Follow up project to the Assessment of the Water-Food-Energy-Ecosystems Nexus and benefits of cooperation in the Drina Basin

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Aim: to foster transboundary cooperation and action across sectors, preparing the improvement of monitoring and improve knowledge about selected main factors affecting negatively water quality, support flow regulation and promote investment into sustainable renewable energy, continuing the energy-water dialogue.

To achieve this, 4 interlinked and mutually supportive components:

1. Monitoring of water resources and information exchange in transboundary cooperation
2. Addressing the main pressures on water quality
3. Identifying options for formalizing a more optimal flow regime (including environmental flows)
4. Supporting investment into sustainable renewable energy with multi-stakeholder dialogue (described in a separate presentation)
General strategic approach

- Support and accompany the riparian countries in responding to selected challenges identified in the Drina nexus assessment.
- Initial project concept provides a general orientation of the components, but adjustment and refinement with the local authorities and experts’ insights is to be done, taking into account other initiatives.
- Build on the WBIF Drina project; Complement the GEF-SCCF Drina project’s work.
- Use the frameworks of the Water Convention and the Group of Experts on Renewable Energy for identification of relevant international experience and to support follow up action.
- Link to the integrated plans coordinated by the Int. Sava River Basin commission, notably RBMP and sediment management.
Component 1: Proposed activities

* Review of monitoring and information exchange in transboundary cooperation (bilateral in particular), identification of needs
* Mapping of guidance available, identification of potential guiding tools to support information exchange;
* Development of recommendations for improvement of information exchange (elements for rulebooks for information exchange, rules of procedures for monitoring on stations of transboundary importance)
Component 1: Justification & orientation for scoping

* Bilateral cooperation in managing transboundary waters is currently being developed between the Drina countries.
* Need for agreeing about approaches, parameters etc. This is timely because all countries have investment and network development needs.
* ICPDR and ISRBC provide key frameworks and guidance, but in bilateral cooperation there are specific needs
* Under the Water Convention, updating needs of the monitoring and assessment guidelines are being reviewed
Component 2: Proposed activities (preliminary)

* Study of slope erosion and its contribution to sedimentation. Comparison to the historical situation and linking to land use change.
* Identification of areas in the basin more affected by slope erosion.
* Defining preliminary directions for action, considering different uses in the basin.
Sedimentation is a major issue in the basin affecting all the countries (loss of agricultural soil, degrading water quality, reservoirs), affecting also downstream in the Sava main stem. There is a lack of data.

The sediment protocol to FARBC adds to the priority of the issue.

Quantification of wastewater discharges and defining treatment needs is variable looked into. The nexus report pointed at the solid waste related issues. Other projects have made related efforts; and GEF-SCCF project will identify solid waste hotspots and define measures to address the problem.

GEF-SCCF project will undertake a major study of bed load and washload, and erosion of river banks. However, the focus in on the river channel and its banks while this study would be across the basin (scope to be defined in coordination with ISRBC and GEF-SCCF).
Component 3: Proposed activities

1. Review of relevant SEE subregional and international practice with environmental flows and good practices

2. Review of how discharge regimes or thresholds has been addressed at transboundary level in relevant agreements, protocols, discharge rules etc.

3. Based on a review of the 3 Drina countries e-flow regulation and its implementation, identify some formalization options for possible follow by the countries
Possible tasks – can be evaluated and prioritized in light of planned projects

1. Review of general principles of transboundary water allocations (i.e. environmental sustainability, equitable and reasonable water utilization, causing no significant harm)

2. A targeted review of practice of water resources allocations, focusing on issues relevant to the Drina (coordinated operation of hydropower, ensuring environmental flow, controlling flood damages with flow regulation, maintaining hydraulic infrastructure and managing effects of the sediment load on it, etc.). Within the context of the EU Water Framework Directive, regulation of eflows is a means contributing to achieve Good status in international river basins

3. Identification of key elements from good international practice relevant to the Drina Basin and the wider context of the Sava Basin (environmental flows, water uses and future growth, natural fluctuation in river flow, droughts, high flows, unpredictable effects of climate change, mechanism of re-evaluation and adjustment to fit the new conditions, etc.)

4. Preliminary ideas on a possible formal flow regulation in the Drina basin. Options to be elaborated upon could include e.g. the following:
   - Efficient implementation of the ICPDR Guiding Principles of Sustainable Hydropower
   - Developing exchange of information (at the level of ISRBC, collection of hydrological data has been set up)
   - Harmonization or agreeing on minimum environmental flows
Component 3: Justification & orientation for scoping

- The main intersectoral issue that emerged is **flow regulation**, its side-effects, the degree to which it serves different uses and it is possible to account for different water uses (co-optimization). Energy security, flood risk management, drought response, including transboundary implications are important related considerations.

- With the EU acquis, the Drina countries face — due to their accession commitments — an anticipated obligation to implement environmental flows. The approaches of the Drina riparian countries differ, and experience is accumulating about environmental flows, in the EU, SEE. The transboundary character of the rivers calls for coordination.

- Need for coordination and harmonization (permitting of withdrawals, regulation etc)

- **Complements a technical study** of e-flows to be undertaken by the GEF-SCCF project