



# Project factsheet - Assessment grid

PROJECT OVERVIEW	
Project Ref. No.	DRP0200156
Project title	Danube Region Programme
Acronym	Danube Water Balance
Priority axis	2. - A greener, low-carbon Danube Region
SO	2.3 - WaterManagement
Lead partner	General Directorate of Water Management
Lead partner country	Magyarország (HU)
Lead partner legal status	Public
Project duration	30
Total Interreg Funds	2422655.60
Total Eligible Budget	3028319.50

## Project Summary

The extreme and trend like climate change impacts cause significant water balance issues in the Danube River Basin (DRB), already posing major challenges also for the environment, the economy and the whole society. Water management in the DRB is characterized by scattered data availability and various national calculation methods, ultimately leading to country-scale or sub-regional mosaics about the water balance. A jointly developed data management and a water balance model is needed to cope with the transnational water quantity challenges of the basin. The Danube Water Balance project aims to overcome this situation and contribute to sustainable, integrated transnational water management in the DRB. The overall objective of the project is to develop a harmonized water balance modelling system in the DRB. Our main outputs will cover four fields: 1. Improved data management for present and future water balance calculations. This will consist of (i) a data repository for all input and output data of the model, (ii) a set of tools supporting input data collection, validation, conversion and result visualization and interpretation and (iii) a new data management strategy providing a sound basis for data related activities of future water balance and water management modelling. Both the data repository and the tools will be open access, therefore the list of beneficiaries extends from water experts using the developed model through experts from other water related fields to decision makers willing to understand the main characteristics of the DRB as a hydrological system. 2. The state-of-the-art, open-source water balance model for the DRB, that allows the quantification of water balance components for the entire basin and for selected areas of interest. The model will be calibrated and validated against measured data collected and processed by jointly defined data management protocols, assuring the common acceptance of model results. The foreseen afterlife of the water balance model is a fully functional water management model of the basin, by which a more reasonable, sustainable and adaptive water management can be achieved in the long run. 3. Elaborated water balance scenarios for 4 selected transboundary sub-basins, namely Morava (CZ, SK & AT), Tisa (HU, SK, RO, RS & UA), Upper Sava (SI & HR), and Drina (RS & BA). This key action within the project will be the cornerstone of future cooperation by providing a good exercise for our international experts to test and enhance the the Danube River Basin Water Balance model (DRBWBM) and the founded common data repository. 4. Improved stakeholder insight into transboundary water balance methodology: strong emphasis will be put on sectoral stakeholder involvement and capacity building in the project. Besides the essential technical modelling steps, it is planned that several trainings will be carried out and an expert hub will be established that will consist of modelling experts, water managers, and other professionals from water-related sectors. This approach will ensure that water experts, universities and all

interested stakeholders will benefit from the project results and their ability to carry out transnational projects on transboundary water issues is greatly enhanced. The tangible novelty of our proposal is the long-overdue common water balance calculation methodology for the whole Danube basin, tested in transboundary sub-basins, using climate scenarios and the data repository. This will improve river basin management planning measures required by the Water Framework Directive. A less tangible novelty of the proposed project is the extensive partnership and expert hub deeply committed in maintaining the framework and methodology for determining the water balance of the basin. This will also help finding synergies between the water resource management and other ongoing environmental initiatives within the DRB: consultation will be organized with relevant partners of other projects, especially with Expert/Task Groups of the International Commission for the Protection of the Danube River (ASP1) and organizations with observer status in the ICPDR. These include the International Hydrological Programme of the UNESCO (IHP/Danube) as well as representatives of e.g., waterways & transport and nature conservation. The DRB is one of the most diverse transboundary river basins of the World in the sense that 14 countries share over its territory with different cultural, societal and economic backgrounds. Therefore, it was essential to establish a broad partnership for the implementation of this project. All the 14 DRB countries are represented in the project with the involvement of 20 PPs from 11 countries (6 from 3 non-EU ones) and 13 ASPs. It is the first time that all Danube countries would work jointly to achieve a better understanding and a common interpretation of the water balance in order to lay the foundations of improved water management.

#### LIST OF PROJECT PARTNERS

No.	Institution name	Country	Total Interreg funds	Total eligible budget
OVF	General Directorate of Water Management	Magyarország (HU)	278714.40	348393.00
BME	Budapest University of Technology and Economics	Magyarország (HU)	156702.00	195877.50
TU Wien	Vienna University of Technology	Österreich (AT)	210016.00	262520.00
IIASA	International Institute for Applied Systems Analysis	Österreich (AT)	360728.80	450911.00
BUT	Brno University of Technology	#esko (CZ)	97535.60	121919.50
STUBA	Slovak University of Technology in Bratislava	Slovensko (SK)	98040.00	122550.00
ARSO	Slovenian Environment Agency	Slovenija (SI)	134840.00	168550.00
CW	Croatian Waters	Hrvatska (HR)	92164.00	115205.00
ZZV	Institute for Water Management	Bosnia and Herzegovina (BA)	49920.00	62400.00
UNSA	University of Sarajevo	Bosnia and Herzegovina (BA)	80952.00	101190.00
UNSFSA	Faculty of Agriculture, University of Novi Sad	Serbia (RS)	99572.00	124465.00
JCWI	Jaroslav #erni Water Institute	Serbia (RS)	100386.00	125482.50
PWMC SV	Public Water Management Company „Srbijavode“	Serbia (RS)	173384.00	216730.00
NIHWM	National Institute of Hydrology and Water Management	România (RO)	160588.80	200736.00
NARW	National Administration Romanian Waters	România (RO)	122388.00	152985.00

ANM	National Meteorological Administration	România (RO)	66376.00	82970.00
EAEMDR	Executive Agency "Exploration and Maintenance of the Danube River	Bulgaria (BG)	34320.00	42900.00
NIMH-BG	National Institute of Meteorology and Hydrology	Bulgaria (BG)	54048.00	67560.00
BWA	Bulgarian Water Association	Bulgaria (BG)	29028.00	36285.00
IEG	Institute of Ecology and Geography	Moldova (MD)	22952.00	28690.00
TOTAL (EUR)			2422655.60	3028319.50

#### LIST OF ASSOCIATED PARTNERS

No.	Institution name	Country
TU Wien	International Commission for the Protection of the Danube River	Österreich (AT)
TU Wien	Federal Ministry of Agriculture, Forestry, Regions and Water Management	Österreich (AT)
TU Wien	Bavarian State Ministry of the environment and consumer protection, Department Water Management	Deutschland (DE)
OVF	Ministry of Interior	Magyarország (HU)
OVF	Ministry of Foreign Affairs and Trade of Hungary	Magyarország (HU)
UNSA	Sava River Watershed Agency	Bosnia and Herzegovina (BA)
STUBA	Slovak Hydrometeorological Institute	Slovensko (SK)
STUBA	Water Research Institute	Slovensko (SK)
BUT	Czech Hydrometeorological Institute	Česko (CZ)
JCWI	Republic hydrometeorological service of Serbia	Serbia (RS)
UNSFA	Public Water Management company "Vode Vojvodine"	Serbia (RS)
OVF	Zakarpattia Hydrometeorological Center	Ukraine (UA)
PWMC SV	Ministry of Agriculture, Forestry and Water Management	Crna Gora (ME)