



KNOW-HOW TRANSFER EVENT MODERNISATION OF DANUBE VESSELS FLEET



Becoming the world's first climate-neutral continent by 2050 is a great challenge and opportunity for Europe. To achieve this, the European Commission presented the **European Green Deal**, the most ambitious set of measures that should enable European citizens and businesses to benefit from sustainable green transition.

Regarding emissions, a 90% reduction in transport emissions is needed by 2050 to achieve climate neutrality and all transport modes, including inland waterway transport (IWT), will have to contribute to the reduction. As a matter of priority, a substantial part of the 75% of inland freight carried today by road should shift onto rail and inland waterways.

The consortium of the [project GRENDL](#), together with the innovation centre [INDanube](#) and the host "[Danube Commission](#)", organises a further **edition of the Know-How Transfer Event for Modernisation of Danube inland vessels**. The objective of this event is to raise awareness about technologies and fuels which have potential to reach 'near zero-emission' performance of IWT while addressing a carbon neutrality (GHG emissions) and technologies and fuels aiming to achieve at least NRMM Stage V emission performance on NO_x and PM. Clean combustion engines using carbon neutral fuels for direct drive, advanced design and engine management technologies and after treatment technologies lead to improved environmental performance of inland vessels. Fuels will gradually convert from fossil fuels to carbon neutral fuels. Hybrid configurations using various technologies for the power generation & storage, is another option increasing environmental performance of inland vessels.

The event will bring together inland vessel operators from the Danube region with technology & innovation experts as well as technology suppliers to debate available technologies which could fit in the transition pathway towards (near) zero emission performance and future alternative solutions which still need further research. Besides technologies, insight into digitalisation aspects leading to paperless sailing and increasing efficiency of transport processes as well outlook to expected funding and financing will be provided.

KNOW-HOW TRANSFER EVENT ON MODERNISATION OF DANUBE VESSELS FLEET

- DATE / TIME: Tuesday, 29 September 2020, 08:45 – 13:00 CEST
*The participants are requested to dial in **by 8:45 a.m.** in order to enable the punctual start of the meeting.*
- VENUE: Online meeting (*the login link will be sent to registered participants some days before the meeting*)
- REGISTRATION: https://ec.europa.eu/eusurvey/runner/GRENDEL_Know_How_Transfer_Event_September_2020

By registering, participants agree that their details, name and institution, will be made available in a list of participants/in the meeting minutes. Please note that screenshots may be taken during the session. By attending this event, participants freely provide their agreement that they accept to be photographed that way. The participants also agree that the above-mentioned photos may be used, reproduced, distributed and communicated to the public for the purpose of disseminating the GRENDL Project.

Tuesday, 29 September 2020

PROGRAMME

09:00 – 09:20	Setting the scene
	Setting the scene - political and regulatory framework for modernisation of Danube inland waterway vessels <ul style="list-style-type: none">• Manfred Seitz (Danube Commission)• Laure Roux (CCNR)
09:20 – 10:50	Low emission propulsion solutions
	<ul style="list-style-type: none">• EU Stage V Update from the Manufacturer, Formerly known as the Dealer (Peter Snijders, Koedood)• Marineized Euro VI DAF Paccar engines for IWW Stage V (Peter van der Heijden, NPS Diesel)• Stage V Marine Developments (Jan-Willem Vissers, Volvo Penta Europe)• Scania propulsion and auxiliary solutions for inland waterway vessels: Marinisation of industrial engine range (NRE category engine) including EU Stage V approval according BAnz AT 20.12.2018Bz (IWA/IWP-solution) (Detlef Plachta, ScanDiesel)• Discussion
10:50 – 11:05	Pause
11:05 – 11:25	Powertrain technology outlook & transition pathway towards (near)zero emissions
	<ul style="list-style-type: none">• Future Powertrain Technology Options for Inland Waterway Transport (Thomas Kammerdiener, AVL List GmbH)
11:25 – 12:15	Clean carbon neutral (alternative) fuels
	<ul style="list-style-type: none">• Overview of alternative energy carriers for inland navigation (Friederike Dahlke-Wallat, DST)• Alternative fuels – best practices and possible outlook (Sebastian Dörr, Lubtrading)• Discussion
12:15 – 12:35	Increasing resilience and energy efficiency
	<ul style="list-style-type: none">• (Hydrodynamic) solutions to increase resilience & energy efficiency (Benjamin Friedhoff, DST)
12:35 – 13:00	Discussion & Closing of the day

The presentations of the following topics will be circulated to the participants on beforehand. Questions on these topics are welcome during the discussion session from 12:35-13:00.

Digitalisation of transport processes in inland waterway transport

- Automation of Inland Navigation to Increase Safety and Energy Efficiency (Alexander Lutz, Argonics GmbH)
- NOVIMAR – The vessel train concept (Erwin van der Linden, EICB)
- River Information Services Corridor Approach – RIS COMEX and intended systems (Mario Kaufmann, via donau)
- Introduction of new services for vessel management - VEMASYS (Tony Ameryckx / Willem De Braal, Bluecentury)

Funding and financing for modernisation of inland vessels

- Funding and financing of modernisation of inland vessels - outlook (Markus Eppich, Pro Danube Management)
- State Aid model for Modernisation of Danube fleet (Charlotte Siot, Pro Danube International)