

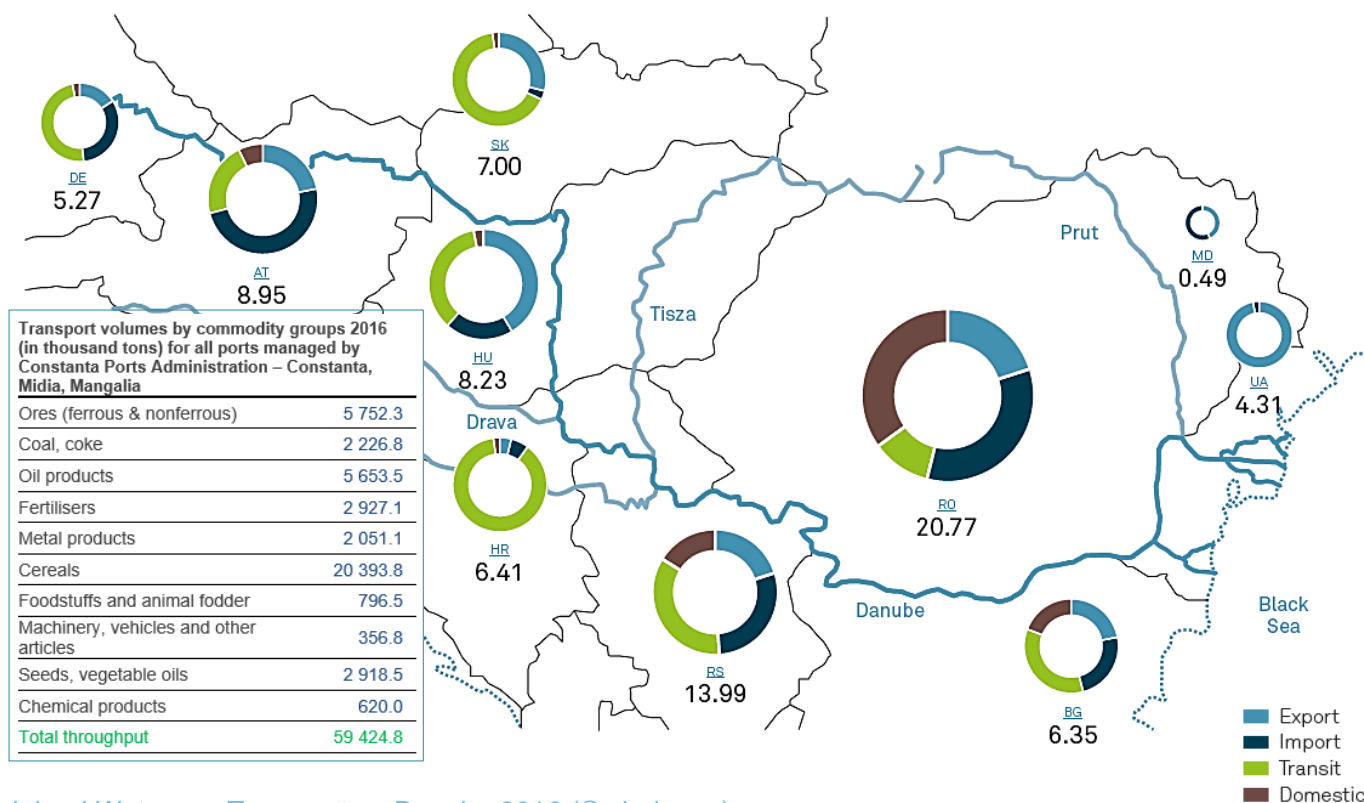
Fact Sheet Danube Transportation

Danube Waterway - backbone of the European Transport Network and key logistics axis of the entire region

Almost 40 million tons of goods were carried on the Danube waterway and its tributaries in 2016 (an increase of approx. 3,2% compared to 2015), whereby a total of 14,5 million tons were transported on the Romanian Danube-Black Sea Canal. The largest transport volumes are realised on the Lower Danube (Romania, Serbia) followed by the Upper Danube (Austria).

Bulk capacity and low transport costs make inland waterway transport an attractive means of transport for different commodity types ranging from construction materials, agricultural and forestry products, iron ore and steel products to recycling products. With the right framework conditions in place, Danube navigation can capture an even bigger share of Europe's multimodal transport.

The positive societal side effects of a higher share of inland navigation are well-known. The safety and environmental record of inland navigation is unbeatable. Danube navigation therefore is an indispensable element of Europe's transport policy.



Inland Waterway Transport on Danube 2016 (© viadonau)

In millions of tons	DE	AT	SK	HU	HR	BA	RS	RO	BG	MD	UA
Export	0.82	2.00	2.09	3.41	0.22	0.20	2.79	4.13	1.39	0.21	4.22
Import	1.74	4.36	0.13	1.68	0.41	0.12	4.04	7.09	1.54	0.28	0.08
Transit	2.56	1.98	4.74	2.94	5.68	0.00	4.88	2.20	2.20	0.00	0.00
Domestic	0.15	0.61	0.04	0.20	0.10	0.00	2.28	7.35	1.22	0.00	0.01
Total	5.27	8.95	7.00	8.23	6.41	0.32	13.99	20.77	6.35	0.49	4.31

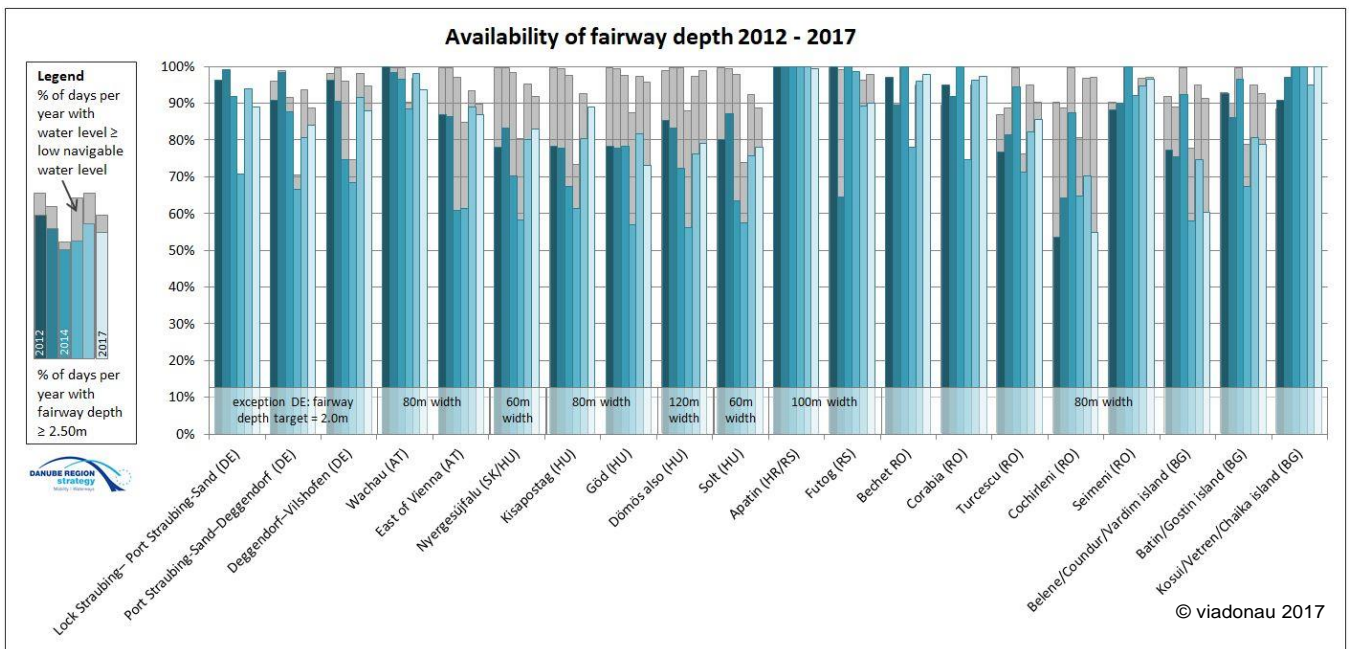
In order for Danube navigation to take up a larger share of transport in the Danube corridor, following key issues need to be addressed:

Secure stable fairway conditions

Cargo is transported along the Danube over an average distance of about 600 km. In order for these shipments to be transported in an economic way, a stable and reliable fairway is needed. Close international cooperation and coordination is thereby required, since no less than 10 riparian states are responsible for proper maintenance of the Danube waterway.

Fairway conditions were very difficult along the whole Danube over the last years due to shortcoming in maintenance work of almost all the waterway administrations. On a large part of the main critical maintenance and rehabilitation sections along the Danube, the recommended fairway depth of 2.5m at Low Navigable Water Level was not achieved in almost all the years of the last decade resulting into severe financial losses or even disruption of the logistics chains thus withholding the economic potential of Danube transport.

Within the framework of the EU Strategy for the Danube Region, a Fairway Rehabilitation and Maintenance Master Plan for the Danube was developed in cooperation with the waterway administrations and representatives of private shipping companies. This document identified the most critical locations in the waterway network and, more importantly, draws up proposals for their elimination.



All Ministers of transport of the Danube Region (except HU) reaffirmed their commitment towards proper waterway maintenance on the basis of this Master Plan document in June 2015, Rotterdam. Hungary is cooperating on an operational level. Progress is being monitored and major implementation steps are taken within the framework of the EU-funded FAIRway Danube project (2015-2020, Connecting Europe Facility). Despite the progress made, a stronger political commitment is needed to implement the defined maintenance projects in time and in line with the needs of the IWT sector.

How policy makers should support:

- Keep waterway maintenance and development high on the agenda through close progress monitoring
- Ensure proper finance of maintenance works as well as adequate technical and human capacity of waterway administrations
- Facilitate TEN T bottleneck projects in line with Joint Statement (ICPDR) by providing technical and organisational assistance to waterway administrations
- Ensure close coordination between the different policy areas (transport, regional development, environmental policy) and involvement of private sector stakeholders to guarantee tangible results
- Optimize use of EU funds to solve most urgent shortcomings

Boost fleet modernisation

In total, approximately 20 fleet operators and 15 agents or freight forwarders work on a regular basis on the Danube IWT market. A high number of the industrial shippers manage their own logistics departments to interface with vessel operators. In total, almost 1.000 motorized vessels are in operation on the Danube waterway. Inland navigation is an efficient, safe and environmentally friendly mode of transport. In order to further reduce the environmental impact and to improve the economic performance of Danube navigation, it is necessary to stimulate the modernisation of the Danube fleet. Several European projects have demonstrated that a whole range of innovative technologies is available to make Danube navigation even greener and more efficient (Liquefied Natural Gas, filtering technologies, etc.). The full roll out of these technologies is however hampered by the severe economic framework conditions, an uncertain investment climate as well as limited access to finance.

The GRENDL project initiated & coordinated by Pro Danube supports the Danube fleet operators and their public counterparts (ministries and relevant authorities) in the required modernisation process by establishing a transnational cooperation platform of key IWT stakeholders. Dedicated activities shall raise the awareness of the sector concerning the impact of new regulations, advanced technologies which reduce air pollutants and energy consumption of inland vessels as well as improved transport & logistics management processes making use of digitalisation.

Fleet investment planning	Preparatory Actions for Fleet Operators	Regulation & Strategy
The objective is to identify, assess & consolidate investment requirements for Danube fleet modernisation addressing retrofitting and new-building. Related new skills of personal and needs for education & training will also be explored.	Main goal is to assist selected fleet operators in concrete preparatory activities for investing in green fleet. Opportunities to improve transport & logistics management of fleet operators and to boost digitalisation will also be investigated.	Main focus is to trigger innovation uptake in the sector by establishing a favorable regulatory framework, well-designed public support measures throughout the Danube region. A model State Aid scheme will be based on modernisation needs of the sector.

Key activities of GRENDL

How policy makers should support:

- Provide public financial support via State Aid Schemes for fleet modernization and innovation in IWT transportation
- Create support facilities to secure a solid investment climate for private entrepreneurs (e.g. fleet modernization fund) and for advocacy on promising greening technologies
- Ensure a concise legal framework for environmental and safety standards to guarantee fair competition and a reliable planning horizon of fleet investment
- Foster development and deployment of lead projects for technological advance of vessels within adequate EU programs

Enhance network of efficient multimodal ports

There are approximately 70 ports along the 2.414 km length of the Danube and out of these it is only those in Germany and Austria that display an adequate level of infrastructure, facilities and hinterland connections that allow them to provide high-quality logistics services in record time and with a reduced effect on the environment.

This gap in transport infrastructure quality, safety and eco-performance between the Western and the Eastern Danube ports requires substantial investment, transnational coordination and close cooperation with private sector stakeholders. With the right strategy and measures Danube ports have a huge potential to become efficient nodal hubs of a sustainable transport system and focal points of smart regional economic growth spanning across traditional borders. The **DAPhNE project** initiated & coordinated by Pro Danube focuses on improving the performance of Danube Ports, touching on topics such as port legislation & funding, port administration & management, port development and port strategy & port network formation.

As part of the DAPhNE project's ongoing activities, the recently launched **Danube Ports Network** (DPN) is a new actor in the Danube Region's Port Governance System. DPN acts as a regional coordination and collaboration platform involving public and private Danube port organisations (administrations & terminal operators).



How policy makers can support:

- Support elaboration of a transnational strategy for the Danube Ports and implementation of targeted actions to improve the functioning of Danube Ports (port legislation, port administration / management and port development)
- Provide public finance through National Funding Schemes for port development, modernization and improvement of hinterland connections
- Facilitate lead projects for port improvement and development in adequate EU programs

Reduce administrative barriers

Excessive administrative procedures and processes by many authorities and administrations create significant competitive disadvantage for inland waterway transport on the Danube and its tributaries and result in time losses and unnecessary costs. The current unsatisfactory situation calls for a targeted transnational approach, facilitated by the EU Strategy for the Danube Region. The **DANTE project** initiated & coordinated by Pro Danube brings together all relevant authorities and private sector stakeholders (funded by the Danube Transnational Program) and provides the necessary international coordination for dedicated national implementations.

How policy makers can support:

- Facilitate reduction of administrative procedures & processes and related fees to a minimum and thus relief IWT industry from costs and time losses
- Work towards simplification, harmonisation and digitalisation of administrative procedures along the entire Danube waterway following the Pro Danube concept of **“Same River – Same Rules”**

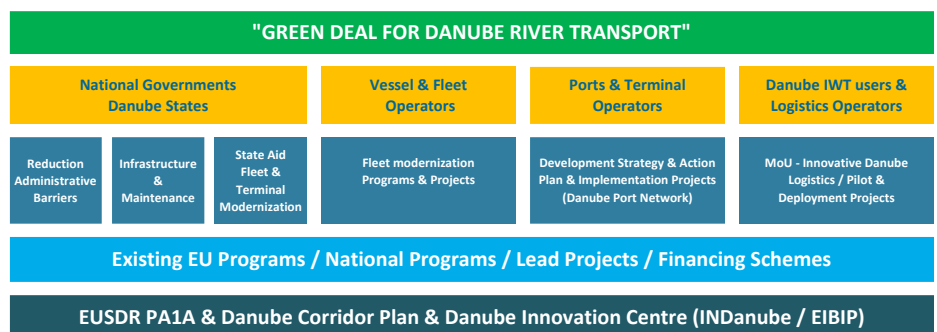


<http://www.prodanube.eu/administrativebarriers>

Green Deal for Danube river transport

The Danube region needs smart, sustainable and inclusive growth based on an eco-efficient, reliable transport system. The Danube waterway can provide cost-effective logistics solutions to many industries to support their competitiveness and to ensure economic growth and the creation of jobs. The high economic potentials for turning the Danube into a core logistics axis are withheld by numerous shortcomings in infrastructure, unfavourable regulatory framework and structural problems of the IWT sector. A targeted, long-term cooperation of public and private sector with firm commitments is needed to break the vicious cycle of degradation of infrastructure and reduction of transport demand.

The “Green Deal for Danube river transport” forms this new policy and business framework to improve efficiency and environmental performance of Danube waterway transport system. DANTE, DAPhNE and GRENDL projects are part of the implementation of the Green Deal, with DANTE & DAPhNE among the nine EUSDR designated strategic projects.



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The business actors of the PDI network acknowledge that sustainable development of the Danube waterway and its navigable tributaries can only be achieved in close cooperation with the public and private stakeholders of the Danube region as well as with the continuous support of the European Union services and instruments. By means of the new Danube Waterway Industry Declaration released in October 2018, the industry representatives have called upon the national governments and the European Commission to acknowledge the need for action.

Useful links

- EUSDR Priority Area 1A, www.danube-navigation.eu
- DG MOVE Rhine-Danube Core Network Corridor, http://ec.europa.eu/transport/themes/infrastructure/ten-t-guidelines/corridors/rhine-dan_en.htm
- Pro Danube International, www.prodanube.eu/industrydeclaration
- EIBIP/INDanube, www.eibip.eu / www.indanube.eu
- Danube Ports Network, www.danubeports.eu
- DAPhNE – Danube Ports Network, www.interreg-danube.eu/daphne
- DANTE – Improving Adm. Procedures & Processes for Danube IWT, www.interreg-danube.eu/dante
- GRENDL – Green and efficient Danube fleet, www.interreg-danube.eu/grendel

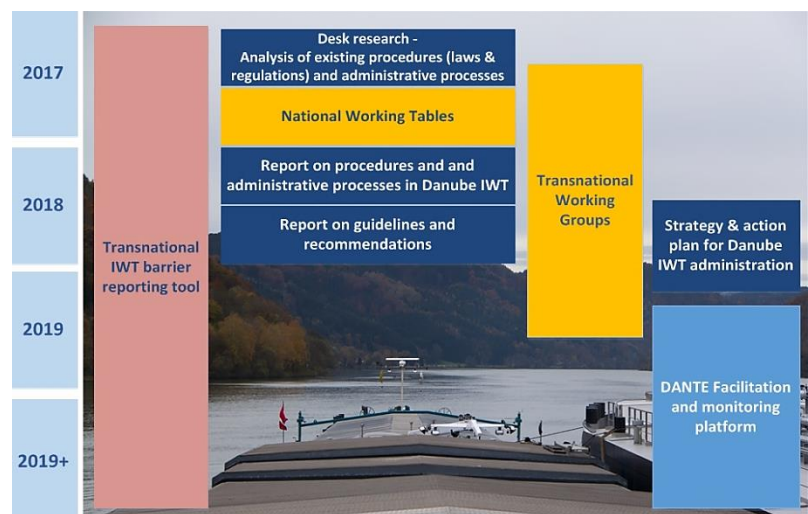
Improving Administrative Procedures and Processes for Danube IWT



DANTE aims at identifying and eliminating administrative barriers for transport of cargo and passengers on the Danube and its navigable tributaries as a joint initiative of private sector organisations and national public authorities covering all Danube countries.

Main goals

- Improve administrative procedures and reduce bureaucratic processes as well as related charges and fees for IWT on Danube and navigable tributaries
- Reduce time losses and costs caused by unnecessary administrative regulations and processes for Danube businesses
- Eliminate red tape and abuse of administrative power
- Harmonize regulations and administrative processes for transport and transshipment operations ("Same River-Same Rules" concept)



Timeframe

- 01/01/2017 – 30/06/2019

Budget

- Total: 1.982.786,00 Euro
- ERDF Contribution: 1.650.134,75 Euro
- IPA Contribution: 35.233,35 Euro

Key output

- **The transnational IWT barrier and good practice reporting tool** is an innovative, multi-language tool that enables state-of-the-art way of mapping every-day barriers of IWT actors and results in a database that works as basis for further analysis and recommendation. Together will contribute to the elimination of unnecessary barriers to IWT in order to ensure smooth and predictable way of the logistics processes using the Danube River.

Partnership

ERDF Partners

Pro Danube International (AT); Steinbeis Innovation GmbH, Steinbeis-Europe-Center (DE); iC consulenten ZT GesmbH (AT); University of Applied Sciences Upper Austria (AT); Waterborne Transport Development Agency (SK); Slovak Shipping and Ports (SK); Hungarian Federation of Passenger Fleet Operators (HU); Hungarian Federation of Inland Waterway Freight Forwarders (HU); Bulgarian-Romanian Chamber of Commerce and Industry (BG); Romanian Ministry of Transport (RO); Romanian River Ship Owners and Port Operators Association (RO); Pro Danube Romania (RO); Danube Commission (HU); Constanta Port Business Association (RO); Port Authority Vukovar (HR)

IPA Partner

Shipmasters Association of Serbia (RS)

Associated Strategic Partners

International Sava River Basin Commission (HR); Rhenuis Logistics Austria GmbH (AT); Hungarian Federation of Danube Ports; Pro Danube Serbia; Port Bulmarket (BG); Union of Romanian Inland Ports; Danube Cruises Romania; Danube Logistics (MD); Ministry of Maritime Affairs, Transport and Infrastructure (HR); Ministry of National Development (HU); State Enterprise Ukrainian Sea Ports Authority; Ministry of Transport, Construction and Regional Development of the Slovak Republic (SK)

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Danube Ports Network



DAPhNE aims to facilitate a balanced development of Danube Ports as eco-friendly, well accessible multimodal hubs for the transport system of the region and to turn them into buzzing economic centres functioning as catalysts for economic growth and creation of high value jobs.

Main goals

- Improve the balanced development of Danube Ports as eco-friendly, efficient multimodal hubs for the transport system of the region
- Further develop Danube Ports into prospering economic centers functioning as catalysts for economic growth and creation of high value jobs
- Produce guidelines, recommendations and concrete pilot activities based on best practices and leading into an overall development strategy and action plan for Danube ports
- Set-up a Port Network of Danube ports to foster cooperation between key stakeholders
- Improve the eco-performance of the ports in order to contribute to the ecological balance of the river and to improve the environmental situation of port municipalities

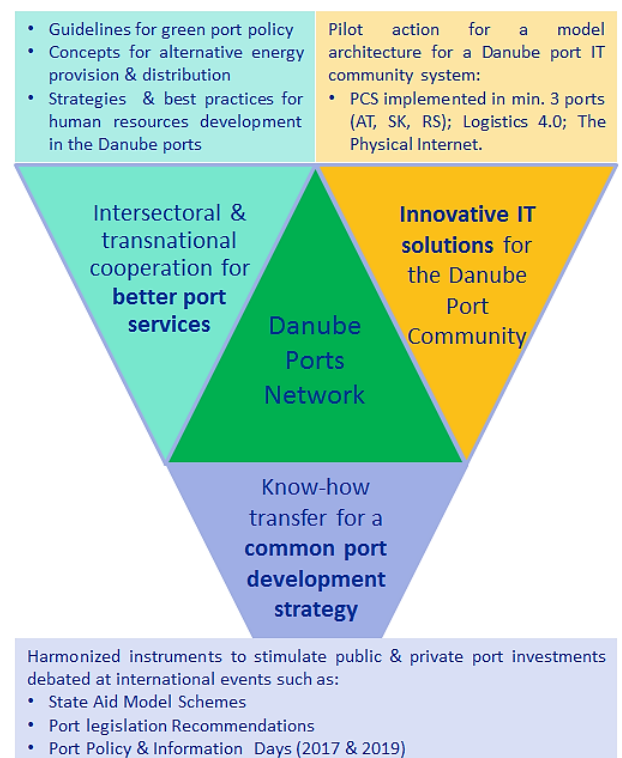
Timeframe

- 01/01/2017 – 30/06/2019

Budget

- Total: 2.985.406,15 Euro
- ERDF Contribution: 2.415.219,42 Euro
- IPA Contribution: 122.375,77 Euro

Project outputs



Partnership

ERDF Partners

Pro Danube International (AT); Ennshafen Port (AT); iC consulenten ZT GesmbH (AT); University of Applied Sciences Upper Austria (AT); National Company Maritime Danube Ports Administration Galati (RO); National Company Maritime Ports Administration SA Constanta (RO); Ovidius University of Constanta (RO); Pro Danube Romania (RO); Ministry of Transport (RO); Bulgarian Ports Infrastructure Company (BG); Public Institution Port Authority Vukovar (HR); RGO Communications Ltd. (HR); ILR Logistica Romania SRL (RO); Hungarian Federation of Danube Ports (HU); Public Ports jsc (SK)

IPA Partner

Port Governance Agency (RS)

Associated Strategic Partners

Container Terminal Enns (AT); Giurgiu Municipality (RO); Port of Vienna (AT); Ministry of Sea, Transport and Infrastructure (HR); Ministry of Transport, Information Technology & Communications (BG); Danube Logistics SRL (MD); State Enterprise Ukrainian Sea Ports Authority (UA).

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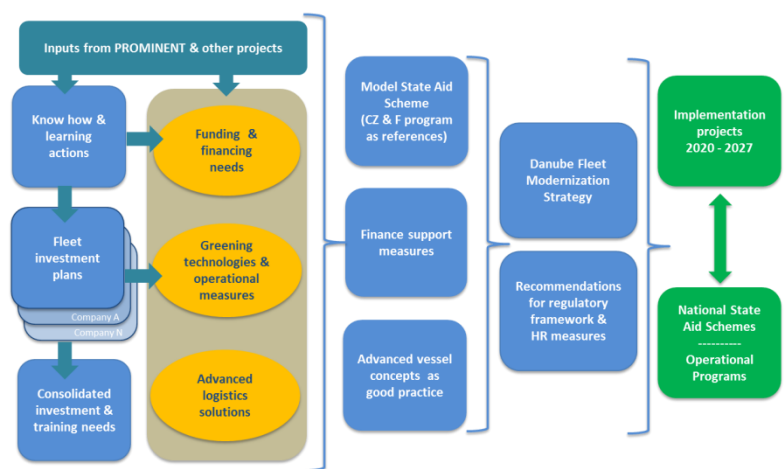
Green and efficient Danube fleet



Improving the environmental and economic performance of the Danube inland vessels is the overall goal of the GRENDEL project. It aims to achieve a higher acceptance and use of inland waterway transport (IWT) as an environmentally friendly transport mode contributing to economic growth and a more sustainable transport system in the Danube region. GRENDEL supports the Danube fleet operators and their public counterparts in ecological economic modernisation of the sector and in definition and deployment of necessary transition measures.

Main goals

- Know-how transfer for Danube fleet operators in order to overcome the existing knowledge gap, lack of activities & absence of instruments to deploy innovative solutions
- Elaboration of innovative technical vessel concepts and improved transport & logistic management processes of fleet operators
- Supporting development of favourable regulatory framework & well-designed public support measures by introducing Model State Aid Scheme & innovative financial instruments



GRENDEL approach and outcomes

Timeframe

- 01/06/2018 – 30/11/2020

Budget (in Euro)

- Overall: 1,824,999.20
- ERDF Contribution: 1,481,137.05
- IPA Contribution: 70,112.25

Key outputs

- Innovative technologies database as the source of information on greening technologies, their economics and contributions to the society
- Advanced vessel concepts of three Danube vessel operators
- Model of the State Aid scheme elaborated with the industry and the Member states
- IWT Fleet Modernisation Strategy & Recommendations

Partnership

ERDF Partners

Pro Danube International (AT); DST – Development Centre for Ship Technology and Transport Systems (DE), National Association of Radio Distress-Signalling and Infocommunications (HU), Danube Commission (International Organisation), Bulgarian-Romanian Chamber of Commerce and Industry (BG), Pro Danube Romania (RO), Romanian Maritime Training Centre – CERONAV (RO), SDG – Ship Design Group S.R.L. Galati (RO), Romanian Naval Authority (RO), River Navigation Company NAVROM SA (RO), Fluvius Shipping and Transport. Company (HU), Danubia Kreuzfahrten GmbH (AT)

IPA Partner

Pro-Danube Serbia (RS)

Associated Strategic Partners

Associated Strategic Partners: Federal Ministry for Transport, Innovation and Technology (AT), Ministry of National Development (HU), Executive Agency Maritime Administration (BG), CFND (RS), Donau Tankschiffarts-Gesellschaft m.b.H (AT), Bulgarian River Shipping (BG), Romanian River Ship Owners and Port Operators Association (RO), BAVARIA Schiffahrts- und Speditionen-AG (DE), Ministry of Maritime Affairs, Transport and Infrastructure (HR), Ministry of Transport (RO), Ministry of Transport and Construction (SK)

Contact

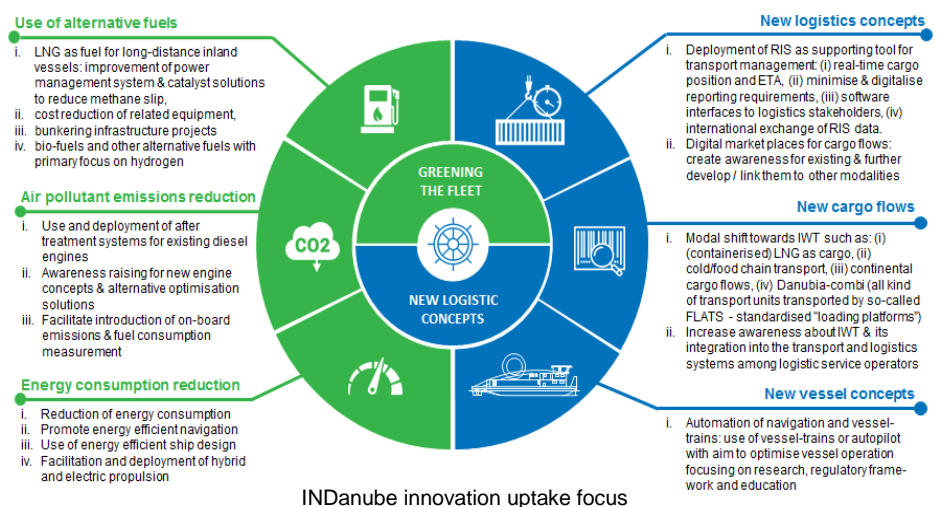
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INDanube – Centre for Innovation Transfer in the Danube Region



INDanube, founded in January 2016 as one of the innovation centres of the European Inland Barging Innovation Platform (www.eibip.eu), plays an important role as facilitator and promoter of innovation in inland waterway transport (IWT) on the Danube and its navigable tributaries. The EIBIP network and three new regional Innovation Transfer Centres in Germany (D-ZIB), France (BATELIA) and the Danube region (INDanube) were established with the start-up support from EC/DG MOVE to promote the uptake of innovation by the inland waterborne transport sector.

INDanube conducts promotion and awareness activities to ensure knowledge transfer in the Danube region & supports implementation of concrete projects to facilitate innovation up-take by the IWT sector, specifically by vessel operators and their partners along logistics value chains. In particular, fuel efficiency, reduction of emissions and unexploited potential market share are key areas where more innovation can lead to improvements.



Innovations through projects & assistance

INDanube facilitated projects like DAPHNE - Danube Ports Network, DANTE - Improving administrative procedures & processes for Danube IWT, or project proposal GRENDDEL aiming at the modernisation of Danube vessels addressing both the greening and digitalisation topics of the sector. INDanube furthermore assisted stakeholders in preparing projects targeting the greening & innovations such as:

- LNG/CNG infrastructure in Slovakia to serve IWT and road transport users, including a liquefaction unit
- LNG infrastructure initiative in Upper Austria investing into the LNG road infrastructure and vehicles as well as LNG terminal / bunkering station in the port of Linz or Enns
- LNG terminal and bunkering stations in Galati and Constanta (Romania) targeting along the infrastructure as well the construction of LNG-fuelled pushers and LNG-fuelled self-propelled inland vessels
- Green waterborne public transport in Bratislava (Slovakia) and neighbouring cities/villages along the Danube to solve heavy traffic problems of commuters

Regional partners

In order to reach key stakeholders in the region three regional organisations support INDanube: (1) National Association of Radio Distress-Signalling and Infocommunications (RSOE) in Hungary, (2) Pro Danube Romania and (3) Pro Danube Serbia – all acting as facilitators and promoters of innovation in IWT in their regions.

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