Project Data Sheet

BASIC PROJECT DATA			
Full project title:	**Pollutant emissions reduction of IWT ships on the Danube Corridor**		
Short project title: (acronym)	IDA	**Project logo:**	–
Project website:	–	**Project ID:**	PA1A083
Need and added value for Danube Region Strategy:	The Danube corridor represents important infrastructure for transport and for commercial activities. Development of inland waterway transport and ports' activities lead to a disturbance of the environment by affecting biodiversity, quality of air, soil and water. As far as IWT is concerned, introduction of innovative technological solutions for pollutant emission reduction on board is a major task. According to the EU Strategy for the Danube Region's Action Plan, "better transport and energy infrastructures are the condition for innovation (attracting skilled researchers and workers). Innovative solutions can reduce costs, improve efficiency and encourage sustainable solutions". The consortium was committed to develop innovative, safe and sustainable IWT concepts, focussing on a significant reduction of emissions and optimal efficiency for IWT fleet and logistic chain. This project idea was about addressing the urgent need to reduce levels of pollutant emissions caused by inland waterway transport (IWT), both on board of vessels and in river ports. If implemented, the project would thus have secured significant progress towards reducing the levels of harmful emissions along the Danube corridor by considering the whole system of river transport, from the ship's exhaust stack all the way through to river port logistics. It was envisaged that the design of new port infrastructure and the modernization of existing ports based on the idea of a "green port" would be taken into consideration in the concepts resulting from this project. If implemented, this project would also have improved sustainability of IWT ships by promoting the transfer of knowledge regarding green logistics through the informational training centres (ITCs) developed in previous projects such as PLATINA and NELI and e-communication integration with RIS as an optimization of co-modal transport. The deliverables of this project would have aided the elaboration of regulations for river ports and inland waterways ships regarding environmental issues.		
Objective(s) of project:	The objectives of the project idea are: 1. This holistic programme of research would have developed the "eco-friendly ship" concept. The first strand to this investigation would have been to establish the relationship between the type, duty cycle and age of the engines that power ships navigating the Danube corridor and their emissions characteristics. 2. In order to establish the impact of this new technology, the project would have analysed the effect of pollutant emissions on ecosystems from different populated, protected and low dissipation geographic areas along the Danube corridor. In order to understand the effect of ships within these regions, a series of parametric mathematical models would have been developed for pollutant emission levels for certain engine types and operating regimes. 3. The concept of a "green port" would have been developed using data relating to the levels of pollutant emissions and pollutant maps. Within the port, it would have been necessary to establish the constraints in cargo handling and ship manoeuvring.		

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Planned project activities:	Contributing to the development of new low emission integrated systems for innovative IWT ships was foreseen by the project idea by: • Evaluation of the emissions of IWT ships' engines • Finding solutions to reduce the emissions The next step would have been the elaboration and implementation of regulations for pollution monitoring similar to maritime transport. • Investigating the influence of the pollutant emissions from IWT ships on ecosystems from different populated, protected and low dissipation geographic areas along the Danube corridor and elaboration of pollution maps in port areas • Contributing to the improvement of logistics management in ports by: ○ Decreasing the operating times ○ Implementing the e-communication inside the logistic chain ○ Concept of green logistic chain integration
Transboundary impact:	Inland waterway transport in general and the Danube Corridor in particular.
Project beneficiaries / target groups:	Members of the consortium and stakeholders, inhabitants of the Danube region

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:	2013	**End date:**	2016
Notes:	**The project was not realised.** It was intended to be conducted for a three year period from 2013 to 2016. The proposal for the project was submitted to the FP 7 Programme, but was rejected even though it had received a letter of support from the EUSDR. Some of the project's ideas, concepts and challenges have already been tackled in other projects which are currently ongoing.		

PROJECT TEAM	
Project leader:	University of Craiova – UCV / Romania
Project partner(s):	• STC Group / The Netherlands • University of Lincoln / United Kingdom • University of Sussex / United Kingdom • Brodarski Institute / Croatia • University of Montenegro / Montenegro • Romanian Maritime Training Centre / Romania

	• Institute for Shipping Economic and Logistics / Germany • University of Zilina / Slovak Republic • Centre of Maritime Technologies e.V. / Germany • Research and Development Centre in Transport & Energy / Spain • University of Applied Sciences / Germany • University of Technology and Economics / Hungary • Faculty of Mechanical Engineering, University of Ruse "Angel Kanchev" / Bulgaria • Clean Water Project Company / Bulgaria • IPA CIFATT / Romania • WDL Powertrain Systems Engineering Ltd / United Kingdom	
Contact person:	**Name:**	-
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FINANCING		
Available: (please tick a box)	☐ Yes ☐ Partly ☒ No	
Total budget:	3,268,374 EUR (indicative) – Funding was not provided	
Source(s) and amount (potential sources for project ideas): (please tick a box and provide further info)	☒ National/regional funds:	state budgets
	☒ EU funds:	Seventh Framework Programme (FP7)
	☐ IFI loans:	–
	☐ Private funds:	–
	☐ Other:	–

PROJECT ENVIRONMENT	
Project cross-reference:	PLATINA (PA1A004), NELI (PA1A009), INNOSUTRA, CREATING
Cross-reference ID(s):	–
Strategic reference:	-
Relevant legislation:	–

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 2015. ☒ 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 2015. ☐ 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:	–
Follow-up project:	–
Any other issues:	–