

Green and efficient Danube fleet

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

Output 5.2 – Model State Aid Scheme & public support measures

Work Package 5 Regulations & Strategy

Version 1.0

Date: 30/11/2020

FINAL

O 5-2_GRENDEL_Model State Aid Scheme and public support measures_v1.0_FINAL_2020-11-30

Document History

Version	Date	Authorised
1.0	30.11.2020	Pro Danube

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1 Scope of the document

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 as an environmentally friendly transport mode contributing to economic growth and a more sustainable transport system in the Danube region.

One of the core objectives of the project is to provide a fruitful ground for the establishment of dedicated instruments that trigger investments in the fleet. In this sense, the *model state aid scheme* is a key result of the project.

Next to the assessment of investment priorities in the Danube region, exchanges with the European Commission (in particular DG COMP, DG REGIO) and with the respective representatives of countries already implementing state aid schemes supporting the modernisation of the inland fleet (CZ, FR, DE, etc.), the representatives of public bodies of Danube States and from the private sector were consulted, including all GRENDEL partners. The findings formed the basis for the elaboration of the model state aid scheme and measures were pre-identified for becoming activities funded under national state aid schemes.

The model covers the five most important aspects of fleet modernisation:

- Priority 1 Improving environmental performance
- Priority 2 Better integration of IWT into logistic chains to increase multimodality of freight transport
- Priority 3 Modernisation of vessels leading to increased safety of inland water transport
- Priority 4 Renewal of actors in the sector
- Priority 5 Promote the emergence of innovative solutions.

The model state aid scheme was developed to serve as a guideline for Danube riparian countries to develop national state aid schemes for fleet modernisation according to their individual needs. In this sense, a number of Danube riparian countries already started to have discussions with regard to the implementation of a state aid scheme that would provide adequate financial incentives for the modernisation of their fleet.

Particularly important in this regard is the constant support provided by the European Commission, encouraging the approach of GRENDEL and Member States to implement state aid scheme measures. This should be viewed as an encouragement for the Danube riparian countries to use the GRENDEL model state aid scheme for the financing period 2021-2027 as a basis to develop investment incentives that could be financed via various types of financial resources – both national and European.

The report is organised in two parts, the first one presenting the model state aid scheme, the second one providing information on financing instruments for modernisation of Danube IWT fleet.



Interreg



EUROPEAN UNION

Danube Transnational Programme

GRENDEL

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Abbreviations

Abbreviation	Explanation
AIS	Automatic Identification System
CCNR	Central Commission for the Navigation of the Rhine
CESNI	Comité Européen pour l'Élaboration de Standards dans le domaine de la Navigation Intérieure
CO	Carbon oxide
CO₂	Carbon dioxide
dB	Decibel
DG COMP	Directorate General for Competition
EC	European Commission
EEAG	Guidelines on State aid for environmental protection and energy 2014-2020
ERDF	European Regional Development Fund
ESIF	European Structural and Investment Funds
ES-QIN	European Standard for Qualifications in Inland Navigation, Edition 2019
ES-TRIN	European Standard laying down Technical Requirements for Inland Navigation vessels, Edition 2019/1
EU	European Union
GBER	Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty (General Block Exemption Regulation)
GHG	Greenhouse gases
GPS	Global Positioning System
HC	Hydrocarbons
IWT	Inland Waterway Transport
kW	Kilowatt
LNG	Liquefied natural gas
NO_x	Nitrogen oxides

NRMM	Regulation (EU) 2016/1628 of the European Parliament and of the Council of 14 September 2016 on requirements relating to gaseous and particulate pollutant emission limits and type-approval for internal combustion engines for non-road mobile machinery, amending Regulations (EU) No 1024/2012 and (EU) No 167/2013, and amending and repealing Directive 97/68/EC (as amended by Regulation (EU) 2020/1040 of the European Parliament and of the Council of 15 July 2020 amending Regulation (EU) 2016/1628 as regards its transitional provisions in order to address the impact of the COVID-19 crisis)
PM	Particulate matter
RIS	River Information Services
SA	State aid
SME	Small and medium-sized enterprise
TFEU	Treaty on the Functioning of the European Union
VNF	Voies Navigables de France

Implementation guidelines

Programme promoting sustainable modernisation and innovation of inland waterway vessels in the Danube region (hereinafter “Programme”)

1 Executive summary

Inland waterway transport (IWT) is the most environmentally friendly mode of transport in terms of transported tonne-kilometres. To keep the leadership and label of being environmentally friendly, there is a high urgency for the IWT sector to develop measures facilitating the transition towards zero-emission and thus address urgent climate challenges the world is facing nowadays. Currently the vessel operator takes all risks and high investments when deploying greening technologies. It is therefore necessary, next to other measures, to support them in greening by putting in place funding schemes.

The GRENDEL project consortium, INDanube¹ and representatives of Danube countries worked together on the elaboration of a state aid model programme promoting sustainable modernisation and innovation of inland waterway vessels in the Danube region. Main goal of GRENDEL is to trigger innovation uptake in the sector in the Danube region by establishing an encouraging framework of a variety of public support measures going beyond national borders and to help national governments to prepare well-designed and targeted public support measures.

The state aid model programme is in line with European policies and contributes to the new Cohesion Policy 2021-2027. The ambitious European Green Deal striving for Europe being the first climate-neutral continent was presented by the new President of the European Commission as part of the Political Guidelines for the next European Commission 2019-2024. Inland waterway transport shall be ambitious enough to play an important role in this European Green Deal.

The scope of the document is to present the model state aid scheme developed in the framework of the GRENDEL project, taking into account the results gathered during the project, information exchanges with the European Commission (DG COMP) and with representatives of public bodies of Danube States and from the private sector. Measures were pre-identified for becoming activities funded under national state aid schemes. **The state aid model programme promoting sustainable modernisation and innovation of inland waterway vessels in the Danube region addresses five pillars (priorities)**, as illustrated below.

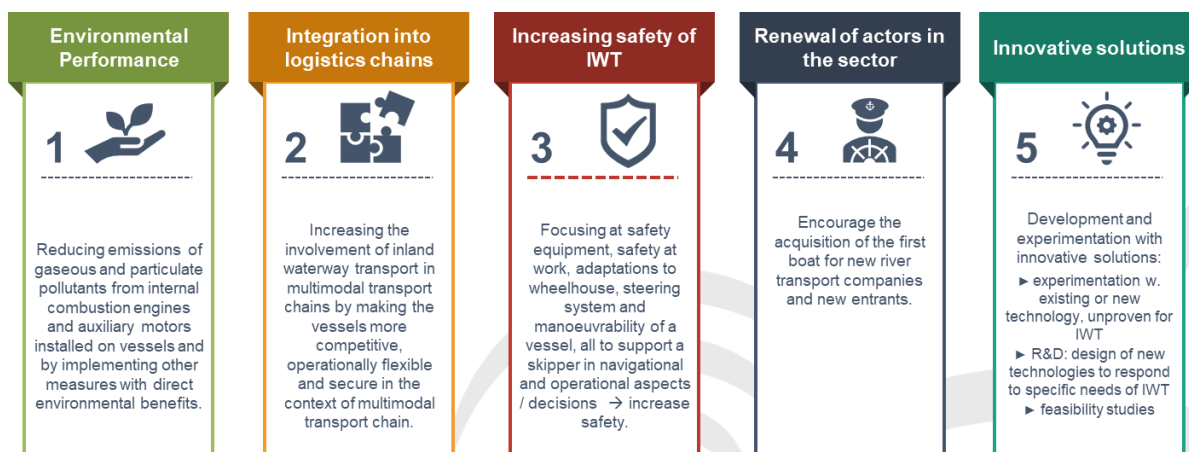


Figure 1: Priorities of the state aid model promoting sustainable modernisation of inland waterway vessels in the Danube region

¹ Centre for Innovation Transfer in the Danube Region

The model state aid scheme constitutes a tool at the disposal of the Danube Member States for the financing period 2021-2027 which shall later be implemented as national state aid scheme by relevant ministries in as many Danube countries as possible. Nevertheless, it is a model which needs to be adapted to each national situation. For its implementation in a concrete state aid scheme, the usual assessment work and steps, in particular in the case of a notification, will need to be pursued by the Member States, as for any state aid measure.

With the COVID-19 crisis of 2020, it can be assumed that the investment in the fleet will be even more reduced to the absolutely necessary investments in the coming years. A state aid scheme would constitute an incentive in this context. Due to the mentioned crisis, several aids have been issued in EU countries, but they are not dealing explicitly with the greening of the fleet. In general, companies shall pay attention to the national state aid legal framework, as there might be special cases that can derive benefits for IWT companies as well. Pro Danube International (PDI) is part of the discussions with the European Commission, the River Commissions and the other relevant European branch organisations with regard to the exit and recovery strategy from the COVID-19 crisis where the more flexible use of state aids is one of the topics on the agenda. The European Commission advises the Member States to enable the use of these aids for the recovery from the current situation.

2 Purpose and legal basis

2.1 Definitions

- (1) The following definitions are used in the guidelines

“aid” means any measure fulfilling all the criteria laid down in Article 107(1) of the Treaty on the Functioning of the European Union;

“aid intensity” means the gross aid amount expressed as a percentage of the eligible costs, before any deduction of tax or other charge;

“aid scheme” means any act on the basis of which, without further implementing measures being required, individual aid awards may be made to undertakings defined within the act in a general and abstract manner and any act on the basis of which aid which is not linked to a specific project may be granted to one or several undertakings for an indefinite period of time and/or for an indefinite amount;

“beneficiary” designates the IWT operator/user interested in applying to the Programme;

“inland waterway vessel” means a vessel intended solely or mainly for navigation on inland waterways in the scope of Directive (EU) 2016/1629²;

“Programme” refers to Programme promoting sustainable modernisation and innovation of inland waterway vessels in the Danube region developed in the present document;

“small and medium-sized enterprises” or “SMEs” means undertakings fulfilling the criteria laid down in Annex I of the General Block Exemption Regulation (GBER);

Further definitions are available in the GBER and in Annex 1.

2.2 Background

- (2) IWT is the most environmentally friendly mode of transport in terms of transported volumes (tonne-kilometre). Shipping more goods on water reduces Greenhouse Gases (GHG), traffic congestions and accidents. Inland vessels offer an enormous carrying capacity per transport unit and inland waterways dispose of ample unused infrastructure capacity. However, there is significant potential for reducing energy use and pollutant emissions, in particular with regard to existing vessels as well as a large potential for modal shift by improved services. There is a high urgency for the IWT sector to develop measures to facilitate the transition towards zero-emission and thus address urgent climate challenges the world is facing nowadays.
- (3) Long service life of inland vessels, high investment costs, low re-investment capacity of the Danube fleet operators together with knowledge deficits about green technologies as well as the lack of public actions and incentives impose severe barriers for the adaptation of the Danube IWT fleet to forthcoming European IWT and environmental policy objectives. In general, waterway maintenance in the Danube region shall be improved to ensure the reliability of the Danube fairway.
- (4) The size of the Danube fleet in comparison with the size of the Rhine fleet and of the fleet of other countries is illustrated below.

² Directive (EU) 2016/1629 of the European Parliament and of the Council of 14 September 2016 laying down technical requirements for inland waterway vessels, amending Directive 2009/100/EC and repealing Directive 2006/87/EC

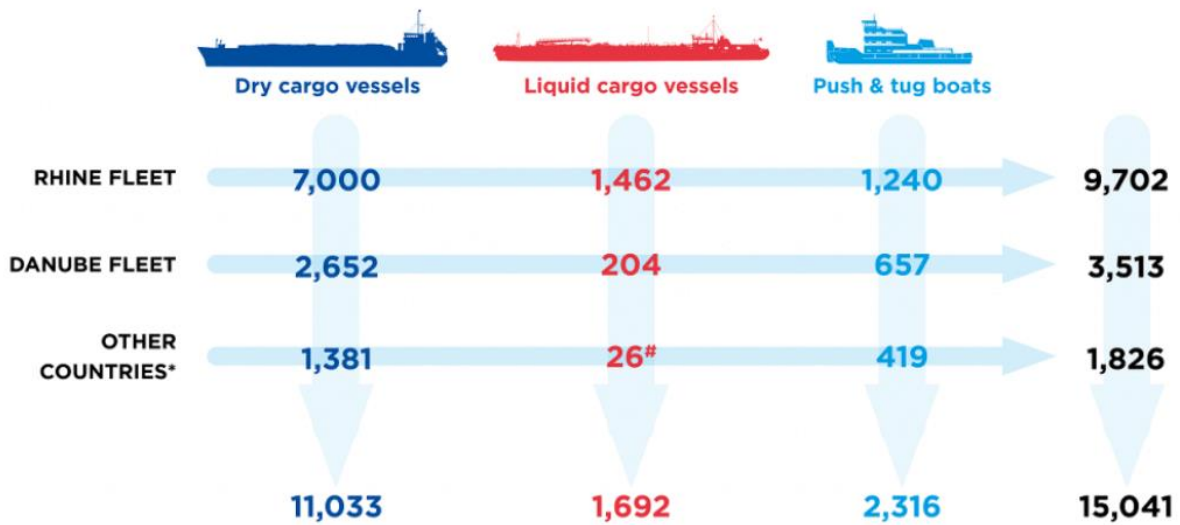


Figure 2: Size of fleets per macro-region (number of inland vessels) in Europe.

Source: CCNR, Market observation - Sources: 1) Rhine countries: VNF (France), CBS (Netherlands), Belgian Ministry of Transport, Waterway and Shipping Administration of Germany, Luxembourg and Switzerland. 2) Danube countries: Danube Commission. 3) Other countries: Eurostat [iww_eq_loadcap], [iww_eq_age], Italian and Czech Ministries of Transport, Statistical office of Poland

* Other countries = Poland, Czech Republic, Italy, United Kingdom, Lithuania. # comprises 9 tanker vessels in Poland, 1 in the Czech Republic and 16 in Lithuania. No data for the UK and Italy.

- (5) Danube navigation is dominated by a relatively small number of major fleet operators. About 20 fleet operators provide transport services on a regular basis on the Danube, carrying approximately 75% of the total freight. Due to the generally difficult economic situation in most Danube countries, re-investment or even general overhaul over several years have been subordinated to day-to-day maintenance and essential repairs of the vessels. Therefore, a significant number of vessels has reached or passed its commercial and/or technical lifetime. The situation has aggravated due to the decrease in transport volumes and reduced profitability as consequence of the global financial crisis in parallel with the severe financial losses caused by the shortcomings in waterway maintenance.
- (6) The biggest challenge for greening of the inland vessels is the development of a business case for a vessel owner or a vessel operator. This is needed to justify the investment in greening technologies and alternative fuels. A major barrier is that there is no internalisation of external costs of air pollution and greenhouse gas emissions in IWT.
- (7) The engines have a lifetime of around 20 years and more and retrofitting is expensive.
- (8) The obligation towards the reduction of pollutant emissions is installed through the Non-Road Mobile Machinery (NRMM) Regulation, with the goal to decrease air pollution from emitted carbon oxide (CO), hydrocarbons (HC), nitrogen oxides (NOx) and particulate matter (PM). However, this addresses only new engines and creates no pressure or incentive on the existing fleet and only a relatively small number of new engines is sold each year to the IWT sector.
- (9) With regard to the new logistic and vessel concepts, the major barrier is the structure of the sector. The IWT sector is characterised by fragmentation, making deals on the spot market. It can be concluded that there is a lack of stable long-term relationships between the shipper and the ship-owning companies. Investments in new logistic concepts and vessel concepts however need stable long-term partnerships between the transport contractors and the shippers. The barrier/challenge is therefore to bring actors

together and to have a facilitator (like EIBIP partners) to support the innovation discussions, such as logistic and vessel concepts. An asset of IWT is the available transport capacity, low congestion levels and a low carbon footprint. These assets are becoming more and more relevant in future and can be exploited.

- (10) The technology neutrality approach was adopted for the present document, the objective being to support advanced technologies which reduce air pollutants and energy consumption of inland vessels.
- (11) Various **research and innovation projects** (LNG Masterplan, PROMINENT, PLATINA, EIBIP ...) as well as policy initiatives (NAIADES) looked into modernisation of inland vessels.
- (12) **EU-Wide Strategy for Innovation Uptake in Inland Waterway Transport** (elaborated by EIBIP consortium, May 2018) defined topics related to the modernisation and innovation uptake when considering the inland vessels sailing European waterways. It addresses the innovations concerning the inland vessels fleet and concerning logistics services. The aim is to improve the environmental footprint (reduction of air pollutant and greenhouse gas emissions) and to improve the position and performance of inland navigation in the overall transport system in Europe. The Strategy identified following areas:
 - Environmental aspects and greening the fleet: (1.a) use of alternative fuels, (1.b) air pollutant emission reduction, (1.c) energy consumption reduction;
 - Position of IWT in the overall transport system: (2.a) new logistics concepts, (2.b) new cargo flows, (2.c) new vessel concepts.
- (13) For definition of possible relevant measures for the state aid model the **legislation** was as well taken into account, in particular the European Standard laying down Technical Requirements for Inland Navigation vessels (ES-TRIN), the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) and NRMM Regulation among others.
- (14) Lessons learned from the preparation of the previous, current or new state aid schemes in various EU Member States (Czech Republic, Germany, France, Croatia, etc.) and results of analysis as well as outcomes of discussion with experts were assessed. The **past and current schemes** were analysed and outcomes created another basis for the elaboration of measures.

2.3 Objectives and purpose of the *model state aid scheme*

- (15) The overall objective of the GRENDEL project is to support Danube fleet operators as well as public bodies (as Ministries and relevant authorities) which are relevant for regulatory and policy actions in their efforts to set up a comprehensive strategy and concrete actions for launching a targeted long-term Danube fleet modernisation process on a transnationally harmonised basis. Whereas in Western Europe, public and private efforts aim to modernise and green the IWT sector, the Danube region lacks of such initiatives. The present document is prepared in the framework of the GRENDEL project and constitutes a “model state aid scheme”, instrument which shall be used by Member States for developing national state aid schemes addressing IWT fleet modernisation in Danube states. This model considers investment priorities of the Danube IWT sector and was elaborated as a logical result of the preparatory works developed in the framework of the project³, including information exchanges with the European Commission (DG COMP) and with representatives of public bodies of Danube States and from the private sector. This regional approach is innovative and appreciated by the European Commission. It is important to have common elements in the Danube region to avoid distortion of concurrence. The Programme should not prevent each Member State implementing this model from having its own deep analysis of the EU law in order to ensure the respect of the state aid rules. Each Member State is encouraged to use the model, adjust it to its own situation and proceed to the usual checks, steps and procedures towards EU law (e.g. for a notification).

³ The Annex 2 provides an overview of the GRENDEL model state aid scheme and its context (presentation held during the GRENDEL Final event).

- (16) The aim of the Programme is to reduce the air pollutant, noise and greenhouse gas emissions from inland waterway vessels, to improve their energy efficiency and safety and to encourage better integration into logistic chains.
- (17) The objective is to make IWT 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.
- (18) The funding will provide targeted incentives to invest in low-emission engines, emissions-abatement technologies and noise abatement measures. In addition, fuel-saving technologies and measures can be promoted. Measures enhancing safety and better integration into logistic chains are also foreseen.
- (19) The grant supports the beneficiary in its work on applicable Union standards and thereby improves environmental protection and energy efficiency. With the targeted increase in investments in the modernisation of inland waterway vessels, a contribution is made to achieving the climate protection and sustainability goals.

2.4 Legal basis

2.4.1 TFEU compliance

- (20) State aid is in principle prohibited as incompatible with the common market. Article 107(1) of the Treaty on the Functioning of the European Union (TFEU) states: "Save as otherwise provided in this Treaty, any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the common market." This article provides the four constitutive elements of a state aid.
- (21) In order to determine whether the notified measure contains state aid elements within the meaning of Article 107(1) TFEU, it must be established:
- 1) whether the measure confers a selective economic advantage to the undertakings concerned,
 - 2) whether this advantage has been financed through State resources,
 - 3) whether this advantage distorts or threatens to distort competition and, finally,
 - 4) whether the measure affects trade between Member States⁴.
- (22) A state aid in the meaning of Article 107(1) TFEU is unlawful unless:
- it is notified to the European Commission according to Article 108(3) TFEU 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 market. Indeed, according to Article 109 of the Treaty, the Council may determine categories of aid that are exempted from this notification requirement
- (23) When Member States notify state aid to the Commission for IWT, two possible legal bases are possible:
- **Article 107(3)(c) TFEU**, as legal basis for declaring aid to facilitate the development of certain economic activities or of certain economic areas compatible with the internal market (greening

⁴ Support granted under the *de minimis* Regulation (Commission Regulation (EU) No 1407/2013 of 18 December 2013 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to *de minimis* aid) is not regarded as state aid if no more than EUR 200 000 is granted to a single undertaking over a period of three years and the other conditions laid down in the *de minimis* Regulation are also respected (transparency, cumulation rules).

among others) & **Guidelines on State aid for environmental protection and energy 2014-2020**⁵ for aid for energy and environment under Article 107(3)(c) TFUE.

- **Article 93 TFEU**, as legal basis for establishing the compatibility of aid for the coordination of freight transport.

- (24) Using the **GBER** allows to grant state aid without notification to the Commission if the respective conditions are respected. Categories of aid that are exempted from the notification requirement and can be used in IWT are for example: aid in favour of research and development and innovation, aid for environmental protection, training aid. The current rules of GBER apply until 31.12.2020 (and will be prolonged until 31 December 2023)⁶.
- (25) As a general rule, an aid shall not be granted for investments to ensure the compliance with EU standards.
- (26) In conclusion, there are different aid options for modernisation and greening the inland navigation fleet⁷:
- *De minimis* aid (which is not regarded as state aid and will not be addressed by the present guidelines)
 - Measures that are subject to a Commission approval decision (notified measures)
 - Measures that fall under the GBER (block exempted categories of measures)
- (27) At a webinar attended by PDI, representatives of the European Commission provided guidance on the new Temporary Framework which aims at using the full flexibility foreseen under state aid rules to support the economy in the context of the COVID-19 outbreak. The Temporary Framework enables Member States to ensure that sufficient liquidity remains available to businesses of all types and to preserve the continuity of economic activity during and after the COVID-19 outbreak. Current information on most recent developments can be found on the website of the European Commission (DG COMP)⁸.

2.4.2 Sectoral legislation

- (28) The **NRMM Regulation** sets emission limits for several pollutants from combustion engines covering the non-road sector, ranging from small gardening and handheld equipment over agricultural and construction machinery to locomotives and inland vessels. It also lays down the procedures engine manufacturers have to follow in order to obtain type-approval of their engines – which is a prerequisite for placing their engines on the EU market. With a view to inland navigation the regulation introduces very stringent emission limits (“Stage V”) requiring exhaust aftertreatment systems (e.g. DPF (Diesel particulate filters), SCR (Selective catalytic reduction)) for nearly all power ranges. This additional technical equipment leads to significantly higher costs per kW engine power compared to the preceding standard Stage IIIA. Furthermore, the industry is still in the process of developing and type-testing engines, thus, at the moment only a very limited number of engines conforming to Stage V requirements is available on the market. Regulation (EU) 2020/1040 adapted the transition period to take into account the effects of COVID-19 and added 12 months to the transition deadlines for engines of less than 300 kW, making the deadlines the same for all categories⁹.
- (29) The technical standard **ES-TRIN** is a standard jointly developed by the Member States of the European Union and the Central Commission for Navigation of the Rhine (CCNR) within the CESNI framework. It has

⁵ The current Guidelines on State aid for environmental protection and energy 2014-2020 apply until 31.12.2020 (and will be prolonged until 31 December 2021). New guidelines shall be adopted to reflect regulatory, technological and market developments in Q4 2021.

⁶ A new GBER shall be adopted to reflect regulatory, technological and market developments in Q4 2021. It cannot yet be assessed if the GBER related framework described in the present document will stay unchanged or will be amended. Nevertheless, it could also be an option to consider all the presented measures entering in the scope of use of the GBER to go through the notification process of the European Commission.

⁷ The Annex 3 provides an overview of the legal framework of state aid for modernizing the Danube fleet by DG COMP (presentation held during the 2nd GRENDEL Public Consultation).

⁸ https://ec.europa.eu/competition/state_aid/what_is_new/covid_19.html

⁹ More information is available in the Frequently asked questions (FAQ) regarding the application of the ES-TRIN and the NRMM Regulation to engines fitted to inland navigation vessels (Question n°6) of CESNI (available on <https://www.cesni.eu/en/technical-requirements/>)

been introduced as the applicable set of technical provisions for inland navigation vessels on the EU waterways by way of Annex II of Directive (EU) 2016/1629. The currently applicable edition is ES-TRIN 2019/1. With a view to the greening of inland navigation, ES-TRIN already covers a couple of relevant issues. The 2017 edition introduced the requirement that for new vessels as well as for the replacement of engines only engines in conformity with the requirements of the NRMM Regulation are permitted. However, ES-TRIN does so far not contain deadlines for the substitution of existing engines in conformity with emission stages lower than V as long as they are maintained in proper working order. In addition, the 2017 edition introduced a set of requirements for vessels using Liquefied natural gas (LNG) for propulsion or auxiliary purposes. The 2019 edition for the first time introduced specific requirements for inland navigation vessels with electric propulsion.

- (30) The **RIS Directive**¹⁰ establishes a framework for the deployment and use of harmonised, interoperable and open **River Information Services (RIS)**. It requires Member States to develop and implement RIS in an efficient, expandable and interoperable way and to provide interfaces with transport management systems and commercial activities. Member States must provide RIS users with the data necessary for voyage planning, electronic navigational charts for waterways and notices to skippers shall be provided as standardised, coded and downloadable messages. In line with the RIS Directive, the Commission laid down technical guidelines and specifications for RIS through five implementing acts¹¹.
- (31) The **Directive 2017/2397** of the European Parliament and of the Council on the recognition of professional qualifications in inland navigation¹² lays down the conditions and procedures for the certification of the qualifications of persons involved in the operation of a craft navigating on Union inland waterways, as well as for the recognition of such qualifications in the Member States. By providing the common standards across the Union necessary to achieve the internal market for workers in IWT, the Directive 2017/2397 streamlines the legal framework related to professional qualifications in the European IWT sector, which is currently fragmented. The Directive will replace a complex set of regional requirements with multilateral and bilateral agreements by a simpler and, more importantly, EU-wide framework for certification and mutual recognition. CESNI adopted in 2018 the first version of the **European Standards for Qualifications in Inland Navigation (ES-QIN)**. The list of standards represents the standards required by the Directive concerning the competences and corresponding knowledge and skills, for the practical examinations, for the approval of simulators and for the medical fitness, approved by Commission Delegated Directive (EU) 2020/12¹³.

2.4.3 Transition towards zero-emission and climate neutral economy

- (32) An ambitious European Green Deal striving for Europe being the first climate-neutral continent was presented by the new President of the European Commission on 09.09.2019 as part of the Political Guidelines for the next European Commission 2019-2024. IWT shall be ambitious enough and play an important role in this European Green Deal. Released by the new European Commission in December 2019, the European Green Deal provides an ambitious roadmap with concrete actions to stop climate change. It covers all sections of the economy. With transport being a massive polluter, the document makes a plea to encourage the development of IWT in Europe and to efficiently integrate it in the

¹⁰ Directive 2005/44/EC of the European Parliament and of the Council of 7 September 2005 on harmonised river information services (RIS) on inland waterways in the Community

¹¹ Commission Regulation (EC) No 414/2007 concerning the technical guidelines for the planning, implementation and operational use of RIS; Commission Implementing Regulation (EU) No 909/2013 on the technical specifications for the electronic chart display and information system for inland navigation (Inland ECDIS); Commission Regulation (EU) No 415/2007 concerning the technical specifications for vessel tracking and tracing systems (as amended by Commission Implementing Regulation (EU) No 689/2012); Commission Regulation (EU) No 164/2010 on the technical specifications for electronic ship reporting in inland navigation (as amended by Commission Implementing Regulation (EU) 2019/1744); Commission Regulation (EC) No 416/2007 concerning the technical specifications for Notices to Skippers (as amended by Commission Implementing Regulation (EU) 2018/2032)

¹² Directive (EU) 2017/2397 of the European Parliament and of the Council of 12 December 2017 on the recognition of professional qualifications in inland navigation and repealing Council Directives 91/672/EEC and 96/50/EC

¹³ Commission Delegated Directive (EU) 2020/12 of 2 August 2019 supplementing Directive (EU) 2017/2397 of the European Parliament and of the Council as regards the standards for competences and corresponding knowledge and skills, for the practical examinations, for the approval of simulators and for medical fitness

intermodal transport and logistics chains. IWT will therefore play a major role in overcoming the massive challenges Europe will face in the long run.

- (33) Transition towards zero-emission and climate neutral economy is already longer on the agenda of European Union with visions elaborated on the Union level, policy declarations and calls to improve the sustainability of transport modes. Relevant policy guidelines and strategies are summarised below:
- Communication (COM/2018/773 final, 28 November 2018) “A Clean Planet for All”- a European strategic long-term vision for a prosperous, modern, competitive and climate-neutral economy by 2050
 - Communication (COM/2018/330 final) “A Europe that protects: Clean air for all” from the European Commission provides the policy framework for reduction of air pollutant emissions such as NO_x and PM.
 - Council of Transport Ministers in December 2018 and the European Parliament in February 2019 called for improvement of sustainability of IWT in view of contributing to Paris agreement objectives (COP21).
 - The CCNR stated, in the Mannheim declaration of October 2018, to develop a roadmap to largely eliminate GHG and other pollutants by 2050. Moreover, the Waterborne Technology Platform recently launched its vision regarding zero-emission waterborne transport in 2050. In addition, an emerging number of ship-owners set net-zero CO₂ emissions in 2050 or earlier as their target.

2.4.4 National policies and legal basis

- (34) The state aid measures in question shall be implemented in Danube countries in the upcoming multiannual financial framework 2021-2027. The state aid schemes are expected to be financed from the cohesion policy funds for the most of Member States, under the European Structural and Investment Funds (ESIF). In order to achieve this, the programme promoting sustainable modernisation and innovation of inland waterway vessels in the Danube region should be also embedded into the national Operational Programmes for EU structural funds.
- (35) The new Cohesion Policy 2021-2027 shall focus its resources on 5 policy objectives¹⁴, whereas the majority of European Regional Development Fund (ERDF) and Cohesion Fund investments will be geared towards the first two objectives: a Smarter Europe and a Greener Europe. 65% to 85% of ERDF and Cohesion Fund resources will be allocated to these priorities, depending on Member States’ relative wealth.
- (36) Currently, the definition of the investment priorities for future Partnerships Agreements (2021-2027) that will be reflected in the national operational programmes is on-going in Member States. Therefore, the work done in the GRENDEL project delivers the input for these operational programmes. The work of the GRENDEL consortium feeds to the operative work and processes of the Member States through their representatives. However, it is as well important that the priority to modernise the inland vessels is supported from the European Commission services, so that this becomes a priority in the upcoming Partnership Agreements negotiations with Member States.
- (37) Structural Funds are managed and controlled by the Member States and therefore qualify as state aid. As a consequence, they need to be taken into account in regard of state aid rules.
- (38) The legal bases at national level are not addressed in the Programme. Each Member State has to respect its respective legislation.

¹⁴ 1) a Smarter Europe, through innovation, digitisation, economic transformation and support to small and medium sized businesses; 2) a Greener, carbon free Europe, implementing the Paris Agreement and investing in energy transition, renewables and the fight against climate change; 3) a more Connected Europe, with strategic transport and digital networks; 4) a more Social Europe, delivering on the European Pillar of Social Rights and supporting quality employment, education, skills, social inclusion and equal access to healthcare; 5) a Europe closer to citizens, by supporting locally-led development strategies and sustainable urban development across the EU

3 Supported measures

(39) The table below provides details on priorities and measures included into the model state aid scheme. Only measures under the priorities 2, 3, 4 are part of a notification. The measures under priorities 1, 5 could be covered by the GBER¹⁵. Nevertheless, if higher funding rates than those foreseen in the GBER are considered, the respective priorities/measures will also need to be notified.

Measures ¹⁶	Framework
Priority 1. Improving environmental performance	
1.1. Acquisition (purchase and replacement) of lower emission engines	Article 36 ¹⁷ GBER
1.2. Measures to reduce air pollutant emissions (other than through lower emission engines)	Article 36 GBER
1.3. Measures to improve energy efficiency and optimise energy management on board	Articles 38 ¹⁸ and 41 ¹⁹ GBER
1.4. Measures to reduce noise emissions	Article 36 GBER
1.5. Measures to reduce and treat releases to water or waste	Article 36 GBER
1.6. Adapt vessels to improve their energy/fuel consumption performance through improved hydrodynamics	Article 38 GBER
1.7 Promotion of education and training in inland navigation	Article 31 ²⁰ GBER
Priority 2. Better integration of inland water transport into logistic chains to increase multimodality of freight transport	
2.1. Adaptation of vessels to attract new traffic or freight or perpetuate existing traffic or freight	Notification
2.2. Construction or acquisition of vessels to attract new traffic or freight	Notification
2.3. Construction or adaptation of vessels to serve maritime ports	Notification
2.4. Acquisition of instruments and software to help the navigation or operation of vessels/fleet	Notification
Priority 3. Modernisation of vessels leading to increased safety of inland water transport	
3.1. Measures to adapt equipment used for manoeuvring of inland vessel and related indicating and monitoring devices	Notification
3.2. Measures addressing vessel's safety equipment and fire protection systems	Notification
3.3. Measures addressing safety at work stations and crew safety	Notification
3.4 Measures addressing other safety related issues	Notification
Priority 4. Renewal of actors in the sector	
4.1 Acquisition of first vessel for new inland waterborne transport companies and new entrants	Notification
Priority 5. Promote the emergence of innovative solutions	
5.1 Development of innovative solution and experimentation with innovations	Articles 25 ²¹ and 49 ²² GBER

Table 1: General overview of supported measures

¹⁵ The Annex 1 provides an overview of relevant articles of the GBER.

¹⁶ The Annex 4 provides an overview of all the identified measures per priority.

¹⁷ Investment aid enabling undertakings to go beyond Union standards for environmental protection or to increase the level of environmental protection in the absence of Union standards

¹⁸ Investment aid for energy efficiency measures

¹⁹ Investment aid for the promotion of energy from renewable sources

²⁰ Training aid

²¹ Aid for research and development projects

²² Aid for environmental studies

3.1 Priority 1 Improving environmental performance

Priority 1. Improving environmental performance			
GBER if applicable	Training aid (Art. 31) Investment aid enabling undertakings to go beyond Union standards for environmental protection or to increase the level of environmental protection in the absence of Union standards (Art. 36) Investment aid for energy efficiency measures (Art. 38) Investment aid for the promotion of energy from renewable sources (Art. 41) Aid for environmental studies (Art. 49)		
Intensity of aid	Maximum	Medium enterprises	Small enterprises
Article 31 GBER	50%	↑ by 10%	↑ by 20%
Article 36 GBER	40%	↑ by 10%	↑ by 20%
Article 38 GBER	30%	↑ by 10%	↑ by 20%
Article 41 GBER	30% ²³ or 45% ²⁴	↑ by 10%	↑ by 20%
Article 49 GBER	50%	↑ by 10%	↑ by 20%
(to be defined by country) ²⁵	XX %	↑ XX %	↑ XX %
<p>To apply under GBER the intensity of aid shall be as described in GBER. The aid can be two-fold:</p> <ul style="list-style-type: none"> • Aid for undertakings which go beyond Union standards or which increase the level of environmental protection in the absence of Union standards • Aid for acquisition of new vessels which go beyond Union standards or which increase the level of environmental protection in the absence of Union standards <p>Only works or equipment which are not compulsory according to Union standards (and therefore go beyond the current Union standards) are eligible for support under state aid. If the installation of certain equipment or features is made mandatory in the period of the state aid, the corresponding works or equipment will no longer be eligible.</p>			

²³ If the eligible costs are calculated on the basis of following (Art. 41(6)):

(c) for certain small installations where a less environmentally friendly investment cannot be established as plants of a limited size do not exist, the total investment costs to achieve a higher level of environmental protection shall constitute the eligible costs.

²⁴ If the eligible costs are calculated on the basis of following (Art. 41(6)):

(a) where the costs of investing in the production of energy from renewable sources can be identified in the total investment cost as a separate investment, for instance as a readily identifiable add-on component to a pre-existing facility, this renewable energy-related cost shall constitute the eligible costs;

(b) where the costs of investing in the production of energy from renewable sources can be identified by reference to a similar, less environmentally friendly investment that would have been credibly carried out without the aid, this difference between the costs of both investments identifies the renewable energy-related cost and constitutes the eligible costs.

²⁵ If the intensity of aid is higher than intensity limits in GBER, the state aid shall be notified to the European Commission and go through the whole notification and assessment process. The intensity can differ for each measure.

Objective ►►► Environmental protection

The measures addressed by the aid aim at reducing the environmental impacts of waterway transport **by reducing emissions of gaseous and particulate pollutants from internal combustion engines and auxiliary motors installed on vessels** and by **implementing other measures with direct environmental benefits**. These measures aim to protect health and the environment from the adverse effects of emissions from the transport sector, contribute to energy efficiency and lower levels of CO₂ emissions, in line with the EU environmental objectives and the EU climate change goals. Following measures can be eligible under this priority:

- 1.1. Acquisition (purchase and replacement) of lower emission engines
- 1.2. Measures to reduce air pollutant emissions (other than through lower emission engines)
- 1.3. Measures to improve energy efficiency and optimise energy management on board
- 1.4. Measures to reduce noise emissions
- 1.5. Measures to reduce and treat releases to water or waste
- 1.6. Adapt vessels to improve their energy/fuel consumption performance through improved hydrodynamics
- 1.7. Promotion of education and training in inland navigation

1.1. Acquisition (purchase and replacement) of lower emission engines

Acquisition and replacement of lower emission engines aimed at reducing emissions. Investments may relate to following:

- Acquisition of lower-emission engines
- Acquisition of lower-emission auxiliary engines, including installation
- Acquisition of directly subsequent components (e.g. gearbox), including installation
- Replacement of the previously used conventional diesel engine with a lower emission engine (removal & installation)
- In case of gas engine, the associated gas storage and supply system

Terms of application

The aid covers equipment/technologies/systems and works carried out on **existing** and **new vessels**.

The installed equipment and technology shall enable to achieve performance exceeding the standards in force at the time of application. *(Examples: German state aid - SA.52931 - has a provision that exhaust emissions must comply with the exhaust emission limit values in NRMM Regulation, whereas at least one of limit values shall be undercut by 5%. German state aid measures on 20.11.2019 - the emissions comply with the emission limit values of classes IWP or IWA according to Annex II of the NRMM Regulation provided that one of these limits is undershot by 5%; in the case of engines with a power below 300 kW, that the limit value for NO_x emissions and the limit value for PM are each undercut by 10%.)*

Assessment basis for the grant

There are various alternatives, which needs to be decided. Examples are below:

- *Aid intensity in % of the extra costs (without value added tax) of purchase price of lower emission engines compared to conventional engine (if applicable combined with capping)*
- *Capping at EUR 100,000 per vessel and duration of scheme (FR SA.48804) or aid must not exceed 30% of the price of a new reference vessel, which is set to CZK 80 million = EUR 2.96 million (CZ SA.43080)*

- Flat rate basis is used in the German state aid scheme (DE SA.52931) for acquisition (EUR XX per kW of acquired engine), for replacement (flat rate per ranges of engine power), additional expenditure compared to conventional fuel system in case of associated gas storage & supply system
- In the Czech state aid scheme (CZ SA.43080) in case of replacement of vessels' engines, the market price of the existing engine of the vessel will be deducted from the eligible costs (the estimate of the market price will be supported by a court-sworn expert's opinion). All modernisations on a vessel under the aid scheme must not exceed 30% of price of a new reference vessel (CZK 80 million = EUR 2.96 million).

Legislation/Standard

- NRMM Regulation

While new engines have to conform to the NRMM Regulation, this regulation does not oblige the owners of vessels operating with old engines to replace them. Therefore, the aid is granted in order to incentivise such owners to go beyond their environmental obligations.

1.2. Measures to reduce air pollutant emissions (other than through lower emission engines)

Installation of equipment and technologies as well as procedures aimed at reducing emissions, other than through the acquisition and installation of lower emission engines. To fulfil these limits different exhaust gas after-treatment technologies and processes can be used. Investments may relate to following:

- ▶ Installation of (re)processing technologies and equipment²⁶ 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.
- ▶ Installation of fuel water emulsion technology/plant

Terms of application

The aid covers equipment/technologies/systems and works carried out on **existing vessels**.

The installed equipment and technology shall enable to achieve **performance exceeding the standards in force at the time of application**.

Detailing the eligibility of measures

The measures are eligible in following cases (example taken from DE SA.52931):

- if the PM reduction is at least 90% and this is evidenced by a manufacturer's declaration or by metrological verification by a certified inspection body, or
- if the reduction in NO_x is at least 70% and this is evidenced by a manufacturer's declaration or by metrological verification by a certified inspection body, or
- if equivalent combined reduction of particulate and nitrogen oxide emissions of the engine as specified in points (a) and (b) is substantiated by the manufacturer's declaration or by metrological evidence. The equivalent combined reduction is given by the following formula: $(\Delta \text{NO}_x [\%] / 70 + \Delta \text{PM} [\%] / 90) * 100 \geq 100\%$

Assessment basis for the grant

There are various alternatives to assess the basis for the grant, which needs to be decided.

- In case of installation of (re)processing technologies and equipment for emitted gases, the proven expenditure for acquisition of the technology and implementation of the measure

²⁶ See as well GRENDEL Factsheet No. 3 on After-treatment technologies containing details on Exhaust gas recirculation (ERG) used to reduce NO_x concentration, Diesel oxidation catalyst (DOC), Diesel particle filter (DPF), Selective catalytic reduction (SCR), Fuel water emulsion technology, Combination of after-treatment technologies - combined exhaust gas reduction systems

- In case of installation of fuel water emulsion technology/plant, the flat-rate basis²⁷ (purchase costs EUR XX per kW and flat fee for installation) is used.
- NL SA.39430 uses formula combining (A) EUR amount per kW engine power, (B) effectiveness in NOx reduction, (C) average number of active days in the work area measured over 3 years.

Legislation/Standard

- NRMM Regulation

While new engines have to conform to the NRMM Regulation, this regulation does not oblige the owners of vessels operating with old engines to replace them. Therefore, the aid is granted in order to incentivise such owners to go beyond their environmental obligations.

1.3. Measures to improve energy efficiency and optimise energy management on board

Installation of equipment and technologies as well as procedures aimed to improve onboard energy management by limiting energy consumption and promoting renewable energies. Encouraged are on one hand measures to reduce fuel consumption and on the other hand installation of systems reducing the amount of energy used and exploiting more environmentally friendly energy sources. Investments may relate to following:

- ▶ Installation of technologies to reduce the fuel consumption provided that a saving of at least XX % in fuel consumption compared to the installed engine is achieved (e.g. installation of alternative drive systems – diesel and gas electrical and purely electric drives, ...)
- ▶ Installation of energy reduction systems on board (e.g. energy management automat, eco-pilot, generator)
- ▶ Installation of renewable energy production systems (e.g. solar panels for domestic use)
- ▶ Adaptations of vessels energy supply wiring/network resulting from installations above (e.g. overhaul of electrical or hydraulic circuits)

Terms of application

The aid covers equipment/technologies/systems and works carried out on **existing** and **new vessels**.

The installed equipment and technology shall enable to achieve **performance exceeding the standards in force at the time of application**. (Example DE SA.52931 - in particular measures to reduce fuel consumption, shall be eligible provided that a saving of at least 10% in fuel consumption compared to the installed engine is achieved by inland waterway vessels in service. The proof shall be provided in a suitable form, for example by a comparative calculation for the representative areas of operation (including representative load profiles) where the inland waterway vessel is expected to operate or by means of model/simulation results.)

Assessment basis for the grant

Proven expenditure for the acquisition of the technology and the implementation of the measure (alternative with capping per vessel).

Example: FR SA.48804, the grant amounts 30% of the pre-tax cost of the work and it is capped at EUR 40,000 per vessel over the duration of the plan. DE SA.52931 - The proven expenditure for the acquisition of the technology and the implementation of the measure are taken as basis for the assessment (eligible costs).

²⁷ The flat rate for engines and full water emulsion plant is foreseen in German state aid scheme SA.52931. The flat rate is set as follows: Purchase costs: EUR 55 per kW and Flat fee for installation: EUR 7,500.

1.4. Measures to reduce noise emissions

Measures to reduce noise emissions are those leading to a reduction of airborne or structure-borne noise emissions by limiting noise values for occupational health and safety as set in the Union standards, which is in this case ES-TRIN. Investments may relate to following:

- ▶ Installations and adaptations to reduce noise emissions and vibrations in engine rooms (Art. 3.04(7))
- ▶ Installations and adaptations measures to reduce noise emissions and vibrations in a wheelhouse (Art. 7.01(2))
- ▶ Installations and adaptations measures to reduce noise emissions and vibrations in accommodation spaces, both communal living quarters and sleeping cabins (Art. 15.02(5))

Terms of application

The aid covers equipment/technologies/systems and works carried out on **existing** and **new vessels**. The installed equipment and technology shall enable to achieve performance exceeding the standards in force at the time of application.

Assessment basis for the grant

Proven expenditure for the acquisition of the technology and the implementation of the measure (alternative with capping per vessel).

Legislation/Standard

- ES-TRIN – in particular Articles 3.04(7), 7.01(2), 14.09, 15.02(5)

1.5. Measures to reduce and treat releases to water or waste

Installation of equipment and technologies as well as procedures aimed at reducing volumes of waste generated, improving conditions for waste storage on board and facilitate waste reprocessing. Investments may relate to following:

- ▶ waste storage systems (e.g. storage tanks)
- ▶ waste reprocessing systems (e.g. reprocessing station, adaptation of piping)
- ▶ equipment to limit the waste generated (e.g. propeller shaft limiting grease)

Terms of application

The aid covers equipment/technologies/systems and works carried out on **existing** and **new vessels**. The installed equipment and technology shall enable to achieve performance exceeding the standards in force at the time of application.

Assessment basis for the grant & aid intensity

Proven expenditure for the acquisition of the technology and the implementation of the measure (alternative with capping per vessel).

Example: FR SA.48804 - The aid has an intensity of 30% of the installation cost of this equipment and it is capped at EUR 70,000 per vessel over the life of the plan.

Legislation/Standard

- Convention on the collection, deposit and reception of waste produced during navigation on the Rhine and Inland Waterways (CDNI) – not applicable in the Danube countries
- Any regulation applicable in the Danube countries

1.6 Adapt vessels to improve their energy/fuel consumption performance through improved hydrodynamics

Measure aims to reduce the fuel consumption of vessels through adaptations of hydrodynamics of a vessel. Investments may relate to following:

- ▶ modification of the aft body and/or bow section of a vessel
- ▶ improvement of the propulsion system (e.g. nozzles, optimized propeller)

Terms of application

The aid covers equipment/technologies/systems and works carried out on **existing vessels** and whose aim is to improve their performance in terms of hydrodynamics, by adaptations carried out on the structure of the vessels or on that of the propulsion system.

Assessment basis for the grant & aid intensity

Proven expenditure for the acquisition of the technology and the implementation of the measure (alternative with capping per vessel).

Example: FR SA.48804 - The aid has an intensity of 30% of the cost of the work, and it is capped at EUR 150,000 per vessel over the life of the plan.

1.7 Promotion of education and training in inland navigation

The measure aims to increase the number of training places and the number of participants in training courses addressed to inland navigation personnel. The high requirements in connection with technology and environmentally friendly behaviour in IWT require continuous participation of professional staff in appropriate training programmes. The measure intends to contribute significantly to increasing the safety of navigation and protecting the environment. By skilled workers who are additionally trained in new and innovative technologies, environmental protection, safety of navigation and economics, inland navigation should be strengthened. Support may relate to the following actions:

- ▶ attract qualified personnel of the next generation via training grants paid for training to achieve professional qualifications in accordance with Directive (EU) 2017/2397 and Delegated Directive (EU) 2020/12
- ▶ qualify personnel of inland navigation via training grants paid for training courses, in particular in the following training activities:
 - provide the mandatory competences (knowledge and skills) for the operation of an inland waterway vessel;
 - provide the knowledge for the commercial operation of an IWT company;
 - provide the knowledge in the use of electronic data processing;
 - prepare to a specific qualification to be used in inland navigation.

Terms of application

The aid covers expenditure of training activities. The funding is provided as project funding. Aid shall not be granted for training which undertakings carry out to comply with national mandatory standards on training (Art. 31(2)).

Assessment basis for the grant & aid intensity

Proven expenditure of training activities. Article 31(3) GBER details the eligible costs²⁸.

Example: DE SA.52929:

- *For new personnel: the aid has an intensity of 50% of the total training expenditure, up to a maximum of EUR 30,000 for the duration of the total 36-month training period as inland waterway crewmembers (funding rate of 60% if the applicant is a medium-sized enterprise and 70% if the applicant is a small enterprise).*
- *Further training: the aid has an intensity of 50% of the expenditure for training activities invoiced by seminar organisers. The maximum amount of the grant for further training measures is EUR 2,000 per participant over a period of 12 months.*

Example: DE SA.52929:

- *Training grants may also be awarded to IWT training associations who receive training places within the framework of a training alliance with cooperation partners from the IWT sector and as such are recognized by the Ministry of Transport.*
- *IWT operators applying for training grants must have their seat in Germany and offer training places on their barges for trainees.*

Legislation

- Directive (EU) 2017/2397 of the European Parliament and of the Council of 12 December 2017 on the recognition of professional qualifications in inland navigation and repealing Council Directives 91/672/EEC and 96/50/EC
- ES-QIN adopted by Delegated Directive (EU) 2020/12

Definitions

“conventional diesel engine” - an engine of an inland waterway vessel that does not meet the following standards of the European Union or the equivalent national standards:

- the exhaust emission limit values set out in Annex II to NRMM Regulation
- the noise emission limits set out in Article 8.10 of ES-TRIN

“lower emission engine” - shall mean an engine for an inland waterway vessel meeting the following standards of the European Union or the equivalent national standards:

- the **exhaust emissions** comply with the exhaust emission limit values set out in Annex II to NRMM Regulation, with the provision that one of these limits will be undercut by 5%.
- the **noise emissions** are below the limits specified in Article 8.10²⁹ of ES-TRIN

Table 2: Detailed measures Priority 1

²⁸ Information available in the Annex 5 (eligibility of costs)

²⁹ Article 8.10 Noise emitted by vessels

1. The noise produced by a vessel under way, and in particular the engine air intake and exhaust noises, shall be damped by using appropriate means.
2. The noise generated by a vessel under way shall not exceed 75 dB(A) at a lateral distance of 25 m from the ship's side.
3. Apart from transshipment operations the noise generated by a stationary vessel shall not exceed 65 dB(A) at a lateral distance of 25 m from the ship's side.

3.2 Priority 2 Better integration of inland water transport into logistic chains to increase multimodality of freight transport

Priority 2. Better integration of inland water transport into logistic chains to increase multimodality of freight transport			
GBER if applicable	N/A		
Intensity of aid	Maximum	Medium enterprises	Small enterprises
<i>(to be defined by country)³⁰</i>	XX %	XX %	XX %
<p>Objective ►►► Sectoral development</p> <p>The measure is aimed at increasing the involvement of waterway transport in the multimodal transport chains by making the vessels more competitive, operationally flexible and secure in the context of multimodal transport chain.</p> <p>Following measures can be eligible under this priority:</p> <ol style="list-style-type: none"> 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 2.3. Construction or adaptation of vessels to serve maritime ports 2.4. Acquisition of instruments and software to help the navigation or operation of vessels/fleet 			
<p>2.1. Adaptation of vessels to attract new traffic or freight or perpetuate existing traffic or freight</p> <p>The 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 following:</p> <ul style="list-style-type: none"> ► adaptations of the vessel's equipment (e.g. bottom or deck reinforcement, acquisition and installation of stacking covers, raising the hatchways, extending hatchways, ...) ► 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) <p>Terms of application</p> <p>Interventions concern work carried out on existing vessels and intended to respond to specific (new or existing) transport/cargo related adaptations.</p> <p>The applicant will specify the description of cargo/transport business case (traffic), new or to be secured, targeted by the investment (tonnage, origin destination, nature, transport constraints, shipper).</p> <p>Assessment basis for the grant</p> <p>Proven expenditure for the acquisition of the technology and the implementation of the measure (alternative with capping per vessel).</p>			

³⁰ The state aid shall be notified to the European Commission and go through the whole notification and assessment process. The intensity can differ for each measure.

Example: FR SA.48804 – 30% of the cost of the work and is capped at EUR 230,000 per vessel over the duration of the plan.

CZ SA.43080 – Maximum aid intensity of 75% of eligible costs with bonus 10% for small enterprises. Eligible costs are acquisition of equipment, material and installation works. All modernisations on a vessel under the aid scheme must not exceed 30% of the price of a new reference vessel (CZK 80 million = EUR 2.96 million).

2.2. Construction or acquisition of vessels to attract new traffic or freight

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 following:

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

Terms of application

The aid covers equipment/technologies/systems and works carried out on **existing** and **new vessels**.

Assessment basis for the grant

Proven expenditure for the acquisition of the technology and the implementation of the measure (alternative with capping per vessel).

Example: FR SA.48804 - 50% of the cost of the studies and is capped at EUR 100,000 per project over the duration of the plan. 20% of the cost of construction or acquisition, capped at EUR 200,000 per vessel over the duration of the plan.

2.3. Construction or adaptation of vessels to serve maritime ports

The measure is meant to encourage the construction, acquisition or adaptation of inland waterway vessels to navigate and/or doing transshipment in the seaport areas addressing peculiarities which imply certain specific equipment; projects that generate additional traffic (new or increasing compared to existing ones).

Aid for the construction of vessels

Investments may relate to following:

- ▶ design studies and pilots
- ▶ construction of units responding to traffic crossing a river-sea zone

Adaptation of existing vessels

Investments may relate to following:

- ▶ adaptation to navigation conditions (e.g. buoyancy reserve, stowage of containers)
- ▶ adaptation to the specificities of seaports (e.g. coarse risers)

Terms of application

The aid covers equipment/technologies/systems and works carried out on **existing** and **new vessels**.

Assessment basis for the grant

Proven expenditure for the acquisition of the technology and the implementation of the measure (alternative with capping per vessel).

Example: FR SA. 48804 - Aid for the construction of vessels → design studies: 50% of the cost of studies and is capped at EUR 100,000 per project over the duration of the plan; construction: 20% of the construction cost, capped at EUR 400,000 per vessel over the duration of the plan.

Adaptation of existing vessels → 30% of the cost of the work and is capped at EUR 90,000 per vessel over the duration of the plan.

2.4. Acquisition of instruments and software to help the navigation or operation of vessels/fleet

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

- ▶ navigation aids (e.g. GPS, anemometer, Inland AIS interfaced radars, Inland ECDIS chart, tempomat, autopilot, etc.) when their acquisition is not an obligation from the regulatory framework provided in particular in the specific regulations corresponding 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, ...).

Terms of application

The aid covers equipment/technologies/systems and works carried out on **existing** and **new vessels**.

Assessment basis for the grant

Proven expenditure for the acquisition of the technology and the implementation of the measure (alternative with capping per vessel).

Example: FR SA.48804 - 30% of the cost of the works and is capped at EUR 20,000 per vessel over the duration of the plan.

Table 3: Detailed measures Priority 2

3.3 Priority 3 Modernisation of vessels leading to increased safety of inland water transport

Priority 3. Modernisation of vessels leading to increased safety of inland water transport			
GBER if applicable	N/A		
Intensity of aid	Maximum	Medium enterprises	Small enterprises
<i>(to be defined by country)³¹</i>	XX %	XX %	XX %
<p><i>The activities towards the compliance with the Standards and legislation in force are not eligible.</i></p> <p><i>Only works or equipment which are not compulsory according to Union standards (and therefore go beyond the current Union standards) are eligible for support under state aid. If the installation of certain equipment or features is made mandatory in the period of the state aid, the corresponding works or equipment will no longer be eligible.</i></p>			
<p>Objective ►►► Sectoral development</p> <p>The measures are aimed at modernisation of inland waterway vessels in terms of safety equipment, safety at work, adaptations to wheelhouse, steering system and manoeuvrability of a vessel, all to support the crewmembers in navigational and operational aspects and thus enhancing the safety of IWT.</p> <p>Following measures can be eligible under this priority:</p> <ol style="list-style-type: none"> 3.1. Measures to adapt equipment used for manoeuvring of inland vessel and related indicating and monitoring devices 3.2. Measures addressing vessel's safety equipment and fire protection systems 3.3. Measures addressing safety at work stations and crew safety 3.4 Measures addressing other safety related issues 			
<p>3.1 Measures to adapt equipment used for manoeuvring of inland vessel and related indicating and monitoring devices</p> <p>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.</p> <p>Investments may relate to following:</p> <ul style="list-style-type: none"> ► Installations and adaptations related to control, indicating and monitoring devices and equipment (e.g. automatic switch of indicating and monitoring devices to alternative power source³², control for main engines by a single lever³³, display of operational status of devices and equipment³⁴, etc.), 			

³¹ The state aid shall be notified to the European Commission and go through the whole notification and assessment process. The intensity can differ for each measure.

³² ES-TRIN Chapter 7 Wheelhouse, Art. 7.03 General requirements concerning control, indicating and monitoring equipment (8) [depending on transitional provisions]

³³ ES-TRIN Chapter 7 Wheelhouse, Art. 7.04 Specific requirements concerning control, indicating and monitoring equipment of main engines and steering system (2) and (9) [depending on transitional provisions]

³⁴ ES-TRIN Chapter 7 Wheelhouse, Art. 7.04 Specific requirements concerning control, indicating and monitoring equipment of main engines and steering system (3) [depending on transitional provisions]

- ▶ Installations and adaptations related to wheelhouse (measures to ensure unobstructed view³⁵, installation of independent alarm system³⁶, measures enabling lifting and lowering the wheelhouse³⁷, 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 monitoring³⁸, other measures to ensure required manoeuvrability of steering system, temperatures, design of rudder stocks or manual drive³⁹, etc.)

Assessment basis for the grant

Proven expenditure for the acquisition of the technology and the implementation of the measure (alternative with capping per vessel).

Legislation/Standard

- ES-TRIN

3.2 Measures addressing vessel's safety equipment and fire protection systems

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 following:

- ▶ Installations and adaptations related to safety measures of engines and engine equipment⁴⁰ (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 equipment⁴¹
- ▶ Installations and adaptations related to mooring equipment⁴² (replacement of mooring and other cables)
- ▶ Installations and adaptations related to firefighting system (permanently installed firefighting systems⁴³ for general cargo vessels without dangerous goods)

Assessment basis for the grant

Proven expenditure for the acquisition of the technology and the implementation of the measure (alternative with capping per vessel).

Legislation/Standard

- ES-TRIN

³⁵ ES-TRIN Chapter 7 Wheelhouse, Art. 7.02 Unobstructed view (2) to (6) [depending on transitional provisions]

³⁶ ES-TRIN Chapter 7 Wheelhouse, Art. 7.09 Alarm system [depending on transitional provisions]

³⁷ ES-TRIN Chapter 7 Wheelhouse, Art. 7.12 Elevating wheelhouses [depending on transitional provisions]

³⁸ ES-TRIN Chapter 6 Steering system, Art. 6.02 Steering apparatus drive unit (1), (2) and (3), Art. 6.03 Hydraulic steering apparatus drive unit (1), Art. 6.07 Indicators and monitoring devices (2a) and (2e) [depending on transitional provisions]

³⁹ ES-TRIN Chapter 6 Steering system, Art. 6.01 General requirements (1), (3) and (7) [depending on transitional provisions]. Art. 6.05 Manual drive (1) [depending on transitional provisions]

⁴⁰ ES-TRIN Chapter 8 Engine design, Art. 8.02 Safety equipment (1), (4) and (5). [transitional period] Art. 8.03 Propulsion systems (2) and (4) [depending on transitional provisions]

⁴¹ ES-TRIN Chapter 13 Equipment, Art. 13.01 Anchor equipment [depending on transitional provisions]

⁴² ES-TRIN Chapter 13 Equipment, Art. 13.02 Other equipment [depending on transitional provisions]

⁴³ ES-TRIN Chapter 13 Equipment, Art. 13.04 Permanently installed firefighting systems for protecting accommodation spaces, wheelhouses and passenger rooms and 13.05 Permanently installed firefighting systems for protecting engine rooms, boiler rooms and pump rooms [depending on transitional provisions]

3.3 Measures addressing safety at work stations and crew safety

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

- ▶ Installations and adaptations to (completing of) deck cover & deck equipment (e.g. hatch covers⁴⁴, winches⁴⁵) and other protection against falling⁴⁶, or safety equipment like inflatable lifejackets⁴⁷

Assessment basis for the grant

Proven expenditure for the acquisition of the technology and the implementation of the measure (alternative with capping per vessel).

Legislation/Standard

- ES-TRIN

3.4 Measures addressing other safety related issues

Installation of other equipment or adaptations to inland vessels to support the crewmembers in navigational and operational aspects and thus enhancing the safety of IWT.

Investments may relate to following:

- ▶ 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, stability monitor ...)
- ▶ Acquisition of equipment for abatement and/or containment of cargo spills (e.g. skimmer pump, inflatable dam and related equipment for tank barges)

Assessment basis for the grant

Proven expenditure for the acquisition of the technology and the implementation of the measure (alternative with capping per vessel).

Legislation/Standard

Not applicable, however ES-TRIN shall be considered in case of any technical requirements for inland waterway vessels.

Terms of application

The aid covers equipment/technologies/systems and works carried out on **existing** and **new vessels**.

Eligibility of the measures given as examples above is subject to transitional provisions of ES-TRIN and has to be assessed on a case by case basis for every individual vessel.

The installed equipment and technology shall enable to achieve performance exceeding the standards in force at the time of application.

Table 4: Detailed measures Priority 3

⁴⁴ ES-TRIN Chapter 14 Safety at work stations, Art. 14.10 Hatch covers [depending on transitional provisions]

⁴⁵ ES-TRIN Chapter 14 Safety at work stations, Art. 14.11 Winches [depending on transitional provisions]

⁴⁶ ES-TRIN Chapter 14 Safety at work stations, Art. 14.02 Protection against falling. [depending on transitional provisions]

⁴⁷ ES-TRIN Chapter 13 Equipment, Art. 13.08 Lifebuoys and lifejackets (2) [transitional period]

3.4 Priority 4 Renewal of actors in the sector

Priority 4. Renewal of actors in the sector			
GBER if applicable	N/A		
Intensity of aid	Maximum	Medium enterprises	Small enterprises
<i>(to be defined by country)⁴⁸</i>	XX %	XX %	XX %
<p><i>The activities towards the compliance with the Standards and legislation in force are not eligible.</i></p> <p><i>Only works or equipment which are not compulsory according to Union standards (and therefore go beyond the current Union standards) are eligible for support under state aid. If the installation of certain equipment or features is made mandatory in the period of the state aid, the corresponding works or equipment will no longer be eligible.</i></p>			
<p>Objective ►►► Sectoral development</p> <p>Measure aims to encourage the acquisition of the first vessel for new IWT companies and new entrants as entrepreneurs. Investments may relate to following:</p> <ul style="list-style-type: none"> ► Acquisition of first vessel for new inland waterborne transport companies and new entrants as entrepreneurs <p>Terms of application</p> <p>Only to new entrants into the profession / into IWT sector (new individuals or new companies only that have not benefitted from this aid).</p> <p>Assessment basis for the grant</p> <p><i>Example: FR SA.48804 – EUR 80 / ton of deadweight, within a limit of 20% of the purchase price of the vessel and EUR 60,000 per vessel over the duration of the plan.</i></p> <p>Legislation/Standard</p> <p>N/A</p>			

Table 5: Detailed measures Priority 4

⁴⁸ The state aid shall be notified to the European Commission and go through the whole notification and assessment process. The intensity can differ for each measure.

3.5 Priority 5 Promote the emergence of innovative solutions

Priority 5. Promote the emergence of innovative solutions			
GBER if applicable	Aid for research and development projects (Art. 25)		
Intensity of aid	Maximum	Medium enterprises	Small enterprises
Article 25 GBER	(a) 100% fundamental research (b) 50% industrial research (c) 25% experimental development (d) 50% feasibility studies	(b) see Art. 25(6) (c) see Art. 25(6) (d) ↑ by 10%	(b) see Art. 25(6) (c) see Art. 25(6) (d) ↑ by 20%
(to be defined by country) ⁴⁹	XX %	XX %	XX %
<i>The activities towards the compliance with the Standards and legislation in force are not eligible.</i>			
<p>Objective ►►► Sectoral development</p> <p>Measure is dedicated to development and experimentation with innovative solutions. Eligible projects may relate to following activities:</p> <ul style="list-style-type: none"> ► 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 <p><u>Assessment basis for the grant</u></p> <p><i>Example: FR SA.48804 - The intensity of assistance of Voies Navigables de France (VNF) depends on the type of applicant and project and is capped at EUR 100,000 per project.</i></p> <ul style="list-style-type: none"> • <i>Fundamental research: 50% of eligible costs</i> • <i>Industrial research: 50% of eligible costs</i> • <i>Experimental development: from 25%-50% of eligible costs</i> • <i>Feasibility study: 50% of eligible costs</i> 			

Table 6: Detailed measures Priority 5

⁴⁹ If the intensity of aid is higher than intensity limits in GBER, the state aid shall be notified to the European Commission and go through the whole notification and assessment process. The intensity can differ for each measure.

4 Form of aid

- (40) The aid will be granted in the form of non-reimbursable direct grant.

5 Beneficiaries

PRIORITIES 1, 2, 3

- (41) 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].

Input from national reports on fleet investment needs elaborated in the framework of GRENDEL on the potential aid user (versions 28.02.2020)	
Austria	N/A
Slovakia	N/A
Hungary	can/will be all owners or operators of fleets of inland waterway vessels whose vessels are recorded in the national vessel register (of Hungary), regardless of the nationality of the operator having its registered office, branch or subsidiary in Hungary and carrying goods transport by inland waterways in Hungary
Croatia	N/A
Serbia⁵⁰	can/will be all owners or operators of fleets of inland waterway vessels whose vessels are recorded in the national vessel register (of Serbia), regardless of the nationality of the operator having its registered office, branch or subsidiary in Serbia and carrying goods transport by inland waterways in Serbia
Romania	can/will be all owners or operators of fleets of inland waterway vessels whose vessels are recorded in the national vessel register (of Romania), regardless of the nationality of the operator having its registered office, branch or subsidiary in Romania and carrying goods transport by inland waterways in Romania
Bulgaria	can/will be all owners or operators of fleets of inland waterway vessels whose vessels are recorded in the national vessel register (of Bulgaria), regardless of the nationality of the operator having its registered office, branch or subsidiary in Bulgaria and carrying goods transport by inland waterways in Bulgaria

Table 7: Potential aid users

PRIORITY 4

- (42) 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].

⁵⁰ As candidate country, Serbia is considered in the table.

PRIORITY 5

- (43) 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 IWT operators (end users) will be verified, with the dual objective of improving the environmental or logistical performance of IWT.

ALL PRIORITIES

- (44) The sectors addressed by this aid are H.50.30 – Inland passenger water transport and H.50.40 – Inland freight water transport.
- (45) [All types of beneficiaries]⁵¹ are eligible under the scheme.
- (46) The estimated number of beneficiaries in [EU Member State] will be between 11 and 50⁵².

6 Budget, aid intensity and cumulation rules

PRIORITIES 1, 5 (APPLYING GBER)

- (47) The overall allocated budget of the aid for the part of the programme under GBER is EUR [add the amount] million over the period [YYYY-YYYY], for [X] years. EUR [add the amount] will be allocated to the support of Priority 1. EUR [add the amount] will be allocated to the support of Priority 5.

PRIORITIES 2, 3, 4 (REQUIRING A NOTIFICATION)

- (48) The overall allocated budget of the aid for the notified part of the programme is EUR [add the amount] million over the period [add the years], for [X] years. EUR [add the amount] will be allocated to the support of Priority 2. EUR [add the amount] will be allocated to the support of Priority 3. EUR [add the amount] will be allocated to the support of Priority 4.

ALL PRIORITIES

- (49) The actual budget can change based on the number of chosen projects and aid amount to be granted to these.
- (50) Based on the decision of the Member State, the state aid scheme might be (back) financed from the [Cohesion fund or State or Operational Programme].
- (51) The maximum aid intensity will amount [XX]% of the eligible costs for the priority 1, etc.
- (52) Maximum aid intensity can be different for small enterprises/medium-sized enterprises.

⁵¹ SMEs and large enterprises

⁵² Estimations coming from national reports on fleet investment needs elaborated in the framework of GRENDEL

- (53) The measures can be cumulated with each other, within the limits of the aid ceilings⁵³ per priority, for the whole duration of the state aid scheme.
- (54) The aid granted under this scheme cannot be cumulated with other aid for the same eligible costs, if the combination results in an intensity or amount of aid higher than the maximum ceiling applicable to aid granted under this scheme.

[The provisions related to cumulation rules shall be carefully checked at national level and the legal provisions of the GBER on cumulation shall be considered⁵⁴.]

7 Duration

[The budgetary period is from 1 January 2021 until 31 December 2027. EU wide project roll-out rules have to be applied.]

PRIORITIES 1, 5 (APPLYING GBER)

- (55) The aid may be granted for a period of [X] years, from [DD MONTH YYYY] until [DD MONTH YYYY].
[For the sake of consistency, it can be decided that the aid covered by the GBER can enter into force at the same time as the aid notified.]

PRIORITIES 2, 3, 4 (REQUIRING A NOTIFICATION)

- (56) The aid will be granted only after the European Commission has authorised the scheme. Following the approval of the Commission the aid may be granted for a period of [X] years, from [DD MONTH YYYY] until [DD MONTH YYYY].
[Maximum duration of the aid scheme is 6 years. If the duration exceeds 6 years, clarifications on why a longer period is indispensable to achieve the objectives of the aid scheme must be indicated.]

⁵³ To be defined by Member States when elaborating a concrete state aid scheme

⁵⁴ Article 8 GBER

8 Procedure for implementation in the national legal framework

- (57) This section only considers the procedure towards the European Commission and related to EU state aid rules, not internal procedures at national level.
- (58) The procedure that the Member State has to follow for the implementation of the state aid scheme depends on the legal basis of the measure. For the aid measures falling within GBER, there is exemption of prior notification and approval of the European Commission which could concern the priorities 1 and 5 of the presented model state aid scheme. The aid measures requesting notification approval of the European Commission will go through a compatibility assessment. This would apply at least to the priorities 2, 3, 4.

8.1 Exemption of prior notification and EC approval for measures under GBER

- (59) The GBER exempts Member States from the notification obligation, as long as all the GBER criteria are fulfilled⁵⁵. One of these criteria is the incentive effect of the aid (Art. 6(1) GBER). For measures under the GBER, the aid is deemed to have an incentive effect if the beneficiary has submitted a written application for the aid to the Member State concerned before work on the project or activity starts (Art. 6(2) GBER).
- (60) The measures which are exempted under the GBER only need to be published and reported to the Commission:
- The Member State shall ensure the publication on a state aid website of summary information of the state aid as required in Article 9(1) GBER.
 - The Member State shall transmit to the Commission via the Commission's electronic notification system summary information about each aid measure exempted under the GBER, together with a link providing access to the full text of the aid measure, including its amendments, within 20 working days following its entry into force (Art. 11(1)(a) GBER)
 - The Member State shall transmit to the Commission an annual report, in electronic form, on the application of this regulation, in respect of each whole year or each part of the year during which this regulation applies, as requested in Article 11(1)(b) GBER.
- (61) The Member States shall maintain detailed records with the information and supporting documentation necessary to establish that all the conditions laid down in the GBER are fulfilled. Further information on the monitoring is available in Article 12 GBER.

8.2 Compatibility assessment for the measures notified to the European Commission

- (62) As general rule, state aid must be notified to and cleared by the Commission before it is granted. The notification forms made available by the European Commission shall be used at this occasion⁵⁶. A compatibility assessment of the Commission will take place. The objective of the present section is to provide examples in this regard.

⁵⁵ Article 3 GBER

⁵⁶ Form on general information and supplementary information sheets when necessary

- (63) The priorities 2, 3, 4 are concerned by the notification. In case that the priorities 1 and 5 would finally also need to be notified due to the choice not to follow all the mandatory provisions of the GBER, they are also mentioned in the following developments.
- (64) Two possible legal bases are possible in the framework of a notification:
- Article 93 TFEU, as legal basis for establishing the compatibility of aid for the coordination of freight transport. The priorities 2, 3, 4 fall under Article 93 TFEU.
 - Article 107(3)(c) TFEU, as legal basis for declaring aid to facilitate the development of certain economic activities or of certain economic areas compatible with the internal market (greening among others) & Guidelines on State aid for environmental protection and energy 2014-2020 for aid for energy and environment under Article 107(3)(c) TFEU. The priorities 1⁵⁷ and 5⁵⁸ would be under this category if they were notified.

8.2.1 For the measures falling under Article 93 TFEU

- (65) For measures contributing to a shift of freight transport from road to inland waterways, the compatibility has to be assessed on the basis of Article 93 TFEU. The use of this article implies, according to a constant decisional practice, that aid for the coordination of transport will be deemed compatible with the internal market if the conditions below are met.

1 Contribution to a well-defined objective of common interest

- Promoting a shift from road to IWT
- 2011 White Paper on Transport
- NAIADES action programmes (I and II)

In CZ SA.43080, the Commission noted that the aim of the Subprogramme 2 (multimodality) and Subprogramme 3 (safety) of the notified scheme was to implement EU objectives in the inland waterways sector by promoting the adaptation of the existing fleet. As regards Subprogramme 2, it directly contributed to achieving a modal shift. Subprogramme 3, by increasing safety in IWT, also contributed to achieving a modal shift.

2 Necessity (market failure) and incentive effect of the aid

Beneficiaries would not have carried out the aided activities without the granting of the aid.

In CZ SA.43080, the following elements were mentioned under this point:

- The Commission recalled that intermodal competition in the transport sector is suffering from market failure due to the fact that different modes do not pay the real costs of negative externalities they impose on society.
- The limited modal share of inland waterways and, conversely, the potential of the waterway network

⁵⁷ Apart from measure 1.7 related to education and training

⁵⁸ This has to be nuanced for the measures under priority 5 depending on the objective pursued. For the measures having objectives related to coordination of freight transport, Article 93 TFEU would apply.

- The market failure resulting from structural constraints in the sector.
- The necessity to adapt technically the vessels to develop the inland waterway freight market and to maintain IWT's head start as an efficient, safe and environmentally friendly mode of transport.
- The fact that the cost of the transformations under Subprogrammes 2 and 3 is high relative to the size of the beneficiaries.

3 Proportionality of the aid

Aid limited to the minimum necessary and therefore considered as proportionate

In CZ SA.43080, the following elements were mentioned under this point:

- The limited available amount under the scheme and the number of potential beneficiaries were considered, as well as the fact that the aid is awarded on the basis of a bidding process.
- The fact that individual aid is only granted after its necessity has been demonstrated in a detailed counterfactual analysis.

4 Open and non-discriminatory access to the aid measure

In CZ SA.43080, the following elements were mentioned under this point:

- The scheme relates to all SME operators whose vessels are recorded in the Waterways Register of the Czech Republic regardless of the nationality of the operator.
- The aid will be granted provided that the applicant fulfils the conditions foreseen. The procedure of granting the aid imposes the same obligations on all potential beneficiaries and envisages objective rules for calculating the costs and amount of aid.

5 No distortion of competition contrary to the common interest

Aid addressing a well defined market failure

In CZ SA.43080, the following elements were mentioned under this point:

- The programme aims to limit to a certain extent the competitive imbalance between IWT and road transport resulting in part from the age of the transport equipment.
- The programme has a limited budget of EUR 15.6 million which will be disbursed over a six-year period to a relatively large number of potential recipients (could be as many as 50).

8.2.2 For the measures falling under Article 107(3)(c) TFEU and EEAG

- (66) For the notified measures aiming at increasing the level of environmental protection by giving aid to undertakings going beyond Union standards or increasing environmental protection in the absence of Union standards, the compatibility has to be assessed on the basis of Article 107(3)(c) TFEU and the Guidelines on State aid for environmental protection and energy 2014-2020 (hereinafter EEAG). According to the EEAG the Commission will consider a state aid measure compatible with the internal market only if it satisfies each of the criteria below (examples coming mainly from CZ SA.43080).

1 Contribution to a well-defined objective of common interest

- If a measure is co-financed by ESIF, Member States may rely on reasoning from Operational Programmes in indicating the environmental or energy objectives pursued.
- EU environmental policies & legislation (examples)
 - A Clean Planet for All (COM/2018/773 final, 28 November 2018)
 - A Europe that protects: Clean air for all (COM/2018/330 final, 17 May 2018)
 - Call by Council of transport ministers and European Parliament for improvement of sustainability of IWT in view of contributing to Paris agreement objectives (COP21)
 - Mannheim declaration
 - Political Guidelines for the next European Commission 2019-2024 with its “European Green Deal”
 - NRMM Regulation related to emission limits for internal combustion engines for non-road mobile machinery
- National Air quality plans, etc.

2 Need for State intervention

- Greening investments are not possible if purely commercial interests are pursued
 - High financial costs of modernisation/greening, no motivation on the side of vessel operators to modernise
 - Vessel operators do not have sufficient own resources (additional structural costs of the sector, incl. waterway maintenance for the Danube)

3 Appropriateness of the aid

- For aid schemes implementing the objectives and priorities of the operational programmes, the financing instrument chosen in the programme is in principle presumed to be an appropriate instrument.

4 Incentive effect

- Aid aims to support investments that lead to a higher level environmental protection as it supports the realization of investments that go beyond the applicable Union standards (e.g. air pollutant emissions) and contributes positively to the environmental objective set out in point 55 of the EEAG. Such investments are not mandatory and the investor would not undertake them without the aid.
- The aid is awarded on the basis of a competitive bidding process.
- The application for aid must be submitted prior to the start of works on the project.
- A standardized application form will be used for deciding upon the grant of the aid, which includes the presentation of a counterfactual.

5 Proportionality of the aid

- The aid is considered to be proportionate if the aid amount per beneficiary is limited to the minimum needed to achieve the environmental protection or energy objective aimed for (point 69 of the EEAG).
- According to point 70 of the EEAG as a general principle, aid will be considered to be limited to the minimum necessary if the aid corresponds to the net extra cost necessary to meet the objective, compared to the counterfactual scenario in the absence of aid.

→ For measures that are not subject to an individual assessment, a simplified method that would focus on calculating the extra investment costs, that is to say not taking into account the operating benefits and costs, may be used.

- In the Czech scheme, there is a limit whereby all modernizations on a vessel during the aid scheme cannot exceed 30% of the price of a new reference vessel.
- The aid granted under this scheme cannot be cumulated with other aid for the same eligible costs.

6 Avoidance of undue negative effects on competition and trade

If state aid measures are well targeted to the market failure they aim to address, the risk that the aid will unduly distort competition is more limited.

- According to point (99) of the EEAG in order to keep the distortions of competition and trade to a minimum, the Commission places great emphasis on the selection process.
- The Czech programme has a limited budget of EUR 15.6 million which will be disbursed over a six-year period to a relatively large number of potential recipients (could be as many as 50).

7 Transparency

The transparency conditions must meet the EEAG requirements in Section 3.2.7.

9 Aid scheme conditions for the assessment of applications at national level

- (67) The introduction of an aid scheme generally presupposes the formal adoption by the Member State of a text spelling out its purposes, the conditions to receive aid, the applicable procedure and eventually the aid granting authorities. This national legal basis can be a law, a decree, an administrative act, a contract, a call for proposals or other (or a combination of these)⁵⁹.
- (68) Applications can be submitted on the basis of calls or not.
- (69) Below are some examples of aid scheme conditions (CZ SA.43080):
- Investment projects must not have started prior to the aid application by the beneficiary to the granting authority.
 - Aid is granted under a competitive bidding process.
 - Composition of projects applications:
 - a description of the current situation,
 - a justification for the need for investment and proof that without the aid the investment would not be realized,
 - an assessment of the effectiveness of and economic return on such investment,
 - a technical description of the purchased asset and assessment of its expected use,
 - the submission of technical documentation approved by an entity duly authorised to carry out technical inspections of vessels, or by a classification society recognised under EU legislation,
 - etc.
- (70) Project applications are subject to detailed assessment. The evaluation criteria will be detailed in the programme documentation. A significant factor in the system for the evaluation of the applications submitted can be the aid intensity sought (CZ SA.43080). Applicants seeking a lower aid intensity than the maximum permitted would score higher than those applying for the maximum aid intensity.

⁵⁹ State Aid Manual of Procedures (Internal DG Competition working documents on procedures for the application of Articles 107 and 108 TFUE), 2013, 4.1, Section 10-12

Annexes

Annex 1: Extracts of the General Block Exemption Regulation (GBER)

Annex 2: Overview of the GRENDEL model state aid scheme

Annex 3: Overview of the legal framework of state aid for modernizing the Danube fleet

Annex 4: Overview of all the identified measures per priority

Annex 5: Eligibility of costs

Annex 1: Extracts of the General Block Exemption Regulation (GBER)

1.1 Definitions

This overview provides some definitions that are critical and necessary to understand and are of interest for the model state aid scheme for modernisation and innovation of inland waterway vessels in the Danube region.

Other definitions are provided in the regulation itself.

beyond the applicable Union standards	There is no precise indication on how much is “beyond the applicable Union standard”. It shall be checked both with Member States and the European Commission what would be the proper indicator.
‘Union standard’ means:	(a) a mandatory Union standard setting the levels to be attained in environmental terms by individual undertakings; or (b) the obligation under Directive 2010/75/EU of the European Parliament and of the Council to use the best available techniques (BAT) and ensure that emission levels of pollutants are not higher than they would be when applying BAT; for the cases where emission levels associated with the BAT have been defined in implementing acts adopted under Directive 2010/75/EU, those levels will be applicable for the purpose of this Regulation; where those levels are expressed as a range, the limit where the BAT is first achieved will be applicable;

1.2 Block exemptions applicable for modernisation of inland vessels

Section 4 Aid for research and development and innovation	
Art 25	Aid for research and development projects
	<p>1. Aid for research and development projects, including projects having received a Seal of Excellence quality label under the Horizon 2020 SME-instrument, shall be compatible with the internal market within the meaning of Article 107(3) of the Treaty and shall be exempted from the notification requirement of Article 108(3) of the Treaty provided that the conditions laid down in this Article and in Chapter I are fulfilled.</p> <p>2. The aided part of the research and development project shall completely fall within one or more of the following categories:</p> <ul style="list-style-type: none"> (a) fundamental research; (b) industrial research; (c) experimental development; (d) feasibility studies. <p>3. The eligible costs of research and development projects shall be allocated to a specific category of research and development and shall be the following:</p> <ul style="list-style-type: none"> (a) personnel costs: researchers, technicians and other supporting staff to the extent employed on the project; (b) costs of instruments and equipment to the extent and for the period used for the project. Where such instruments and equipment are not used for their full life for the project, only the

	<p>depreciation costs corresponding to the life of the project, as calculated on the basis of generally accepted accounting principles are considered as eligible.</p> <p>(c) Costs for of buildings and land, to the extent and for the duration period used for the project. With regard to buildings, only the depreciation costs corresponding to the life of the project, as calculated on the basis of generally accepted accounting principles are considered as eligible. For land, costs of commercial transfer or actually incurred capital costs are eligible.</p> <p>(d) costs of contractual research, knowledge and patents bought or licensed from outside sources at arm's length conditions, as well as costs of consultancy and equivalent services used exclusively for the project;</p> <p>(e) additional overheads and other operating expenses, including costs of materials, supplies and similar products, incurred directly as a result of the project;</p> <p>4. The eligible costs for feasibility studies shall be the costs of the study.</p> <p>5. The aid intensity for each beneficiary shall not exceed:</p> <p>(a) 100 % of the eligible costs for fundamental research;</p> <p>(b) 50 % of the eligible costs for industrial research;</p> <p>(c) 25 % of the eligible costs for experimental development;</p> <p>(d) 50 % of the eligible costs for feasibility studies.</p> <p>6. The aid intensities for industrial research and experimental development may be increased up to a maximum aid intensity of 80 % of the eligible costs as follows:</p> <p>(a) by 10 percentage points for medium-sized enterprises and by 20 percentage points for small enterprises;</p> <p>(b) by 15 percentage points if one of the following conditions is fulfilled:</p> <p>(i) the project involves effective collaboration:</p> <ul style="list-style-type: none"> — between undertakings among which at least one is an SME, or is carried out in at least two Member States, or in a Member State and in a Contracting Party of the EEA Agreement, and no single undertaking bears more than 70 % of the eligible costs, or — between an undertaking and one or more research and knowledge-dissemination organisations, where the latter bear at least 10 % of the eligible costs and have the right to publish their own research results; <p>(ii) the results of the project are widely disseminated through conferences, publication, open access repositories, or free or open source software.</p> <p>7. The aid intensities for feasibility studies may be increased by 10 percentage points for medium-sized enterprises and by 20 percentage points for small enterprises;</p>
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Section 5 Training aid

Art 31	Training aid
	<p>1. Training aid shall be compatible with the internal market within the meaning of Article 107(3) of the Treaty and shall be exempted from the notification requirement of Article 108(3) of the Treaty, provided that the conditions laid down in this Article and in Chapter I are fulfilled.</p> <p>2. Aid shall not be granted for training which undertakings carry out to comply with national mandatory standards on training.</p> <p>3. The eligible costs shall be the following:</p> <p>(a) trainers' personnel costs, for the hours during which the trainers participate in the training;</p> <p>(b) trainers' and trainees' operating costs directly relating to the training project such as travel expenses, materials and supplies directly related to the project, depreciation of tools and equipment, to the extent that they are used exclusively for the training project. Accommodation</p>

	<p>costs are excluded except for the minimum necessary accommodation costs for trainees' who are workers with disabilities;</p> <p>(c) costs of advisory services linked to the training project;</p> <p>(d) trainees' personnel costs and general indirect costs (administrative costs, rent, overheads) for the hours during which the trainees participate in the training.</p> <p>4. The aid intensity shall not exceed 50 % of the eligible costs. It may be increased, up to a maximum aid intensity of 70 % of the eligible costs, as follows:</p> <p>(a) by 10 percentage points if the training is given to workers with disabilities or disadvantaged workers;</p> <p>(b) by 10 percentage points if the aid is granted to medium-sized enterprises and by 20 percentage points if the aid is granted to small enterprises.</p> <p>5. Where the aid is granted in the maritime transport sector, the aid intensity may be increased to 100 % of the eligible costs provided that the following conditions are met:</p> <p>(a) the trainees are not active members of the crew but are supernumerary on board; and</p> <p>(b) the training is carried out on board of ships entered in Union registers.</p>
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Section 7 Aid for environmental protection

Art 36	<p>Investment aid enabling undertakings to go beyond Union standards for environmental protection or to increase the level of environmental protection in the absence of Union standards</p> <p>1. Investment aid enabling undertakings to go beyond Union standards for environmental protection or to increase the level of environmental protection in the absence of Union standards shall be compatible with the internal market within the meaning of Article 107(3) of the Treaty and shall be exempted from the notification requirement of Article 108(3) of the Treaty, provided that the conditions laid down in this Article and in Chapter I are fulfilled.</p> <p>2. The investment shall fulfil one of the following conditions:</p> <p>(a) it shall enable the beneficiary to increase the level of environmental protection resulting from its activities by going beyond the applicable Union standards, irrespective of the presence of mandatory national standards that are more stringent than the Union standards;</p> <p>(b) it shall enable the beneficiary to increase the level of environmental protection resulting from its activities in the absence of Union standards.</p> <p>3. Aid shall not be granted where investments are undertaken to ensure that undertakings comply with Union standards already adopted and not yet in force.</p> <p>4. By way of derogation from paragraph 3, aid may be granted for</p> <p>(a) the acquisition of new transport vehicles for road, railway, inland waterway and maritime transport complying with adopted Union standards, provided that the acquisition occurs before those standards enter into force and that, once mandatory, they do not apply to vehicles already purchased before that date.</p> <p>(b) retrofitting of existing transport vehicles for road, railway, inland waterway and maritime transport, provided that the Union standards were not yet in force at the date of entry into operation of those vehicles and that, once mandatory, they do not apply retroactively to those vehicles.</p> <p>5. The eligible costs shall be the extra investment costs necessary to go beyond the applicable Union standards or to increase the level of environmental protection in the absence of Union standards. They shall be determined as follows:</p> <p>(a) where the costs of investing in environmental protection can be identified in the total investment cost as a separate investment, this environmental protection-related cost shall constitute the eligible costs;</p> <p>(b) in all other cases, the costs of investing in environmental protection are identified by reference to a similar, less environmentally friendly investment that would have been credibly carried out</p>
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	<p>without the aid. The difference between the costs of both investments identifies the environmental protection-related cost and constitutes the eligible costs.</p> <p>The costs not directly linked to the achievement of a higher level of environmental protection shall not be eligible.</p> <p>6. Aid intensity shall not exceed 40 % of the eligible costs</p> <p>7. The aid intensity may be increased by 10 percentage points for aid granted to medium sized undertakings and by 20 percentage points for aid granted to small undertakings.</p> <p>8. The aid intensity may be increased by 15 percentage points for investments located in assisted areas fulfilling the conditions of Article 107(3)(a) of the Treaty and by 5 percentage points for investments located in assisted areas fulfilling the conditions of Article 107(3)(c) of the Treaty.</p>
Art 37	<p>Investment aid for early adaptation to future Union standards</p> <p>1. Aid encouraging undertakings to comply with new Union standards which increase the level of environmental protection and are not yet in force shall be compatible with the internal market within the meaning of Article 107(3) of the Treaty and shall be exempted from the notification requirement of Article 108(3) of the Treaty, provided that the conditions laid down in this Article and in Chapter I are fulfilled.</p> <p>2. The Union standards shall have been adopted and the investment shall be implemented and finalised at least one year before the date of entry into force of the standard concerned.</p> <p>3. The eligible costs shall be the extra investment costs necessary to go beyond the applicable Union standards. They shall be determined as follows:</p> <p>(a) where the costs of investing in environmental protection can be identified in the total investment cost as a separate investment, this environmental protection-related cost shall constitute the eligible costs;</p> <p>(b) in all other cases, the costs of investing in environmental protection are identified by reference to a similar, less environmentally friendly investment that would have been credibly carried out without the aid. The difference between the costs of both investments identifies the environmental protection-related cost and constitutes the eligible costs.</p> <p>The costs not directly linked to the achievement of a higher level of environmental protection shall not be eligible.</p> <p>4. The aid intensity shall not exceed the following:</p> <p>(a) 20 % of the eligible costs for small undertakings, 15 % of the eligible costs for medium-sized undertakings and 10 % of the eligible costs for large undertakings if the implementation and finalisation of the investment take place more than three years before the date of entry into force of the new Union standard;</p> <p>(b) 15 % of the eligible costs for small undertakings, 10 % of the eligible costs for medium-sized undertakings and 5 % of the eligible costs for large undertakings if the implementation and finalisation of the investment take place between one and three years before the date of entry into force of the new Union standard.</p> <p>5. The aid intensity may be increased by 15 percentage points for investments located in assisted areas fulfilling the conditions of Article 107(3)(a) of the Treaty and by 5 percentage points for investments located in assisted areas fulfilling the conditions of Article 107(3)(c) of the Treaty.</p>
Art 38	<p>Investment aid for energy efficiency measures</p> <p>1. Investment aid enabling undertakings to achieve energy efficiency shall be compatible with the internal market within the meaning of Article 107(3) of the Treaty and shall be exempted from the notification requirement of Article 108(3) of the Treaty, provided that the conditions laid down in this Article and in Chapter I are fulfilled.</p> <p>2. Aid shall not be granted under this Article where improvements are undertaken to ensure that undertakings comply with Union standards already adopted, even if they are not yet in force.</p>

	<p>3. The eligible costs shall be the extra investment costs necessary to achieve the higher level of energy efficiency. They shall be determined as follows:</p> <p>(a) where the costs of investing in energy efficiency can be identified in the total investment cost as a separate investment, this energy efficiency-related cost shall constitute the eligible costs;</p> <p>(b) in all other cases, the costs of investing in energy efficiency are identified by reference to a similar, less energy efficient investment that would have been credibly carried out without the aid. The difference between the costs of both investments identifies the energy efficiency-related cost and constitutes the eligible costs.</p> <p>The costs not directly linked to the achievement of a higher level of energy efficiency shall not be eligible.</p> <p>4. The aid intensity shall not exceed 30 % of the eligible costs.</p> <p>5. The aid intensity may be increased by 20 percentage points for aid granted to small undertakings and by 10 percentage points for aid granted to medium-sized undertakings.</p> <p>6. The aid intensity may be increased by 15 percentage points for investments located in assisted areas fulfilling the conditions of Article 107(3)(a) of the Treaty and by 5 percentage points for investments located in assisted areas fulfilling the conditions of Article 107(3)(c) of the Treaty.</p>
Art 41	<p>Investment aid for the promotion of energy from renewable sources</p> <p>1. Investment aid for the promotion of energy from renewable energy sources shall be compatible with the internal market within the meaning of Article 107(3) of the Treaty and shall be exempted from the notification requirement of Article 108(3) of the Treaty, provided that the conditions laid down in this Article and in Chapter I are fulfilled.</p> <p>2. Investment aid for the production of biofuels shall be exempted from the notification requirement only to the extent that the aided investments are used for the production of sustainable biofuels other than food-based biofuels. However, investment aid to convert existing food-based biofuel plants into advanced biofuel plants shall be exempted under this Article, provided that the food-based production would be reduced commensurate to the new capacity.</p> <p>3. Aid shall not be granted for biofuels which are subject to a supply or blending obligation.</p> <p>4. Aid shall not be granted for hydropower installations that do not comply with Directive 2000/60/EC of the European Parliament.</p> <p>5. The investment aid shall be granted to new installations only. No aid shall be granted or paid out after the installation started operations and aid shall be independent from the output.</p> <p>6. The eligible costs shall be the extra investment costs necessary to promote the production of energy from renewable sources. They shall be determined as follows:</p> <p>(a) where the costs of investing in the production of energy from renewable sources can be identified in the total investment cost as a separate investment, for instance as a readily identifiable add-on component to a pre-existing facility, this renewable energy-related cost shall constitute the eligible costs;</p> <p>(b) where the costs of investing in the production of energy from renewable sources can be identified by reference to a similar, less environmentally friendly investment that would have been credibly carried out without the aid, this difference between the costs of both investments identifies the renewable energy-related cost and constitutes the eligible costs;</p> <p>(c) for certain small installations where a less environmentally friendly investment cannot be established as plants of a limited size do not exist, the total investment costs to achieve a higher level of environmental protection shall constitute the eligible costs.</p> <p>The costs not directly linked to the achievement of a higher level of environmental protection shall not be eligible.</p> <p>7. The aid intensity shall not exceed:</p> <p>(a) 45 % of the eligible costs if the eligible costs are calculated on the basis of point (6)(a) or point (6)(b);</p>

	<p>(b) 30 % of the eligible cost if the eligible costs are calculated on the basis of point (6)(c).</p> <p>8. The aid intensity may be increased by 20 percentage points for aid granted to small undertakings and by 10 percentage points for aid granted to medium-sized undertakings.</p> <p>9. The aid intensity may be increased by 15 percentage points for investments located in assisted areas fulfilling the conditions of Article 107(3)(a) of the Treaty and by 5 percentage points for investments located in assisted areas fulfilling the conditions of Article 107(3)(c) of the Treaty.</p> <p>10. Where aid is granted in a competitive bidding process on the basis of clear, transparent and non-discriminatory criteria, the aid intensity may reach 100 % of the eligible costs. Such a bidding process shall be non-discriminatory and provide for the participation of all interested undertakings. The budget related to the bidding process shall be a binding constraint in the sense that not all participants can receive aid and the aid shall be granted on the basis of the initial bid submitted by the bidder, therefore excluding subsequent negotiations.</p>
Art 44	<p>Aid in the form of reductions in environmental taxes under Directive 2003/96/EC</p> <p>1. Aid schemes in the form of reductions in environmental taxes fulfilling the conditions of Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity (1) shall be compatible with the internal market within the meaning of Article 107(3) of the Treaty and shall be exempted from the notification requirement of Article 108(3) of the Treaty, provided that the conditions laid down in this Article and in Chapter I are fulfilled.</p> <p>2. The beneficiaries of the tax reduction shall be selected on the basis of transparent and objective criteria and shall pay at least the respective minimum level of taxation set by Directive 2003/96/EC.</p> <p>3. Aid schemes in the form of tax reductions shall be based on a reduction of the applicable environmental tax rate or on the payment of a fixed compensation amount or on a combination of these mechanisms.</p> <p>4. Aid shall not be granted for biofuels which are subject to a supply or blending obligation.</p>
Art 47	<p>Investment aid for waste recycling and re-utilisation</p> <p>1. Investment aid for waste recycling and re-utilisation shall be compatible with the internal market within the meaning of Article 107(3) of the Treaty and shall be exempted from the notification requirement of Article 108(3) of the Treaty, provided that the conditions laid down in this Article and in Chapter I are fulfilled.</p> <p>2. The investment aid shall be granted for the recycling and re-utilisation of waste generated by other undertakings.</p> <p>3. The recycled or re-used materials treated would otherwise be disposed of, or be treated in a less environmentally friendly manner. Aid to waste recovery operations other than recycling shall not be block exempted under this Article.</p> <p>4. The aid shall not indirectly relieve the polluters from a burden that should be borne by them under Union law, or from a burden that should be considered a normal company cost.</p> <p>5. The investment shall not merely increase demand for the materials to be recycled without increasing collection of those materials.</p> <p>6. The investment shall go beyond the state of the art.</p> <p>7. The eligible costs shall be the extra investment costs necessary to realise an investment leading to better or more efficient recycling or re-use activities compared to a conventional process of re-use and recycling activities with the same capacity that would be constructed in the absence the aid.</p> <p>8. The aid intensity shall not exceed 35 % of the eligible costs. The aid intensity may be increased by 20 percentage points for aid granted to small undertakings and by 10 percentage points for aid granted to medium-sized undertakings.</p> <p>9. The aid intensity may be increased by 15 percentage points for investments located in assisted areas fulfilling the conditions of Article 107(3)(a) of the Treaty and by 5 percentage points for investments located in assisted areas fulfilling the conditions of Article 107(3)(c) of the Treaty.</p>

	10. Aid for investments relating to the recycling and re-utilisation of the beneficiary's own waste shall not be exempt from the notification requirement under this Article.
Art 49	<p>Aid for environmental studies</p> <p>1. Aid for studies, including energy audits, directly linked to investments referred to in this Section shall be compatible with the internal market within the meaning of Article 107(3) of the Treaty and shall be exempted from the notification requirement of Article 108(3) of the Treaty, provided that the conditions laid down in this Article and in Chapter I are fulfilled.</p> <p>2. The eligible costs shall be the costs of the studies referred to in paragraph 1.</p> <p>3. The aid intensity shall not exceed 50 % of the eligible costs.</p> <p>4. The aid intensity may be increased by 20 percentage points for studies undertaken on behalf of small enterprises and by 10 percentage points for studies undertaken on behalf of medium size enterprises.</p> <p>5. Aid shall not be granted to large undertakings for energy audits carried out under Article 8(4) of the Directive 2012/27/EU, unless the energy audit is carried out in addition to the mandatory energy audit under that Directive.</p>

Annex 2: Overview of the GRENDEL model state aid scheme

The following presentation was held during the GRENDEL Final event on 29 October 2020 (online).



Danube Transnational Programme

GRENDEL

GRENDEL „Green and Efficient Danube Fleet“

State Aid model for Modernisation of Danube fleet

Final event

Charlotte Siot

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



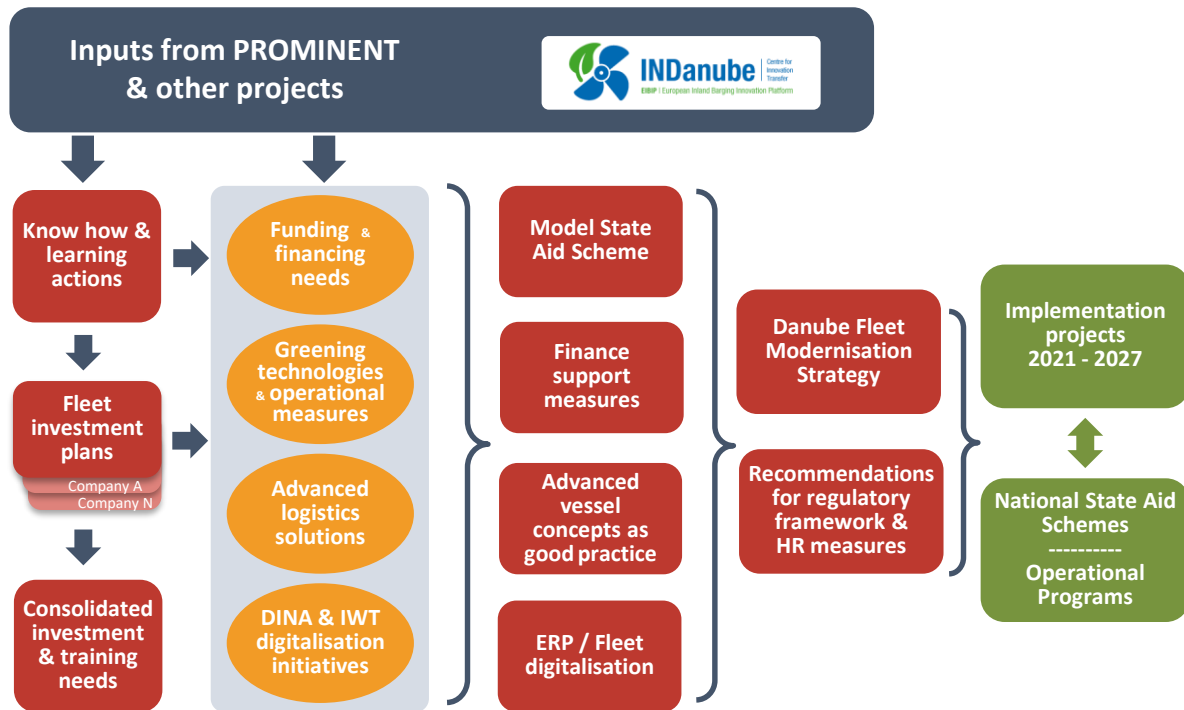
GRENDEL *Work approach*

Green and Efficient Danube Fleet

“

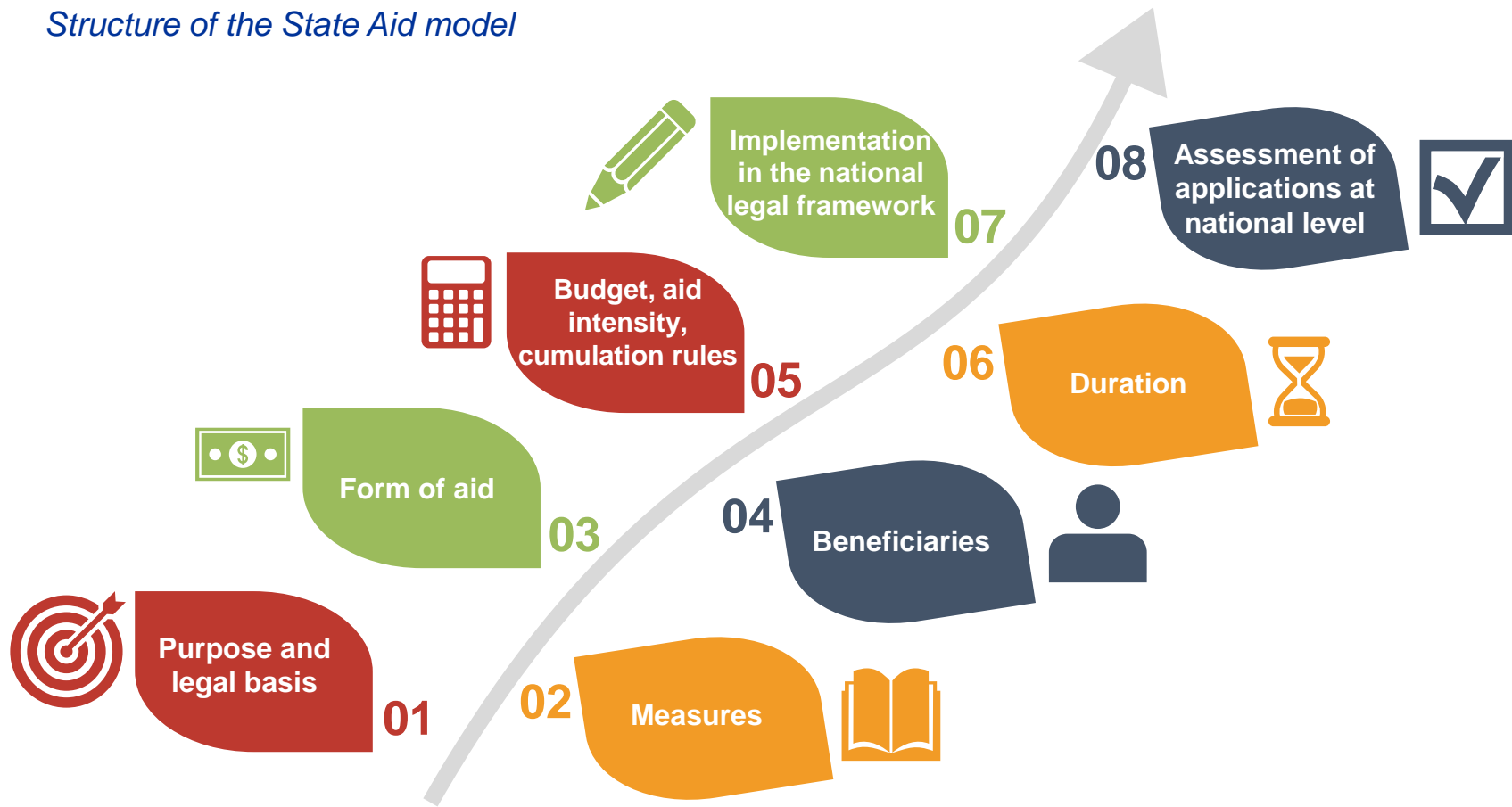
“GRENDEL addresses various fleet modernisation aspects: [i] use of low carbon & alternative fuels, [ii] reduction of air pollutant emissions (CO₂, NO_x, PM) and [iii] overall energy consumption. Besides this, [iv] transport & logistics management processes are addressed to ensure better integration of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

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



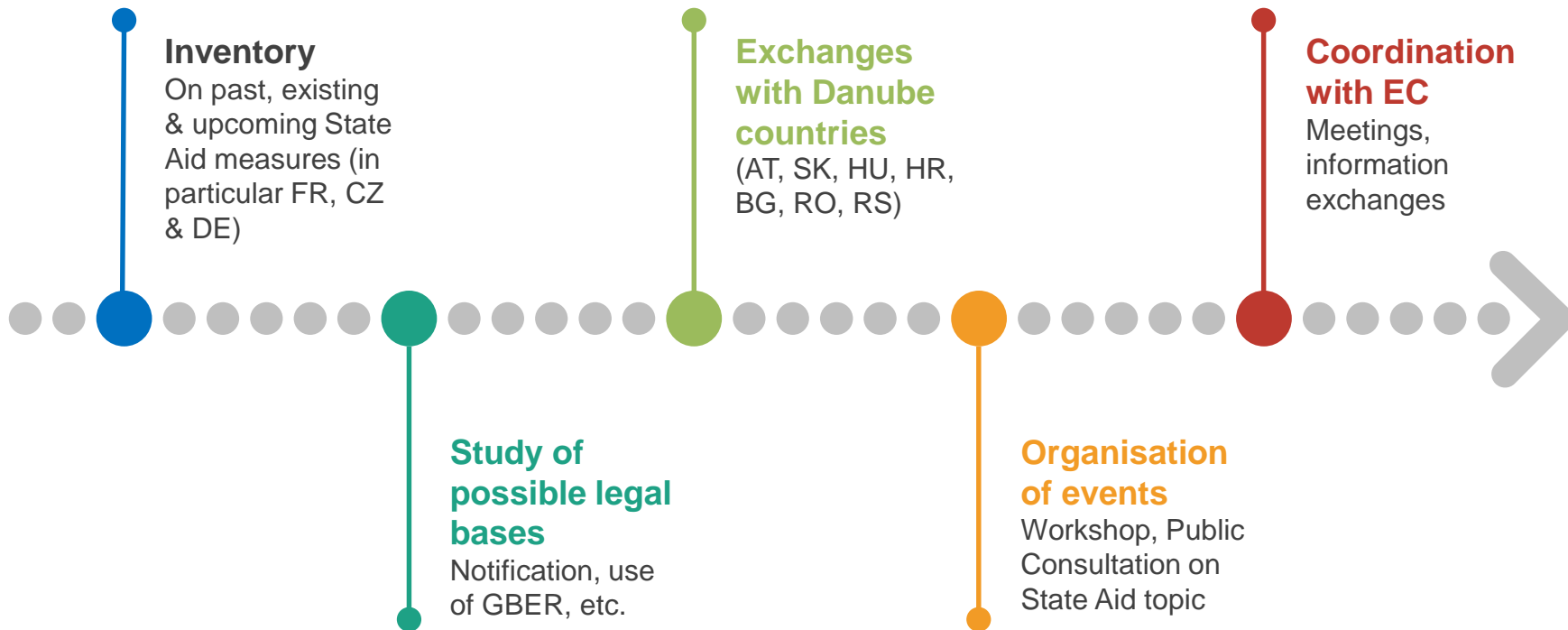
GREDEL *Danube fleet modernisation State Aid*

Structure of the State Aid model



GRENDEL *Danube fleet modernisation State Aid*

Elaboration process of the State Aid model



GRENDEL *Danube fleet modernisation State Aid*

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.

GREDEL *Danube fleet modernisation State Aid*

Possible legal bases

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 → GBER



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

STATE AID OPTIONS

de minimis (not regarded as State Aid)

- no more than EUR 200,000 is granted to single undertaking
- over period of 3 fiscal years
- de minimis* conditions are respected

NOTIFICATION

- Article 107(3)(c) TFEU
- Article 93 TFEU

GBER → applies until 31.12.2020

- Art. 36 & 37 ...environment → 40% (medium ↑10%, small ↑20%)
- Art. 38 ...energy efficiency → 30% (medium ↑10%, small ↑20%)
- Art. 41 ... energy from renewables → 35 or 45% (medium ↑10%, small ↑20%)
- Art. 49 ... enviro studies → 50% (medium ↑10%, small ↑20%)
- Etc.

GRENDEL *Danube fleet modernisation State Aid*

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 & www.INDanube.eu)
 - 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

GRENDEL *Danube fleet modernisation State Aid*

Measures of the State Aid model organised under 5 priorities

Environmental Performance



1

Reducing emissions of gaseous and particulate pollutants from internal combustion engines and auxiliary motors installed on vessels and by implementing other measures with direct environmental benefits.

 **DETAILS**

Integration into logistics chains



2

Increasing the involvement of inland waterway transport in multimodal transport chains by making the vessels more competitive, operationally flexible and secure in the context of multimodal transport chain.

 **DETAILS**

Increasing safety of IWT



3

Focusing at safety equipment, safety at work, adaptations to wheelhouse, steering system and manoeuvrability of a vessel, all to support a skipper in navigational and operational aspects / decisions → increase safety.

 **DETAILS**

Renewal of actors in the sector



4

Encourage the acquisition of the first boat for new river transport companies and new entrants.

 **DETAILS**

Innovative solutions



5

Development and experimentation with innovative solutions:

- ▶ experimentation w. existing or new technology, unproven for IWT
- ▶ R&D: design of new technologies to respond to specific needs of IWT
- ▶ feasibility studies

 **DETAILS**

Priority 1. Improving environmental performance

OBJECTIVE ► Environmental protection ► ► ► MEASURES

1.1 ACQUISITION OF LOWER EMISSION ENGINES

Art. 36 GBER

- › Acquisition of lower-emission engines
- › Acquisition of lower-emission auxiliary engines, including installation
- › Acquisition of directly subsequent components (e.g. gearbox), including installation
- › Replacement of the previously used conventional diesel engine with a lower emission engine (removal & installation)
- › In case of gas engine, the associated gas storage and supply system.

1.2 MEASURES TO REDUCE AIR POLLUTANT EMISSIONS

Art. 36 GBER

- › Installation of (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.
- › Installation of fuel water emulsion technology / plant

1.3 ENERGY EFFICIENCY & MANAGEMENT ON-BOARD

Art. 38 & Art 41 GBER

- › 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
- › Installation of energy reduction systems on board (e.g. *energy management automat, eco-pilot, generator*)
- › Installation of renewable energy production systems (e.g. *solar panels for domestic use*)
- › Adaptations of vessels energy supply wiring / network resulting from installations above (e.g. *overhaul of electrical or hydraulic circuits*)

1.4 NOISE EMISSION REDUCTION

Art. 36 GBER

- › Installations and adaptations to reduce noise emissions and vibrations in engine rooms
- › Installations and adaptations measures to reduce noise emissions and vibrations in a wheelhouse
- › Installations and adaptations measures to reduce noise emissions and vibrations in accommodation spaces, both communal living quarters and sleeping cabins.

1.5 WATER AND WASTE REDUCTION AND TREATMENT

Art. 36 GBER

- › waste storage systems
- › waste reprocessing systems
- › equipment to limit the waste generated

1.7 PROMOTION OF EDUCATION AND TRAINING IN INLAND NAVIGATION

Art. 31 GBER

- › attract qualified personnel of the next generation via training grants paid for training to achieve professional qualifications in accordance with Directive (EU) 2017/2397 and Delegated Directive (EU) 2020/12

1.6 ADAPTATIONS TO VESSELS: HYDRODYNAMICS

Art. 38 GBER

- › modification of the aft body and / or bow section of a vessel
- › improvement of the propulsion system (e.g. *nozzles, optimized propeller*)
- › qualify personnel of inland navigation via training grants paid for training courses

Priority 2. Integration into logistics chains

OBJECTIVE ► Coordination of transport ► ► ► MEASURES

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

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

Notification

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, etc.) since their acquisition is not an obligation from the regulatory framework provided in particular under the specific regulations corresponding 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

5.1 DEVELOPMENT AND EXPERIMENTATION WITH INNOVATIVE SOLUTIONS

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

GRENDEL *Danube fleet modernisation State Aid*

Form of aid & Beneficiaries – all priorities

Form of aid



Non-reimbursable direct grant

Beneficiaries



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

GRENDel *Danube fleet modernisation State Aid*

Beneficiaries – definitions per priority

Priorities 1, 2, 3



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.

GRENDEL *Danube fleet modernisation State Aid*

Measures of the State Aid model organised under 5 priorities

Environmental Performance



1

Reducing emissions of gaseous and particulate pollutants from internal combustion engines and auxiliary motors installed on vessels and by implementing other measures with direct environmental benefits.

 **DETAILS**

Integration into logistics chains



2

Increasing the involvement of inland waterway transport in multimodal transport chains by making the vessels more competitive, operationally flexible and secure in the context of multimodal transport chain.

 **DETAILS**

Increasing safety of IWT



3

Focusing at safety equipment, safety at work, adaptations to wheelhouse, steering system and manoeuvrability of a vessel, all to support a skipper in navigational and operational aspects / decisions → increase safety.

 **DETAILS**

Renewal of actors in the sector



4

Encourage the acquisition of the first boat for new river transport companies and new entrants.

 **DETAILS**

Innovative solutions



5

Development and experimentation with innovative solutions:

- ▶ experimentation w. existing or new technology, unproven for IWT
- ▶ R&D: design of new technologies to respond to specific needs of IWT
- ▶ feasibility studies

 **DETAILS**



Danube Transnational Programme

GRENDL

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Photo: © NAVROM

GRENDL “Green and efficient Danube fleet”

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

www.interreg-danube.eu/grendel

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

MERCUR
CONSTANTA - RO

Annex 3: Overview of the legal framework of state aid for modernizing the Danube fleet

The following presentation was held during the GRENDEL 2nd Public Consultation on 22 January 2020 (Budapest, Hungary).



State aid for modernizing the Danube fleet - legal framework

GRENDDEL 2nd Public consultation on State aid for the modernisation of the Danube Inland Fleet

Budapest, 22 January 2020

Daiwa Żukowska

Case Handler

Unit F2 – State aid, Transport

DG Competition, European Commission

DISCLAIMER

"The views expressed are purely those of the speaker and do not represent the official position of the European Commission."

Overview

1. Existence of State aid
2. GBER / Notification
3. Case practice
4. Revision of GBER

Is it State aid?

- (1) Aid granted by a Member State or through State resources
- (2) Confers an advantage to an undertaking
- (3) Selective advantage
- (4) Potential to distort competition
- (5) Effect on trade between Member States

Article 107(1)
TFEU – **all**
criteria must be
met

- In principle, **State aid is prohibited**
- Commission has **sole competence** to approve State aid
- *De minimis* rule



EU funds and State aid

Directly managed funds

- financed by the EU's central budget;
 - managed directly by the Commission or on the basis of a mandate of the Commission by (normally) the EIB/EIF;
 - no margin of discretion for Member States as to the use of funds
- => **No State aid**

e.g. Horizon 2020, Connecting Europe Facility

Shared management funds

Responsibility for the management, control and selection of projects rests entirely with the national authorities => **Application of State aid law**

e.g. The European Regional Development Fund (ERDF), Cohesion Fund



If State aid is present

It can be declared compatible with the internal market by the Commission either:

- 1) by a **decision**, following prior notification of the aid by the Member State
- 2) by **block exemption regulations** laying down detailed compatibility criteria => no need to notify



Investment aid to go beyond EU standards or increase the level of environmental protection in the absence of EU standards (Article 36 GBER)

- EU Regulation for engines in non-road mobile machinery (NRMM) 2016/1628 introduced stage V emission limits for inland waterway vessel engines which came into force on:
 - 01.01.2019 (engines below 300 kW)
 - 01.01.2020 (engines above 300 kW)
- Applies to new inland waterway vessel engines;
- No obligation to replace old vessel engines;
- If a Member State gives aid for retrofitting old engines, it is State aid (but cf. *de minimis*, already approved schemes, GBER, notification).



SA.48804 Prolongation and adaptation of the aid plan for modernisation of the inland waterway fleet 2018-2022 (PAMI)

Articles 25 & 49 GBER (R&D, environmental studies)

(i) fostering innovative solutions

Article 36 GBER (environmental protection)

(ii) reducing pollution, e.g. filter systems for vessels

(iii) waste treatment on board vessels and reducing waste, e.g. systems for stocking waste on board

Articles 38 & 41 GBER (energy efficiency)

(iv) transforming vessels to make them more hydrodynamic, e.g. by reconstructing back parts of vessels so that they use less energy

(v) optimising energy on board, e.g. by installing solar panels



Notification of aid measures

- If notification is necessary, allow time for the Commission's assessment
- For novel measures, consider pre-notification
- Possible legal basis:
 - Modal shift
 - Article 93 of the Treaty
 - Greening
 - Article 107(3)(c) of the Treaty
 - Environmental Guidelines
- If you have questions:
 - e-WIKI
 - contact Unit F2: COMP-F2@ec.europa.eu

Article 93 of the Treaty

1. Common interest

- Promoting a shift from road to inland waterway transport
- 2011 White Paper on Transport
- NAIADES action programmes (I and II)

2. Necessity and incentive effect

- Beneficiaries would not have carried out the aided activities absent the granting of the aid

3. Proportionality

- Aid limited to the minimum necessary
- Presumptions

4. The distortion of competition must not be contrary to the common interest

- Addresses a well-defined market failure

SA.48804 PAMI

Notified measures:

(A) Integrating the inland waterways network in the logistic chains

- Adapting vessels so they can attract new traffic
- Building or adapting vessels serving seaports
- Purchase of hardware and software to aid navigation or vessel operation

(B) Supporting renewal of operators in the industry

- Purchase of the first vessel

Aid intensities: 20-50%



Commission's review of GBER: scope and timing

Proposal to extend the GBER to three new areas:

- Financing and investment operations supported by the **InvestEU Fund**
- **RD&I** projects with Seal of Excellence, co-funded projects and Teaming Actions
- **European Territorial Cooperation** projects (also called Interreg)

Timing of GBER review:

- aim to adopt the GBER in time for the next MFF (tentative Q3 2020)



Thank you for your attention !

Annex 4: Overview of all the identified measures per priority

Priority 1. Improving environmental performance

OBJECTIVE ► Environmental protection ► ► ► MEASURES

1.1 ACQUISITION OF LOWER EMISSION ENGINES

Art. 36 GBER

- › Acquisition of lower-emission engines
- › Acquisition of lower-emission auxiliary engines, including installation
- › Acquisition of directly subsequent components (e.g. gearbox), including installation
- › Replacement of the previously used conventional diesel engine with a lower emission engine (removal & installation)
- › In case of gas engine, the associated gas storage and supply system

1.2 MEASURES TO REDUCE AIR POLLUTANT EMISSIONS

Art. 36 GBER

- › Installation of (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.
- › Installation of fuel water emulsion technology / plant

1.3 ENERGY EFFICIENCY & MANAGEMENT ON-BOARD

Art. 38 & Art 41 GBER

- › 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
- › Installation of energy reduction systems on board (e.g. energy management automat, eco-pilot, generator)
- › Installation of renewable energy production systems (e.g. solar panels for domestic use)
- › Adaptations of vessels energy supply wiring / network resulting from installations above (e.g. overhaul of electrical or hydraulic circuits)

1.4 NOISE EMISSION REDUCTION

Art. 36 GBER

- › Installations and adaptations to reduce noise emissions and vibrations in engine rooms
- › Installations and adaptations measures to reduce noise emissions and vibrations in a wheelhouse
- › Installations and adaptations measures to reduce noise emissions and vibrations in accommodation spaces, both communal living quarters and sleeping cabins

1.5 WATER AND WASTE REDUCTION AND TREATMENT

Art. 36 GBER

- › waste storage systems
- › waste reprocessing systems
- › equipment to limit the waste generated

1.7 PROMOTION OF EDUCATION AND TRAINING IN INLAND NAVIGATION

Art. 31 GBER

- › attract qualified personnel of the next generation via training grants paid for training to achieve professional qualifications in accordance with Directive (EU) 2017/2397 and Delegated Directive (EU) 2020/12

1.6 ADAPTATIONS TO VESSELS: HYDRODYNAMICS

Art. 38 GBER

- › modification of the aft body and / or bow section of a vessel
- › improvement of the propulsion system (e.g. nozzles, optimized propeller)
- › qualify personnel of inland navigation via training grants paid for training courses

Priority 2. Integration into logistics chains

OBJECTIVE ► Coordination of transport ► ► ► MEASURES

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

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

Notification

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, etc.) since their acquisition is not an obligation from the regulatory framework provided in particular under the specific regulations corresponding 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

5.1 DEVELOPMENT AND EXPERIMENTATION WITH INNOVATIVE SOLUTIONS

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

Annex 5: Eligibility of costs

Eligible costs (possible examples to update with EC services)

- Acquisition costs of equipment / material / technologies / plants / systems
- Acquisition of software incl. licenses / development of software interfaces only, not software itself
- Acquisition of a vessel
- Construction of a vessel
- Installation / adaptation works and acceptance of equipment
- Costs of an emission report (where required)
- Costs of an auditor's report (where required)
- Costs for (feasibility) studies and designs
- Costs of technical documentation needed for construction or retrofitting works at shipyard
- Consultancy related to technical documentation (not dissemination, not project management, not for setting & executing the procurement, etc.)
- Costs of classification societies

Non-eligible costs

- Costs of fuel
- Operational and maintenance costs
- Personnel costs of own personnel (personnel of applicant)
- Travel & subsistence related costs of own personnel (personnel of applicant)

Costs that can be eligible under certain circumstances

- Operational costs e.g. urea costs (in case of SCR catalysts)
According to the European Commission, operative aid is in principle a very distortive form of aid and allowed only in exceptional circumstances. Under the current EU state aid rules, operating aid can be granted to inland waterway operators in order to reduce external costs, designed to encourage a modal shift to inland waterways because it generates lower external costs than other modes such as road transport. Operating costs cannot be included in the calculations of investment costs.

Eligible costs for research and development projects according to Art 25(3) GBER (extract)


- personnel costs: researchers, technicians and other supporting staff to the extent employed on the project;
- costs of instruments and equipment to the extent and for the period used for the project. Where such instruments and equipment are not used for their full life for the project, only the depreciation costs corresponding to the life of the project, as calculated on the basis of generally accepted accounting principles are considered as eligible.
- costs of contractual research, knowledge and patents bought or licensed from outside sources at arm's length conditions, as well as costs of consultancy and equivalent services used exclusively for the project;
- additional overheads and other operating expenses, including costs of materials, supplies and similar products, incurred directly as a result of the project.

Eligible costs for training aid according to Article 31(3) GBER (extract)

- trainers' personnel costs, for the hours during which the trainers participate in the training;
- trainers' and trainees' operating costs directly relating to the training project such as travel expenses, accommodation costs, materials and supplies directly related to the project, depreciation of tools and equipment, to the extent that they are used exclusively for the training project;
- costs of advisory services linked to the training project;
- trainees' personnel costs and general indirect costs (administrative costs, rent, overheads) for the hours during which the trainees participate in the training.

Green and efficient Danube fleet

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



Output 5.2 – Summary on financing instruments for modernisation of Danube IWT fleet

Work Package 5 Regulations & Strategy

Version: 1.0

Date: 30/11/2020

FINAL

Document History

Version	Date	Authorised
1.0	30.11.2020	Pro Danube

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The Trans-European Transport Network policy is providing opportunities, in order to achieve the common strategic goals. Therefore, different funding and financing possibilities have explicitly or implicitly an eye on the transport sector. The programmes on the European level, clearly designed and structured for investments in the transport sector and its businesses, are the following:

- CEF - Connecting Europe Facility: financial support for strategic investment in transport, energy and digital infrastructure
- EFSI - European Fund for Strategic Investment: supports investment in key sectors through financial guarantees
- Horizon 2020: provides funding for research and development projects with the aim of transferring great ideas from the lab to the market.
- ESIFs - European Structural and Investment Funds, including notably:
 - CF - Cohesion Fund: supports projects reducing economic and social disparities and promoting sustainable development in 15 cohesion Member States
 - ERDF - European Regional Development Fund: aims to strengthen economic and social cohesion in the European Union by correcting imbalances between its regions

In addition, there are several programmes like the COSME (Competitiveness of Small and Medium-Sized Enterprises), which is the programme for Europe's small and medium-sized enterprises. In this process, the businesses have easier access to guarantees, loans and equity capital. Those EU 'financial instruments' are channelled through local financial institutions in EU countries and are as a consequence of facts, also relevant for fleet owners, willing to invest into the modernisation of their fleet.

The funding opportunities and the maximal co-funding rates are clearly defined by the European regulations the governing bodies. Financing can be reached via Loans, Equity Investment and other Guarantees. In addition, most of the financing programmes foresee also the opportunity to blend the financing services with other financing or funding possibilities.

In the future European financial framework, the multiannual financial framework 2021 - 2027, there will be similar opportunities for financing and funding. However, the European Commission intends to simplify the structures of programmes as well as the procedures for applications and reporting in the following. The most relevant programmes for Danube fleet owners will be the InvestEU financing programme as well as the funding programme CEF II, including the possibilities to get support from the new Cohesion Fund.

This leads to the probabilistic co-funding rates in the future for CEF II transport general projects up to up to 30%, for studies, cross-border links and safety up to 50%; in case of the eligibility via the Cohesion Fund the proposed level of co-funding is up to 70% and for cross-border projects up to 85%. In the LIFE 2021-2027 programme the level of European co-funding will be up to 60% of the eligible costs and in HORIZON Europe it can be up to 100% funding rate of direct costs.

Status on November 2020 (closing of the GRENDEL project) – The European Parliament, the Member States and the European Commission did not agree yet on details of the next multiannual financial framework 2021 -2027, thus the final details of the foreseen funding and financing schemes are not yet available. Member States and companies are invited to follow closely the further developments and to submit proposals to the relevant bodies and programmes / schemes / calls.