



Danube Transnational Programme

GRENDEL

GRENDEL „Green and Efficient Danube Fleet“

Strategy and recommendations for Danube IWT fleet modernisation

Final event

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Project co-funded by European Union Funds (ERDF, IPA)

29 October 2020 – Online / MS Teams

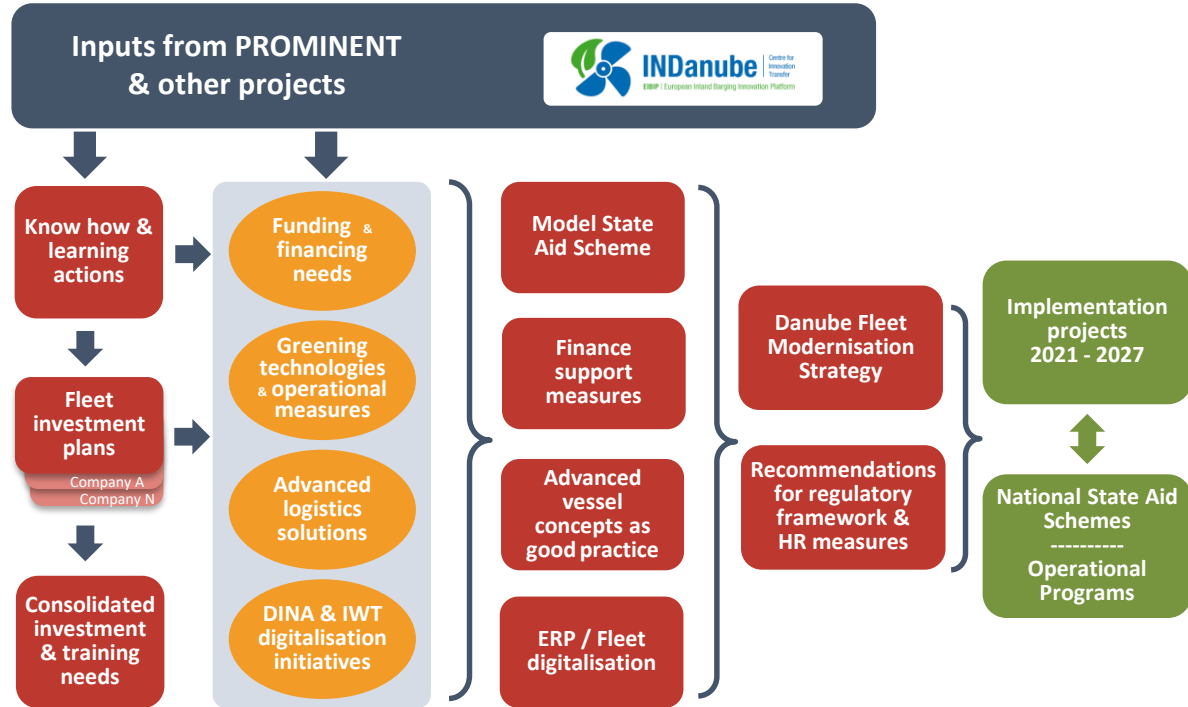


GRENDEL – Work approach

“

“GRENDEL addresses various fleet modernisation aspects: [i] use of low carbon & alternative fuels, [ii] reduction of air pollutant emissions (CO₂, NO_x, PM) and [iii] overall energy consumption. Besides this, [iv] transport & logistics management processes are addressed to ensure better integration of the Danube IWT into logistics chains...”

*Jun 2018 – Nov 2020
Funding: Interreg / DTP*



EUSDR PA1A – Framework

Key recommendations – package of measures

- **Policy and regulatory instruments**
 - Set ambitious emission limits for legacy fleet (with clear transitional periods)
 - Involve approval and certification authorities in an early stage of technology development to avoid delays in approval procedures
 - Create environmental zones with bonus conditions for clean and compliant vessels
- **Financing instruments**
 - Develop coordinated national grant schemes (GRENDEL)
 - Develop European Greening Fund
 - Make available soft loans and create fiscal incentives
- **Research and development**
 - Define clear technological pathways to raise investment security for commercial parties (shipping and supplier industry)
 - Search for modular refit systems to allow large scale introduction
 - Expand innovation labs/platforms to disseminate good practices

EUSDR PA1A – Strategy on fleet modernisation



EU Strategy for the Danube Region

Priority Area 1a – To improve mobility and multimodality: Inland waterways

Strategy on fleet modernisation

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The INTERREG project **GREDEL** (2019) identified some of the main current and future challenges of the Danube inland fleet. On the one hand, the significant improvement of the environmental performance of inland vessels is required through a reduction of energy consumption and a reduction of greenhouse gas and air pollutant emissions. On the other hand, the further integration of inland waterway transport into logistic supply chains is to be secured through – among others – improving the logistical performance of the inland vessels and exploiting the possibilities of digitalisation.

Set up coordinated national grant schemes aimed at tangible modernisation measures

Taking into account the lessons learned from previous national fleet modernisation schemes, national grant schemes should be developed in close coordination with other member states. The project **GREDEL** provides an opportunity to coordinate contents of funding programmes, avoiding undesired side-effects (e.g. selective subsidy applications).

Member States

GRENDEL – Aim of the IWT Fleet Modernisation Strategy



The Strategy addresses a range of actions and measures that deal with fleet modernisation issues



It provides a clear policy analysis of the available options & requirements to increase the economic and environmental performance of the fleet

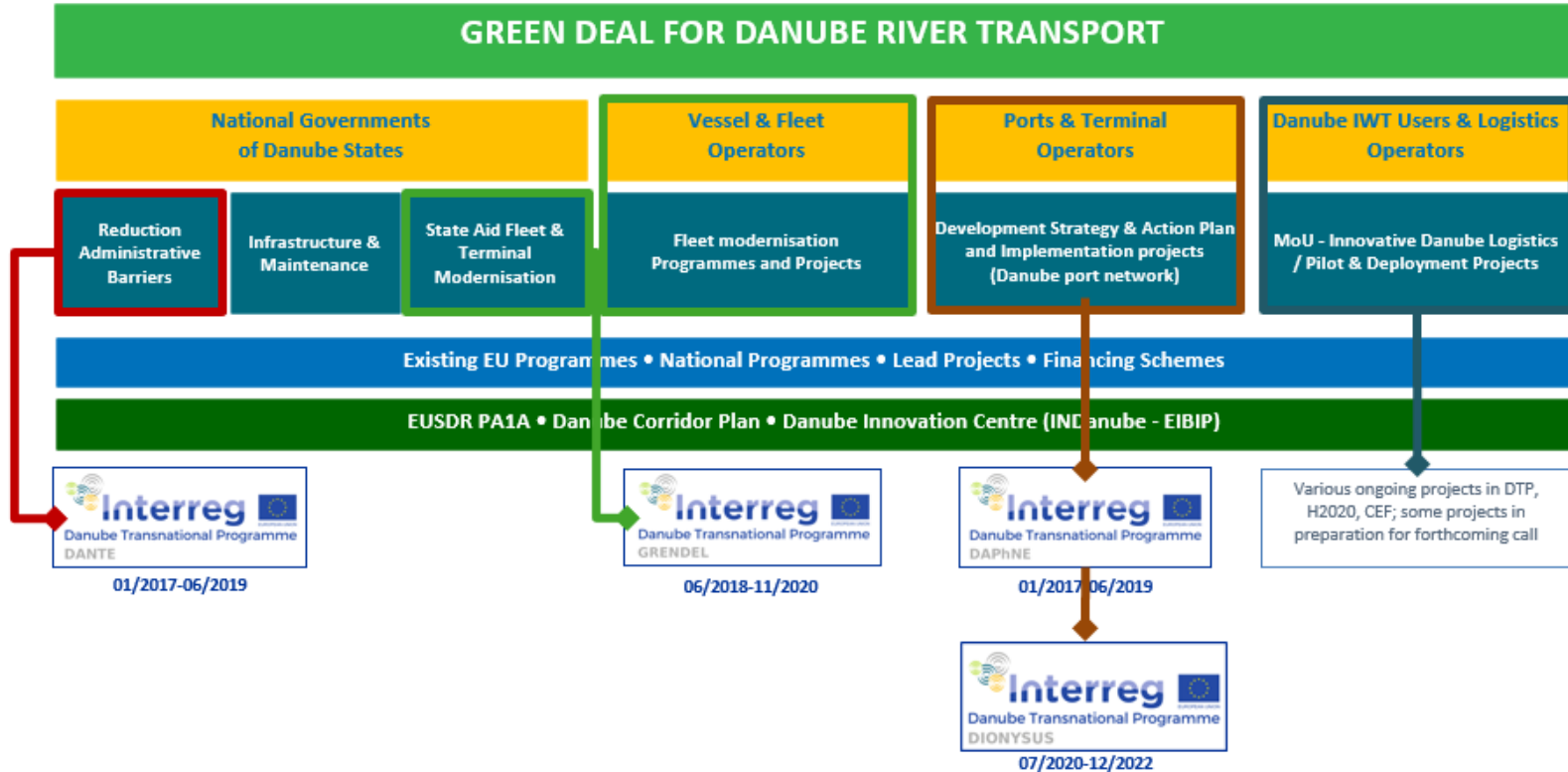


It discusses – based on comprehensive consultations carried out during the entire lifetime of the project with relevant decision makers and the sector – operational aspects of efficient integration into multimodal chains of logistics



It provides a set of recommendations based on the core findings of GRENDEL

Defining the main challenges



Starting point

1. Green Deal for Danube River Transport

- Developed by PDI, the framework's main pillars are:
 - National Governments of Danube States
 - Vessel & Fleet Operators
 - Ports and Terminal Operators
 - Danube IWT & Logistics Operators
- GRENDL is an integral part of the 2nd pillar – *Vessel & Fleet Operators*
 - Addressing key aspects of financial instruments to provide consistent solutions for fleet modernisation
 - It proposes concrete actions and measures (*Model State Aid Scheme for Fleet Modernisation*) to counteract the impact of an outdated fleet on IWT's efficiency and reliability

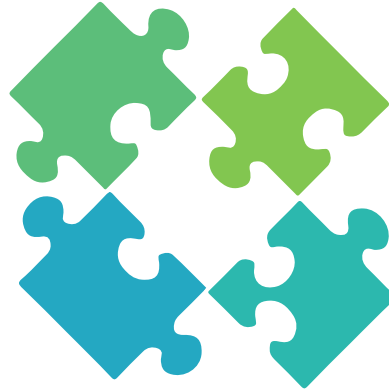
Building the GRENDEL Strategy

EUSDR Priority Area 1a

Continuous exchanges

GRENDEL Consortium

Preparatory works, Strategy workshop



Organisation of events

Public Consultations, Know-how transfer events

Continuous exchanges with Danube countries & beyond

AT, SK, HU, HR, BG, RO, RS, DE

Addressed challenges

1. Policy framework – Environmental quality through low emissions

- European Green Deal
- A Clean Planet for all
- Sustainable & Smart Mobility Strategy
- European Climate Law
- NRMM

2. Integration of IWT into the multimodal logistics chains

- Digitalisation
 - RIS
 - DINA
 - DTLF
 - CEF Building Blocks
 - Effects of COVID-19

I. Policy framework

1. Policy framework – Environmental quality through low emissions

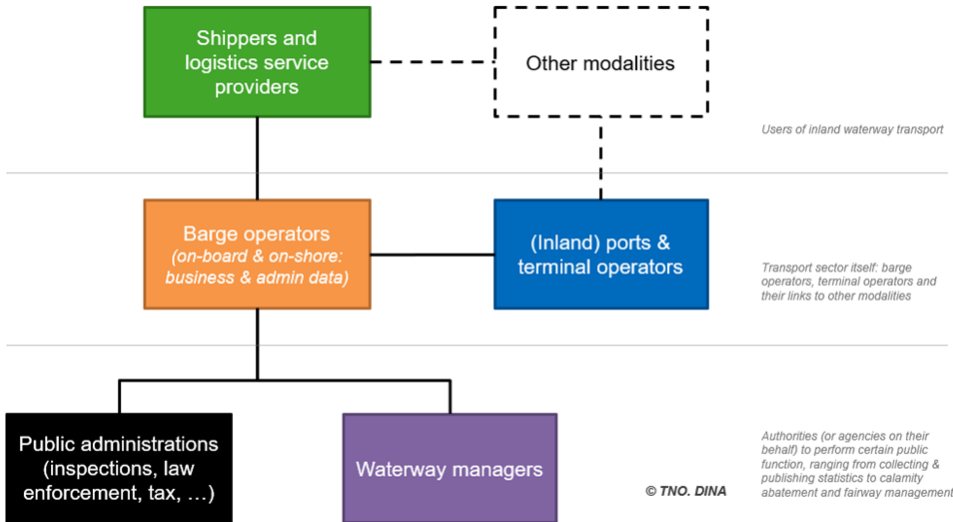
European Green Deal

- In line with EU's commitment towards the goals enshrined in the **Paris Agreement**;
- Provides a precise roadmap with concrete actions and measures to stop climate change;
- **Sustainable & Smart Mobility Strategy** – more stricter climate target by means of sustainable and digital transition (2030: reduction by at least 55% instead of 40% compared to 1990 levels).
- **European Climate Law** – policy instrument as part of the general framework as defined by the Green Deal. It still has to pass the ordinary legislative procedure.

NRMM

- Strict emission requirements on non-road mobile machinery, directly affecting IWT
- Problem: low innovation intake in IWT, low financing capacities

II. Efficient Integration of IWT in the multimodal logistics chains



Digitalisation

- River Information Services (RIS)
- Digital Inland Navigation Area (DINA)
- Digital Transport & Logistics Forum (DTLF)
- CEF Building Blocks

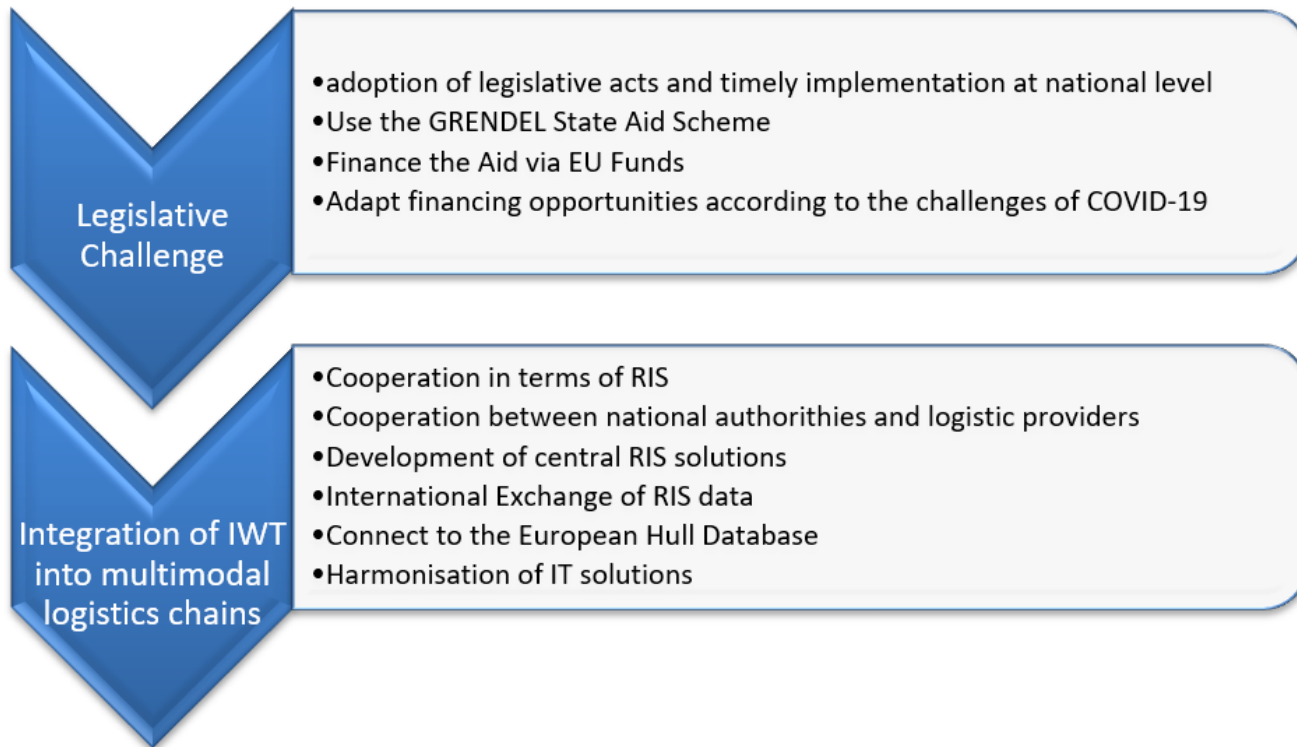
III. Recommendations. Challenge 1 – Environmental topics

- Create harmonised technical and environmental legal framework on the corridor level to ensure levelled playing field
- Adapt financing opportunities to the strict requirements set by the Legislator
- Secure a smooth integration of European legislative provisions at national level
- Adopt a widely harmonised State Aid Scheme for Fleet Modernisation using the GRENDel proposal as a basis
- It is recommended to closely follow the developments with regard to the Recovery and Resilience Fund

III. Recommendations. Challenge 2 – Logistics aspects

- Continuous cooperation of the Danube riparian countries involved in RIS
- Continuous cooperation between relevant national authorities and logistics providers
- Promotion of national best practices promoted on the transnational level
- Development of central RIS solutions considering the corridor approach
- All Danube riparian countries should participate in the international exchange of RIS data with special focus on position and electronic reporting data

III. Recommendations. Overview



GRENDL results already embedded on Danube Region level



The GRENDL project and the recommendations of it clearly support the achievement of the targets established in the revised [EUSDR Action Plan](#)’s for PA1a

ACTION 2: Foster business development

ACTION 3: Facilitate fleet modernisation

ACTION 4: Support the further roll-out and enhancement of River Information Services

ACTION 6: Contribute to the simplification, harmonisation and digitalisation of administrative processes

with which it is to support the optimisation of logistics processes with a green and efficient Danube fleet

Capitalisation of the results – NOW



Capitalisation of the results – IN THE VERY NEAR FUTURE

LET'S GET READY TOGETHER!

**LET'S MOVE DANUBE WATERBORNE
TRANSPORT FURTHER TOGETHER!**



pro **DANUBE**
INTERNATIONAL

- **Connecting Europe Facility 2**
- **Recovery and Resilience Facility**
- **Horizon Europe**
- **National programmes & schemes**
- **Financing opportunities & incentives**
- **... and the combination of all these and COMPANY initiatives**



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GRENDEL “Green and efficient Danube fleet”

Towards modernisation & greening of Danube inland waterborne sector and strengthening its competitiveness

www.interreg-danube.eu/grendel

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