Management of Environmental Risks within EU Strategy for Danube Region

















Project title: PA5 "MANAGEMENT OF ENVIRONMENTAL RISKS" IN THE DANUBE REGION Cod project: DTP-PAC2-PA5

The objective of the project is to support the continuous coordination of the Priority Area 5 (PA5) "Management of Environmental Risks": to facilitate a stable, effective and innovative governance system for the PA in order to enhance cooperation in the field of environmental risks in the Danube Basin and to ensure the implementation of the EUSDR by the smooth coordination of PA5 with special regard to ongoing and current processes. It helps to implement the targets of the Environmental Risks Priority Area (PA5), helps the PACs to support and generate projects that would implement the milestones of the PA5 Action Plan and the measures of the Danube Region Flood Management and Cooperation Program.

Challenges addressed by the project:

- To guarantee the persistent coordination of the 14 Danubian countries (including communication activities)
- To promote a higher involvement of the key stakeholders and Steering Group Members into the implementation of the Strategy
- To face increasing administrative burdens (eg. reporting duties)
- To further strengthen the international cooperation in the field of flood protection and drought
- To organize Steering Group, Stakeholder and other technical/strategic meetings. To support the preparation and implementation of transnational projects
- To ensure the visibility of the activities and achievements of PA5 (editing the PA5 website at http://www.danubeenvironmentalrisks.eu/ on the website of the EU Strategy for the Danube Region (http://www.danube-region.eu/).

PA5 provides assistance in project development, partnership search, networking and dissemination. Furthermore, it deepens synergies with transboundary water management organizations in the Danube River basin, such as the ICPDR and the Sava Commission. The project partners will work in close cooperation with relevant international organizations as the EU Joint Research Center, ICPDR, the Sava Commission, Carpathian Conventions and GWP-CEE.

The project focus on the following target groups: PA5 Steering Group Members, International Organizations, Regional Public Authorities focusing on environmental risk issues, Higher Education and Research Institutes and the general public.

PA5 project activities is financed by: Interreg Danube Transnational Programme under specific objective 4.2 Support to the Governance and Implementation of the EUSDR' (project co-financed by European Union funds - ERDF).



Danube Transnational Programme Programme co-funded by the European Union

Project: Priority Aria 05 Environmental Risks

Project implementation period: 2020-2022

Project Lead Partner: Ministry of Foreign Affairs and

Trade - Hungary

Project partners: Ministry of Environment, Water and Forests - Romania and ICPDR (Associated Strategic Partner)

Total Budget: 350.000 EURO ERDF contribution: 297.500 EURO

More information https://environmentalrisks.danube-region.eu/



ENVIRONMENTAL RISKS

1. Flood Risk Management

- Exchange of information and data
- Develop flood forecast system and warning tool
- Optimizing the management of dams and reservoirs
- Developing and implementing the Flood Risk Management Plan
- Raising flood risk awareness

2. Water scarcity and droughts

- Develop an efficient drought monitoring and early warning system
- Developing the approach for water scarcity in the climate change context
- Tackling water scarcity and droughts within the Danube River Basin Management Plan

3. Reducing the environmental risk from accidental hazard spots (AHS)

- Update the existing database of AHS
- Training for Tailing Management Facilities
- Improving knowledge on risk management
- Reducing accidental pollution risk

4. Improving environmental disaster management

- Training and recommendation for better prepardness
- Coordinated actions to promote disaster resilience, preparedness and response











TARGETS OF THE EUROPEAN UNION STRATEGY FOR THE DANUBE REGION (SUERD) PRIORITY AREA 5 (PA5)

Target 1

To address the challenges of water scarcity and droughts in line with the Danube River Basin Management Plan - Update 2015, the report on the impacts of droughts in the Danube Basin in 2015 (due in 2016) and the ongoing work in the field of climate adaptation.

Target 2

Provide and enhance continuous support to the implementation of the Danube Flood Risk Management Plan - adopted in 2015 in line with the EU Floods Directive - to achieve significant reductions of flood risk events by 2021, also taking into account potential impacts of climate change and adaption strategies.

Target 3

To continuously update the existing database of accident hazard spots (AHS Inventory), contaminated sites and tailing management facilities.

Target 4

To support the assessment of disaster risks in the Danube Region, encouraging actions to promote disaster resilience, preparedness and response activities in line with the European Union Civil Protection Mechanism.

- 1. Main existing actions of PA5
 - Develop and adopt one single overarching floods management plan at basin level;
 - Support wetland and floodplain restoration as an effective mean of enhancing flood protection;
 - Extend the coverage of the European Floods Alert System (EFAS) system to the whole Danube river basin;
 - Strengthen operational cooperation among the emergency response authorities in the Danube countries and to improve the interoperability of the available assets;
 - Update the existing database of accident risk spots (ARS Inventory),
 contaminated sites and sites used for the storage of dangerous substances:
 - Develop rapid response procedures and plans in case of industrial accidental river pollution.











2. Main objectives PA5 in future

- Cooperation with ICPDR for development of projects
- Flood risk management planning and implementation process
- Integration of the environmental risk management with the protection of the water quality
- Cooperation with Non-EU countries on specific projects
- Increasing the awareness on environmental risks

3. Future activities

- Organization of the Steering Group meetings;
- Enhancing the cooperation with ICPDR;
- Increase coordination with PA4 and Pa6:
- Exchange experiences with other macro-regional strategies dealing with the environmental risk;
- Development of cooperation with the Carpathian Convention;
- Increase the cooperation with Non-EU countries;
- Develop a river basin cooperation on disaster management.

4. Proposals for future action

- Providing support for the development and implementation of risk management plans for various stakeholders;
- Capacity building and expansion of forecasting and warning systems at the basin or regional level;
- Strengthen prevention and preparedness among governmental and non-governmental organizations;

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- Decreased anthropogenic impact that leads to the evolution of natural risk factors and could lead to environmental damage;
- Anticipate the regional and local impact of climate change.









DANUBE FLOODPLAIN Reducing the flood risk through floodplain restoration along the Danube River and tributaries

During the last decades, Europe suffered major catastrophic floods along the Danube. Therefore the Flood Directive asks for adequate and coordinated measures to reduce flood risk without conflicting WFD objectives. The main objective of the project is to improve transnational water management and flood risk prevention while maximizing benefits for biodiversity conservation. The expected change is improved knowledge, among the countries located within the Danube River Basin, related to integrative water management through the restoration of floodplains, a combination of classical and green infrastructure, natural retention measures, involving all related stakeholders.

The main activities of the project are: updating the floodplain areas inventory and their ranking using the Floodplain Evaluation Matrix-FEM; assessing, by using the pre-selected pilot areas, the efficiency of floodplain projects in the Danube District and developing tools for increasing the knowledge and cooperation of experts, practitioners, decision-makers, and stakeholders on floodplain restoration.

The Project will develop tools contributing to DTP SO2.1:

- 1. The Danube basin-wide floodplain restoration and preservation manual addressed mainly to practitioners;
- 2. A DRB Sustainable Floodplain management Strategic Guidance summarizing the key findings of the manual targeting a wider audience;
- 3. A DRB Roadmap comprising agreed next steps towards realizing floodplain projects.



The ICPDR which is the major platform for cooperation in flood risk management and river basin management in the DRB, through its experts will be supportive to this project in helping to achieve its goals and also in transferring the outputs. The main project target groups are ministries, river basin authorities, practitioners, and stakeholders. The innovative character is given by the application of FEM by all Partner Countries and by developing a general evaluation tool for possible later assessment of floodplain restoration projects.

The total value of the project-4,013,027.84 euros.

Budget allocated to the Ministry of Environment, Waters and Forests - 112,292.51 euros, of which 85% represent European funds under the Program Transnational Danube 2014-2020 (82,338.62 euros) and 15% is national co-financing, provided from the state budget related to MEWF (14,953.99 euros).

Project implementation period: June 2018 - November 2021.

More information: http://www.interreg-danube.eu/approved-projects/danube-floodplain



JOINTISZA

Project "Strengthening cooperation between river basin management planning and flood risk prevention to enhance the status of waters of the Tisza River Basin".

The JOINTISZA project will enhance the status of the waters of the Tisza River Basin. It will focus on the interactions of two key aspects of water management — river basin management (RBM) and flood protection — while taking into account the relevant stakeholders who play a pivotal role in the Tisza RBM planning process. The main aim of the project is to further improve the integration of water management and flood risk prevention planning and actions for the next RBM planning cycle, in line with the relevant EU legislation.

The JOINTISZA project will ensure that flood risk management planning becomes more deeply embedded in the RBM planning process, and will also facilitate the involvement of interested stakeholders and relevant sectors (e.g. flood risk-, water resource-, urban hydrology- and drought management).

The project will involve the joint efforts of the five countries that share the Tisza River Basin — Hungary, Romania, Serbia, Slovakia, and Ukraine. The ICPDR Tisza Group and EUSDR PA4 and PA5 platforms will build a bridge between stakeholders.

Ministry of Foreign Affairs and Trade (Hungary) as institute responsible for EUSDR PA4 and PA5 coordination and Ministry of Forests and

Waters (Romania) co-coordinating EUSDR PA5 are project partners in JOINTISZA in order to ensure its implementation in line with EUSDR objectives.

The main output of the project will be an updated final draft of the Integrated Tisza RBM Plan, which already includes the primary aspects of the Floods Directive.

The total value of the JOINTISZA project: 2. 254,127 euros.
The project brought together 17 partners from 5 countries:
Romania, Hungary, Serbia, Slovakia and Ukraine, which divides the
waters of the hydrographic basin Tisza;
we worked to create an updated Planof Integrated Management
of the Tisza River Basin.
Project site:

JOINTISZA Project and the Danube Transnational Program (DTP)





RELATED PROJECTS

PROFOUND

The PROFOUND (Procedures of Rescue Organizations in Flood Operations Unified in the Danube Region) project aims to improve the cooperation between non-governmental response capacities involved in flood response in the Danube Region with establishing and exercising a common framework for training and deploying in synergy with the Union Civil Protection Mechanism.

The main output is a large-scale international flood response field exercise, which will be thoroughly planned for, including training and preparation of details.

LIFE-MICACC

The project implementation has begun in September 2017 under the leadership of the Ministry of Interior of Hungary as coordinating beneficiary.

For the successful implementation of the LIFE-MICACC project, nine further partners cooperate as associated beneficiaries: five Hungarian municipalities, where the 5 NWRM (Natural Water Retention Project) pilot projects will be designed and implemented, and four Hungarian organizations with relevant professional knowledge (water management, the protection of nature, climate-friendly municipalities, innovation).

The overall goal of the project is to reduce the vulnerability of municipalities, improve their adaptation skills, and strengthen their local coordination and integration role, by designing and testing innovative natural water retention measures.

SAFETISZA

The project "Strengthening of Crossborder Safety by Joint Measures aimed at Flood and Inland Water Prevention in the Interfluves of Tisza-Tur Rivers" (Project acronym: SAFETISZA) will be implemented during 36 months by the Tisza River Basin Water Resources Directorate in Ukraine in partnership with the Upper Tisza Regional Water Directorate in Hungary, as well as the Vynohradiv Interrayon Department of Water Management in Ukraine, Vynohradiv Rayon State Administration in Ukraine and Ukrainian public organisation "Ekosfera".

The SAFETISZA project will strengthen the water management between the Zakarpattia Region and Szabolcs-Szatmár-Bereg County and reduce the risk of flood damages in the area. The main project outputs are the reconstruction of strategic water management infrastructure that has a common interest for Ukraine and Hungary, and functions as a crossborder flood protection system. As a result of project implementation, the flood risk in the area will be decreased due to the reconstruction of a flood dike which will protect the settlements on both sides of the border.

DAREFFORT

(Danube River Basin Enhanced Flood FORecasting CooperaTion)

The reliable and comprehensive hydrologic data is the basis of sound forecasting in any country of the Danube Basin. None of the flood risk mitigation measures serves better the protection of human lives and the social estate than enhancing the preparation time to avoid catastrophes that could have been caused by predicted floods. The most cost-effective non-structural tangible solution which highly reflects the solidarity principle is the improvement of forecasting capabilities on a basin-wide scale.

The partners jointly work out the policy recommendations to be submitted to ICPDR in the interest of the establishment of the Danube Hydrological Information System (DanubeHIS) which is a fundamental step towards flexible and sustainable data exchange. The main focus is to enhance access to the recorded hydrologic and ice data and to provide harmonized distribution for all the countries in the Danube catchment. For this purpose at all partners interface software will be installed to provide standardized data services also as a data source for EFAS.

DANUBE SEDIMENT

In the Danube Basin, an increasing discrepancy between surplus and lack of sediment can be observed. This leads to an increase in flood risks and a reduction of navigation possibilities, hydropower production, and biodiversity. The lack of sediment management has been recognized by the ICPDR in the Danube River Basin Management Plan in 2009 and 2015. Thus, the main objective of this project is to improve Water and Sediment Management as well as the morphology of the Danube River.

The main outputs of the project are the first Danube Sediment Management Guidance comprising measures to be implemented and a Sediment Manual for the stakeholders consisting of approaches how to implement the measures, which deliver key contributions to the Danube River Basin Management Plan and the Danube Flood Risk Management Plan.

Ministry of Foreign Affairs and Trade (Hungary) and Ministry of Environment, Waters and Forests (Romania) are the institution responsible for EUSDR PA5 coordination are Associated Strategic Partners in the Danube sediment project in order to ensure its implementation in line with EUSDR needs and to support decision-making level related to sediment management.



DriDANUBE

Water scarcity and droughts hit the Danube region frequently and have had large impacts on the economy and welfare of the people.

The main objective of DriDanube project is to increase the capacity of the Danube region to manage drought-related risks. Currently, the drought management is reactive, dealing mainly with losses and damages, cooperation between key actors is missing and formal legislation mostly does not exist. Proactive approach on the other hand counts on drought prevention, mitigation, vulnerability reduction, planning, and preparedness.

One of the main products of the project is Drought User Service, which will enable more accurate and efficient drought monitoring and timely early warning.

DriDanube's main expected result is improved drought emergency response and better cooperation among operational services and decision-making authorities in a Danube region on national and regional level.

CAMARO-D

Water management is a central issue for the Danube Region and requires strong coordination and cooperation across different countries and sectors. Additionally, floods and water scarcity are future challenges to be tackled in an integrated way.

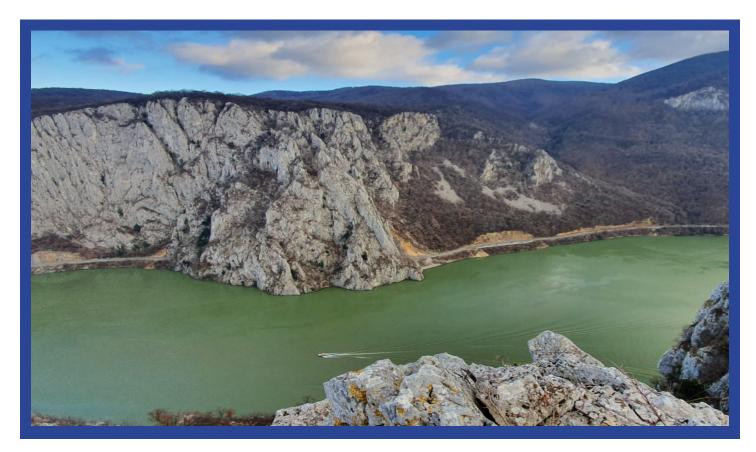
The main objective of CAMARO-D is to provide the initial action to set framework conditions for transnational catchment-based cooperation. The development of transnational guidance for functional land use management (GUIDR), will be lined out in a best practice catalog. In this way, the aims of River Basin Management Plans for the transnational Danube basin will be supported.

The project will develop comprehensive recommendations towards a strategic policy for the implementation of an innovative transnational catchment-based "Land Use Development Plan" (LUDP) for the Danube River Basin.

CAMARO-D outcomes will therefore eventually provide important inputs for the further development of EUSDR. To underline the importance of its implementation, a Memorandum of Understanding was signed during the Final Conference in Vienna in June 2010.



European Union Strategy for the Danube Region (SUERD)



The strategy is structured on four main objectives (pillars):

- I. Interconnection of the Danube region.
- 1. To improve mobility and intermodality
 - a. Inland waterways;
 - b. Rail, road and air links
- 2. To encourage more sustainable energy.
- 3. To promote culture and tourism, people to people contacts.

II. Environmental protection in the Danube region

- 4. To restore and maintain the quality of waters.
- 5. To manage environmental risks.
- 6. To preserve biodiversity, landscapes and the quality of air and soils





III. Increasing prosperity in the Danube region

- 7. To develop the knowledge society (research, education and ICT).
- 8. To support the competitiveness of enterprises.
- 9. To invest in people and skills.

IV. Consolidation of the Danube region

- 10. To step up institutional capacity and cooperation.
- 11. To work together to tackle security and organised crime.













