication of lakes and coastal waters
- Hydro morphological barriers in rivers obstructing the movement of migrating fish
- Industrial releases and pharmaceutical residues in rivers, lakes and coastal waters
- Litter and debris from land based sources, such as wastewater treatment plants, agriculture, industries, storm water systems
- Rivers, lakes and coastal waters not in the good status
- Increasing influence of climate change, which triggers or enhances the processes that take place in the lake

Plans

- Common platform, common goals, common understanding
- Common criteria
- Basin-wide approach
- Common plans or harmonized plans
- Water management plans
- Supervision of plans

Practical implementation, Est-Rus (2)

- **Estonian-Russian Joint Commission:**
- An important transnational body that plays the key role of moderator and coordinator across borders to address climate resilience and contribute to resource security and stability.
- Was established in 1997 based on the 1997 Agreement Between Republic of Estonia and the Russian Federation on the Protection and Sustainable Use of Transboundary Watercourses.
- Implements water policy in transboundary waters through two working groups:
 - - 1) Working group on integrated water resources management;
 - - 2) Working group on monitoring, assessment and research.

Main directions of actions - to prevent, control and reduce transboundary impact

Coherence with the Water Convention, Art.2, Art. 3, para 1

- Taking all appropriate measures
- Implementation through the development, adoption and implementation of relevant **water management plans**, including legal, administrative, economic, financial and technical measures
- Riparian Parties **specify the catchment area**, subject to cooperation and elaborate all relevant criteria jointly

Practical implementation

- Monitoring and exchange of information

Riparian Parties shall establish and implement **joint programmes of monitoring**, harmonize rules and operation of those programmes together with evaluation procedures for **assessment of water quality, both for surface water and groundwater**. National monitoring is developed, usually not harmonized with the neighbours.

Exchange of information: access to the database – joint agreement is needed. Widest exchange of information, as early as possible, on issues covered by the provisions of water management plans and the Water Convention

Water Convention, Art. 4, Art. 6 and Art.11, **12,13**

Practical implementation, Est-Rus (3),

- **Water quality index (WQI(10)) for the Narva River catchment area transboundary rivers:**
- Was use a method for calculation of water quality index (WQI), which was developed by the British Columbian Ministry of Environment, Lands and Parks.
- The method is based on selected water quality parameters (pH, O₂, conductivity EC, BOD₅, CODCr (Russia) or CODMn (Estonia), N_{tot}, N-NH₄, N-NO₃, P_{tot}, P-PO₄) and their limit values for the whole Narva River catchment area.
- Re

0-44 poor	45-59 marginal	60-79 fair	80-94 good	95-100 excellent
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- The developed Index was tested on river data from both sides - Estonia and Russia - and the results obtained were very good.
- WQI index was now used to assess the status of border rivers. In 2021, it was good/very good according to both Parties.

Practical implementation, Est-Rus (4),

- **Joint criteria for joint assessment of the state of the Lake Peipus:**
- Hydrochemical: data of the surface layer in the years 2001-2021 of both the Estonian and Russian sides has been used.
- Hydro-biological criteria: proposal to add chlorophyll a.
- The total set of data (number of samples) that was used to find the class boundaries is more than 5000
- Development of common criteria for lake assessment is in the phase of finalization, the intermediate results are currently being tested.

From local to global

Based on **joint programmes of monitoring**, harmonized rules and operation of those programmes together with evaluation procedures for **assessment of water quality, both for surface water and groundwater** are important to fulfil countries water management plans, with relevant measures .

Access to the database is also important – joint agreement is needed. Widest exchange of information, as early as possible, on issues covered by the provisions of water management plans and the Water Convention

Good, harmonized **joint information between riparian countries** is basic condition for reporting SDG indicator 6.5.2 as well



Thank you!

