Project Data Sheet

BASIC PROJECT DATA			
Full project title:	**PlasticFreeDanube – Macro plastic waste in and along the Danube**		
Short project title: (acronym)	-	**Project logo:**	
Project website:	-	**Project ID:**	PA1A145
Need and added value for Danube Region Strategy:	Estimations go that land-based sources account for up to 80% of the marine litter found in the world's oceans. As rivers transport the waste from far inside the land to the oceans, the first step necessary to understand the contribution of land-based litter to marine litter is to conduct surveys along rivers. In the riparian zone along the Danube anthropogenic litter is ubiquitous. However, at present no comprehensive study on amounts and sources has been conducted, although several voluntary clean-up initiatives regularly collect litter along the Danube and could contribute to a better understanding of the problem.		
Objective(s) of project:	The project "PlasticFreeDanube – Macro plastic waste in and along the Danube" gave an overall picture of the plastic waste transport in the Danube by combining information on waste generation, waste treatment, littering and waste held back by hydropower plants into a comprehensive material flow analysis. Once data on origin, amounts and composition of the waste entering the Danube between Vienna and Bratislava had been collected, measures to reduce this problem were developed and implemented. The planned project area ranged from a few km upstream of Vienna to a few km downstream the hydropower plant Gabčíkovo in Bratislava and included the two metropolitan areas of Vienna and Bratislava. The overall aim of the project was to establish a sound knowledge base on waste and the movement patterns of waste in and along the Danube in terms of quantities, threats (chemicals, additives, pollutants) and costs, so as to quantify the environmental and financial aspects of the problem and to identify the leaks in the chain "production – consumption – disposal" at several stages. The focus was on plastic waste, as preliminary studies showed that plastic constitutes the major waste fraction and the impacts of plastic on the environment are judged more important than the impacts of other waste fractions. In order to assess the composition of the waste, a standard protocol for measuring and sorting waste in and along rivers was developed, as no common procedures for rivers had existed - which made it difficult to compare different studies. Further, measures to reduce waste in and along the Danube were developed and implemented. One key outcome of the project was the development of a communication platform for initiatives that works against waste in and along the Danube in order to guarantee also after the end of the project the further exchange on the development of the amounts of waste along the Danube.		
Planned project activities:	Material Flow and Transport Modelling • Description of the project area • Development of a Material-Flow-Analysis (MFA) model • Collection of available data for the MFA • Material Flow Analysis • Determination of potential plastic accumulation zones • 3D hydrodynamic modelling • Particle tracing and hydraulic characterisation of accumulation zones • Design of hydraulic accumulation structures		

	Waste Sampling in and along Fluvial Systems • Methodologies for macro plastic sampling and sorting • Collection & sorting of macro plastic • Collection of plastic passing the inlet grate of Freudenau or Gabcikovo Analysis of the Collected Plastic and Impact Assessment • Development of a methodology for the analysis of macro plastic • Chemical analysis of macro plastic • Analysis on the fragmentation and the abrasion resistance of macro plastic in fluvial systems • Impact assessment • Economic analysis Policy recommendations & implementation of measures • Scenario and measure development • Development of action plans and policy recommendations • Implementation of selected on-site measures • Outlook Danube Basin Capacity Building and Awareness Raising • Stakeholder identification and clustering • Awareness raising • Capacity building • Litter management platform
Transboundary impact:	The project was carried out in the regions Vienna and Lower Austria in Austria as well as the Bratislava region in Slovakia. The public in this area was addressed in the framework of capacity building measures as well as information events. The models and sampling protocols developed in the project could be the base for other initiatives along the Danube and in Europe.
Project beneficiaries / target groups:	• General public in the project area • Ministries for environment in Austria and Slovakia • Ministries for transport in Austria and Slovakia • City councils of Vienna and Bratislava • Federal state government of Lower Austria • Municipalities along the Danube • National and regional waste associations • National and regional fishing associations • National and regional tourism associations • Environmental protection organisations • Special interest groups on international level (e.g. ICPDR) • Business organisations handling the waste (national and regional) • Educational institutions on national and regional level • Shipping industry • Ports
STATUS AND TIME FRAME	
Current project phase: (please tick a box)	☐ Definition (e.g. project idea, abstract) ☐ Preparation (e.g. project proposal, feasibility study) ☐ Implementation ☒ Completion

Start date:	01.10.2017	**End date:**	03.2021
Notes:	The project “Plastic Free Danube” was applied for in the first call of the Interreg V-A SK-AT programme at the end of February 2017.		

PROJECT TEAM

Project leader:	University of Natural Resources and Life Sciences Vienna (BOKU)	
Project partner(s):	- via donau- Österreichische Wasserstraßen-Gesellschaft mbH - Nationalpark Donau Auen - Polymer Institute of the Slovak Academy of Sciences - RepaNet o.z.	
Contact person:	**Name:**	-
	Organisation:	University of Natural Resources and Life Sciences Vienna (BOKU)
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	Phone:	-
	E-Mail:	-
	Website:	http://www.wau.boku.ac.at/abf/

FINANCING

Available: (please tick a box)	☒ Yes ☐ Partly ☐ No	
Total budget:	EUR 1,500,000	
Source(s) and amount (potential sources for project ideas): (please tick a box and provide further info)	☒ National/regional funds:	EUR 225,000 (State budgets)
	☒ EU funds:	EUR 1,275,000 (INTERREG V-A SK-AT programme; ERDF)
	☐ IFI loans:	-
	☐ Private funds:	-
	☐ Other:	-

PROJECT ENVIRONMENT

Project cross-reference:	-
Cross-reference ID(s):	-
Strategic reference:	• EU 2020 • EU Water Framework Directive • CENTROPE • EUSDR • Action Programme for the Danube

Relevant legislation:	The legislative framework contains relevant European, international and national rules concerning water protection and waste management.
Other:	-
EUSDR EMBEDDING	
Relation to other Priority Areas of the Danube Region Strategy:	☐ PA1b: To improve mobility and multimodality – Road, rail and air links ☐ PA02: To encourage more sustainable energy ☐ PA03: To promote culture and tourism, people and people contacts ☒ PA04: To restore and maintain the quality of waters ☒ PA05: To manage environmental risks ☒ PA06: To preserve biodiversity, landscapes and the quality of air and soils ☐ PA07: To develop the knowledge society through research, education and information technologies ☐ PA08: To support the competitiveness of enterprises, including cluster development ☐ PA09: To invest in people and skills ☐ PA10: To step up institutional capacity and cooperation ☐ PA11: To work together to promote security and tackle organised and serious crime
EUSDR COMPLIANCE	
Compliance with targets of the Danube Region Strategy:	☐ Increase the cargo transport on the river by 20% by 2020 compared to 2010. ☐ Solve obstacles to navigability, taking into account the specific characteristics of each section of the Danube and its navigable tributaries and establish effective waterway infrastructure management by 2020. ☐ Develop efficient multimodal terminals at river ports along the Danube and its navigable tributaries to connect inland waterways with rail and road transport by 2020. ☐ Implement harmonised River Information Services (RIS) on the Danube and its navigable tributaries and ensure the international exchange of RIS data preferably by 2020. ☐ Solve the shortage of qualified personnel and harmonize education standards in inland navigation in the Danube region by 2020, taking duly into account the social dimension of the respective measures.
Compliance with actions of the Danube Region Strategy:	☐ To complete the implementation of TEN-T Priority Project 18 on time and in an environmentally sustainable way. ☐ To invest in waterway infrastructure of Danube and its tributaries and develop the interconnections. ☐ To modernise the Danube fleet in order to improve environmental and economic performance.

	☐ To coordinate national transport policies in the field of navigation in the Danube basin. ☐ To support Danube Commission in finalising the process of reviewing the Belgrade Convention. ☐ To develop ports in the Danube river basin into multimodal logistics centres. ☐ To improve comprehensive waterway management of the Danube and its tributaries. ☐ To promote sustainable freight transport in the Danube Region. ☐ To implement harmonised River Information Services (RIS). ☐ To invest in education and jobs in the Danube navigation sector.
Affiliation to thematic working group of Priority Area 1a of the EUSDR:	☐ Waterway infrastructure and management ☐ Ports and sustainable freight transport ☒ Danube fleet ☐ River Information Services ☒ Education and jobs
OTHER RELEVANT ISSUES	
Project requirements:	For the successful completion of the project it is important to receive the necessary information concerning (plastic) waste from the national and regional waste handling companies. They shall be strategic partners to the project and participate by providing this crucial information.
Follow-up project:	A follow-up project has not been discussed at this stage.
Any other issues:	Not at this moment.