

### **GRENDEL** "Green and Efficient Danube Fleet"

State Aid model for Modernisation of Danube fleet

2<sup>nd</sup> Know-How Transfer Event on Modernisation of Danube Vessels Fleet Charlotte Siot



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



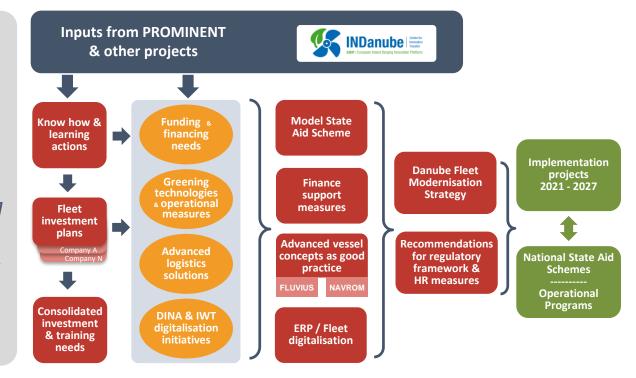
## **GRENDEL** Work approach

Green and Efficient Danube Fleet

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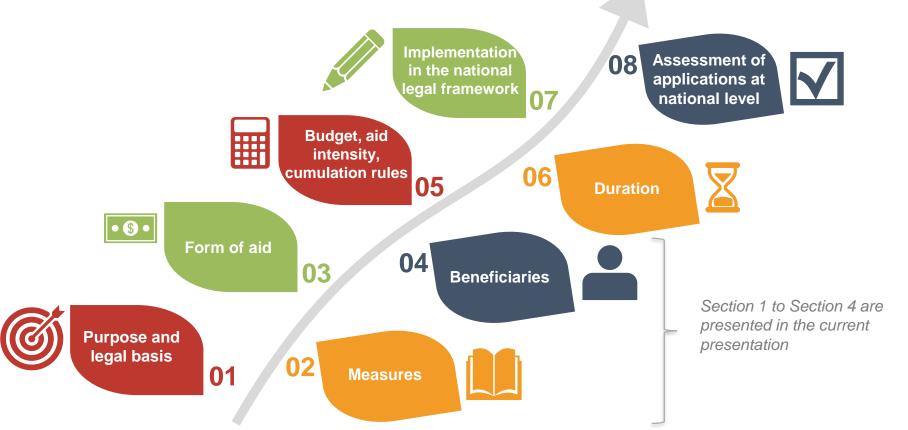
"GRENDEL addresses various fleet modernisation aspects: [i] use of low carbon & alternative fuels, [ii] reduction of air pollutant emissions (CO2, NOx, PM) and [iii] overall energy consumption. Besides this, [iv] transport & logistics management processes are addressed to ensure better integration of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

> Jun 2018 – Nov 2020 Funding: Interreg / DTP



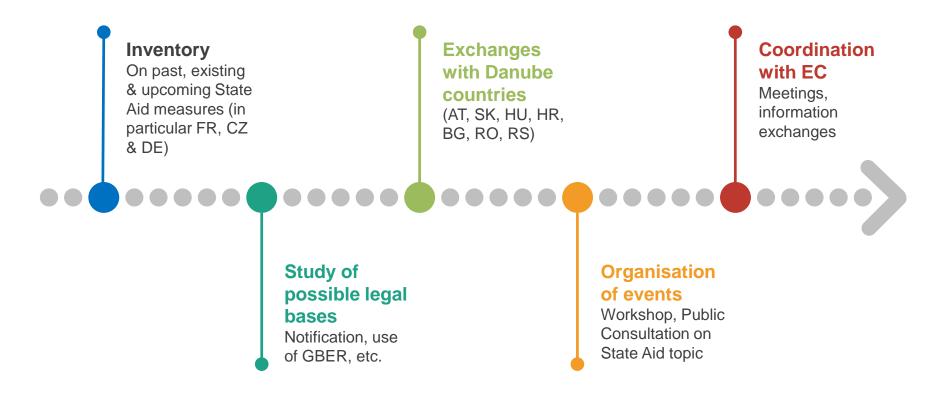


Structure of the State Aid model





Elaboration process of the State Aid model





Objectives & current status of the State Aid model

- The aim is to make inland waterway transport more energy efficient and more climate and environmentally friendly through modernisation and greening of inland waterway vessels and to shift more goods from roads to inland waterways in order to achieve European (and world-wide) climate protection and environmental goals
- IWT still the most environmentally friendly mode of transport in terms of transported volumes (tonne-kilometre) → however need to catch up with air pollutant emissions and logistics challenges.
- · Aim to support the development of the sector four-fold ...
- help the Danube fleet (existing & new) to become **more energy-efficient**, **more climate and environmentally-friendly**
- help the Danube fleet (existing & new) to **adapt to the logistics needs** of carriers and shippers (changes in vessels & equipment, digitalisation of processes, integration to logistics chains)
- support actions likely to make this sector more competitive in order to make the profession more attractive and to ensure the renewal of its actors
- support actions increasing the resilience of the IWT (inland vessels) towards the climate change (low water periods, etc.)



A first version of the model State Aid scheme was elaborated - for the financing period 2021-2027. The model will be available in its final version at the end of the project (November 2020) & published on the website.



Measures were pre-identified for becoming activities funded under state aid schemes.



The model is at the disposal of the Danube Member States for adaptation & implementation at national level.



**State aid** in the meaning of article 107(1) TFEU is unlawful unless:

- it is notified to EC and the Commission approves the aid on the grounds that it is compatible with the internal market
- or it falls within an exemption (set out in EU legislation), as it is considered to be compatible with the internal markets  $\rightarrow$  GBER



Aid shall not be granted for investments to ensure compliance with EU standards !

STATE AID OPTIONS						
<ul> <li>de minimis (not regarded as State Aid)</li> <li>no more than EUR 200,000 is granted to single undertaking</li> <li>over period of 3 fiscal years</li> <li>de minimis conditions are respected</li> </ul>	NOTIFICATION Article 107(3)(c) TFEU Article 93 TFEU	GBER → applies until 31.12.2020         Art. 36 & 37environment         Art. 38energy efficiency         Art. 41 energy from renewables         Art. 49 enviro studies         Etc.	<ul> <li>40% (medium ↑10%, small ↑20%)</li> <li>30% (medium ↑10%, small ↑20%)</li> <li>35 or 45% (medium ↑10%, small ↑20%)</li> <li>50% (medium ↑10%, small ↑20%)</li> </ul>			

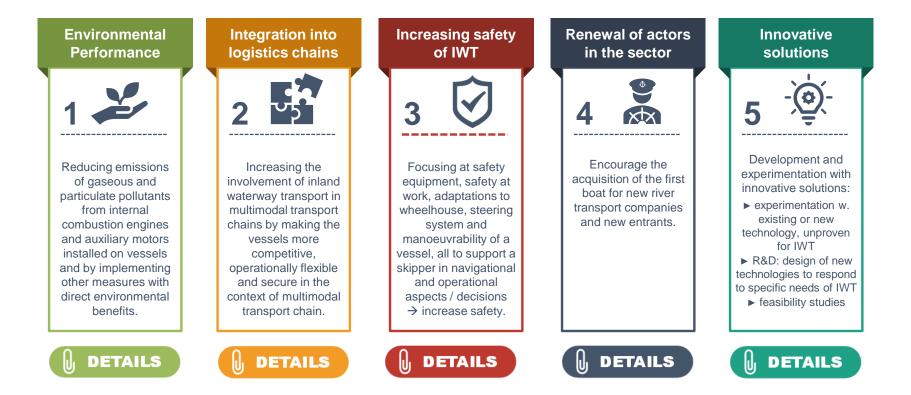


Approach & basis for the elaboration of the measures of the State Aid model

- Research and innovation projects (LNG Masterplan, PROMINENT, PLATINA, EIBIP ...) as well as the policy initiatives (NAIADES) which looked into modernisation of inland vessels
- EU-Wide Strategy for Innovation Uptake in Inland Waterway Transport (EIBIP & <u>www.INDanube.eu</u>)
  - improve the **environmental footprint** (reduction of air pollutant and greenhouse gas emissions) and to improve the **position and performance of inland navigation in overall transport system** in Europe
- Legislation was taken into account (ES-TRIN, ADN, NRMM, etc.)
- Lessons learned from the preparation of the new State Aid schemes, incl. past and existing in various EU Member States (Germany, Croatia, France, Belgium, Netherlands, Czech Republic, etc.)
- State Aid block exemption categories (GBER) → the basis for structuring the catalogue of investment needs along with the notification rule of Member States



Measures of the State Aid model organised under 5 priorities





## **Priority 1. Improving environmental performance**

OBJECTIVE ► Environmental protection ► ► ► MEASURES

1.1 ACQUISITION OF LOWER EMISSION ENGINES Art. 36 GBER	1.2 MEASURES TO REDUCE AIR POLLUTANT EMISSIONS Art. 36 GBER	1.3 ENERGY EFFICIENCY & MANAGEMENT ON-BOARD Art. 38 & Art 41 GBER	1.4 NOISE EMISSION REDUCTION Art. 36 GBER	1.5 WATER AND WASTE REDUCTION AND TREATMENT Art. 36 GBER	1.6 ADAPTATIONS TO VESSELS: HYDRODYNAMICS Art. 38 GBER
<ul> <li>Acquisition of lower- emission engines</li> <li>Acquisition of lower- emission auxiliary engines, including installation</li> <li>Acquisition of directly subsequent components (e.g. gearbox), including installation</li> <li>Replacement of the previously used conventional diesel engine with a lower emission engine (removal &amp; installation)</li> <li>In case of gas engine, the associated gas storage and</li> </ul>	<ul> <li>(re)processing technologies and equipment for emitted gases – these include in particular catalytic converters, particulate filters, unless they are part of the lower emission engine, as well as combined exhaust gas reduction systems and other pollution control systems.</li> <li>Installation of fuel water emulsion technology / plant</li> </ul>	<ul> <li>&gt; Installation of technologies to reduce fuel consumption provided that a saving of at least XX% in fuel consumption compared to the installed engine is achieved</li> <li>&gt; Installation of energy reduction systems on board (e.g. energy management automat, eco- pilot, generator)</li> <li>&gt; Installation of renewable energy production systems (e.g. solar panels for domestic use)</li> <li>&gt; Adaptations of vessels energy supply wiring /</li> </ul>	<ul> <li>adaptations and adaptations to reduce noise emissions and vibrations in engine rooms</li> <li>Installations and adaptations measures to reduce noise emissions and vibrations in a wheelhouse</li> <li>Installations and adaptations measures to reduce noise emissions and vibrations in accommodation spaces, both communal living quarters and sleeping cabins.</li> </ul>	<ul> <li>waste storage systems</li> <li>waste reprocessing systems</li> <li>equipment to limit the waste generated</li> <li>1.7 PROMOTION OF EDUCATION AND TRAINING IN INLAND NAVIGATION</li> <li>Art. 31 GBER</li> <li>attract qualified personnel of the next generation via training grants paid for training to achieve professional qualifications</li> </ul>	<ul> <li>A result of the art body and / or bow section of a vessel</li> <li>A improvement of the propulsion system (e.g. nozzles, optimized propeller)</li> <li>A qualify personnel of inland navigation via training grants paid for training courses</li> </ul>
supply system.	network resulting from installations above (e.g. overhaul of electrical or hydraulic circuits)		in accordance with Directive (EU) 2017/2397 and Delegated Directive (EU) 2020/12		



# Priority 2. Integration into logistics chains

OBJECTIVE ► Coordination of transport ► ► ► MEASURES

Notification

2.1 ADAPTATION OF VESSELS TO ATTRACT NEW TRAFFIC OR FREIGHT OR PERPETUATE EXISTING TRAFFIC OR FREIGHT

2.2 CONSTRUCTION OR ACQUISITION OF VESSELS TO ATTRACT NEW TRAFFIC OR FREIGHT

#### Notification

Measure aims to support the adaptation of existing vessel to attract new cargo and further develop their activity. It also plans to help carriers to make the necessary adjustments to sustain transport activities already in place. Investments may relate to:

 adaptations of the vessel's equipment (e.g. bottom or deck reinforcement, acquisition and installation of stacking covers, raising the hatchways, extending hatchways, etc.)

- adaptations of the dimensions of the vessel (e.g. lengthening, shortening, broadening)
- adaptations related to handling or transport (e.g. on-board handling equipment, hazardous material transfer systems, acquisition transportation frames for cars)

Measure aims to encourage the construction or acquisition of new or used vessels adapted to new transport/cargo in order to capture new market shares. Investments may relate to:

- design studies and pilots
- construction or acquisition of units responding to specific traffic

#### 2.3 CONSTRUCTION OR ADAPTATION OF VESSELS TO SERVE MARITIME PORTS

#### Notification

Measure is to encourage the construction, acquisition or adaptation of inland waterway vessels to navigate in the seaport area addressing peculiarities which imply certain specific equipment; projects that generate additional traffic (new or increasing compared to existing ones). Investments may relate to:

Aid for the construction of vessels

- design studies and pilots
- construction of units responding to traffic crossing a river-sea zone
- Adaptation of existing vessels
- adaptation to navigation conditions (e.g. buoyancy reserve, stowage of containers)
- adaptation to the specificities of seaports (e.g. coarse risers)

#### 2.4 ACQUISITION OF INSTRUMENTS AND SOFTWARE TO HELP THE NAVIGATION OR OPERATION OF VESSELS / FLEET

#### Notification

Measure aims to modernise the management of vessels and their loads by carriers and to improve their productivity. Investments may relate to:

- navigation aids (e.g. GPS, anemometer, AIS interfaced radars, ECDIS chart, tempomat, autopilot, ...) since their acquisition is not an obligation from the regulatory framework provided in particular under the specific regulationscorresponding to the zone in which the vessel navigates
- Software (e.g. logistics planning software, loading plan optimisation software, enterprise resource planning and fleet management software, interfaces with other transport modes and port community systems, etc.).



# Priority 3. Increasing safety of IWT

OBJECTIVE ► Coordination of transport ► ► ► MEASURES

#### 3.1 MEASURES TO ADAPT EQUIPMENT USED FOR MANOEUVRING OF VESSEL AND RELATED INDICATING AND MONITORING DEVICES

Notification

Installation of equipment and technologies to enhance manoeuvrability of inland waterway vessels (such as steering system and rudders) and to ensure the proper signalling indicating any problem. Investments may relate to:

- Installations and adaptations related to control, indicating and monitoring devices and equipment (e.g. automatic switch of indicating and monitoring devices to alternative power source, control for main engines by a single lever, display of operational status of devices and equipment, ...),
- Installations and adaptations related to wheelhouse (measures to ensure unobstructed view, installation of independent alarm system, measures enabling lifting and lowering the wheelhouse, etc.),
- Installations and adaptations related to steering system (measures related to steering system like presence of second independent drive unit, hydraulic steering apparatus and related tanks, pipework as well as alarm and monitoring, other measures to ensure required manoeuvrability of steering system, temperatures, design of rudder stocks or manual drive, etc.)

#### 3.2 MEASURES ADDRESSING VESSEL'S SAFETY EQUIPMENT AND FIRE PROTECTION SYSTEMS

#### Notification

Installation and adaptations to safety equipment on-board of inland vessels aimed to enhance the safety of operation of inland vessels. Investments may relate to:

- Installations and adaptations related to safety measures of engines and engine equipment (e.g. securing engines against unintentional starting, protecting fuel and oil pipeline connections against leakage, jacketed piping system for external high pressure fuel delivery pipes of diesel engines, monitoring devices used to monitor propulsion systems, switch off and indication of automatic device for reduction of engine speed from helmsman's position)
- Installations and adaptations related to anchor equipment
- Installations and adaptations related to mooring equipment (replacement of mooring and other cables)
- Installations and adaptations related to firefighting system (permanently installed firefighting systems for general cargo vessels without dangerous goods)

#### 3.3 MEASURES ADDRESSING SAFETY AT WORK STATIONS AND CREW SAFETY

#### Notification

Installation and adaptations to the inland vessel and working areas aimed to enhance the safety of operations and crew safety. Investments may relate to:

 Installations and adaptations to (completing of) deck cover & deck equipment (e.g. hatch covers, winches) and other protection against falling, or safety equipment like inflatable lifejackets

#### 3.4 MEASURES ADDRESSING OTHER SAFETY RELATED ISSUES

Notification

Installation of other equipment or adaptations to inland vessels to support the crewmembers in navigational and operational aspects. Investments may relate to:

- Installation of equipment that increases the safety of navigation and support crewmembers in (difficult) navigational/operational aspects and situations (e.g. cameras, CCTV on board, upgraded lights, etc.)
- Acquisition of equipment for abatement and/or containment of cargo spills (e.g. skimmer pump, inflatable dam and related equipment for tank barges)



### **Priority 4. Renewal of actors in the sector**

OBJECTIVE ► Coordination of transport ► ► ► MEASURES

4.1 ACQUISITION OF FIRST VESSEL FOR NEW IWT COMPANIES AND NEW ENTRANTS Notification

> Acquisition of first vessel for new IWT transport companies and new entrants as entrepreneurs



# Priority 5. Promote emergence of innovative solutions

OBJECTIVE ► Research, development and innovation ► ► ► MEASURES



Art. 25 & 49 GBER

> Experimentation of existing or new technology, unproven in the specific context of inland water transport

> Research and development related to design of new technologies to respond to specific needs of inland water sector

> Elaboration of feasibility studies



Form of aid & Beneficiaries – all priorities

Form of aid



Non-reimbursable direct grant



Sector affected by the measure

Inland passenger water transport Inland freight water transport

Type of beneficiaries

Small and medium-sized enterprises and large enterprises

Estimated number of beneficiaries (per country)

from 11 to 50



### Beneficiaries – definitions per priority



The potential beneficiaries will be all owners or operators of fleets of inland waterway vessels whose vessels are recorded in the national vessel register of [EU Member State], regardless of the nationality of the operator having its registered office, branch or subsidiary in [EU Member State] and carrying goods or passengers by inland waterways in [EU Member State].

### Priority 4

The aid scheme will be accessible to any natural or legal person belonging to a State of the European Union and fulfilling the Union legal prerequisites for operating as a carrier of goods or passengers by inland waterway in [EU Member State], or any legal person belonging to a State of the European Union having its registered office, branch or subsidiary in [EU Member State] and fulfilling the Union legal prerequisites for carrying out transport of goods or passengers by inland waterway in [EU Member State].

## Priority 5

The priority 5 is accessible to any natural person who is a national of a European Union Member State or any legal person registered in a European Union Member State with its registered office, branch or subsidiary in [EU Member State].

The priority 5 is designed to benefit also other companies that can potentially carry innovative projects: design offices, architects or shipyards, equipment manufacturers, other technical service providers, etc. However, the economic interest of the projects for inland waterway transport operators (end users) will be verified, with the dual objective of improving the environmental or logistical performance of inland waterway transport.



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Photo: © NAVROM

### **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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