



Implementing the European Action Programme
for the promotion of inland waterway transport (NAIADES 2)

The hidden market potential of the Danube and how to unlock it



The Platina2 market analysis unveils the unused cargo potential for inland navigation in the Danube region.

The analysis was checked with logistics players and includes supportive measures that can increase the use of inland waterway transport for the promising cargo groups: renewables, recyclable products and high & heavy.



Project funded by the European Commission (DG MOVE)
under the 7th Framework Programme for Research and Technological Development.



Market analysis for the Danube corridor

7 cargo types shipped in the Danube region were analysed. The type of equipment needed along the river to make the shift to IWT for those goods was verified.

Potential by cargo type

Renewables: agricultural and forestry products
Round wood, wheat, maize, soy bean
Sawn wood, wood-based panels, pellets, bioethanol, rape, sunflower seeds, biodiesel
Sugar beet

High & heavy
Power transformers, building machines and engines, tanks, etc.

Recycling products
Used plastics, scrap glass, waste paper & wood

Chemical products
Fertilisers, polymers

Mineral resources & mineral oil products
Cement, iron ore
Salt, steel

Energy raw materials
Diesel and gas fuel, gasoline, coal
Crude oil, LNG

Vehicles
Cars & vehicle equipment

● very high ● average ● low

The research shows the only type of cargo with low potential to be shipped is sugar beet. The reason evoked by shippers is that sugar beets are mostly processed locally and the damage during transshipment to this natural product could be very high.

This is an interesting finding, as sugar beet is shipped in large quantities by water in North Western Europe.

A closer look at the modal shift conditions for 3 promising markets

The prerequisites for modal shift towards inland shipping were discussed with market players.

High & Heavy cargo

Advantages of inland shipping:

- Large loading capacity compared to trucks and railway wagons.
- No time restrictions (no weekend driving ban, traffic jams, accidents, etc.)
- No costly transit permits in international transport
- No complex route planning (traffic lights, tunnels, bridges)
- Cost efficiency of inland shipping = plus for multimodal transport

TO DO

- Infrastructure and handling equipment must be improved and modernised along the entire Danube River (e.g. missing RoRo ramps in Serbia, storage areas in ports, permanent and dedicated equipment for transshipment)
- More predictability in planning for forwarding companies and clients.

Renewable resources

Advantages of inland shipping:

- Cost efficient transport solution, esp. for bulk cargo



- High volume of renewable resources along the Danube axis, vast agricultural areas in the vicinity of ports and terminals, especially in Middle and Lower Danube countries
- High loading capacity of Danube vessels
- Reliable partners in Danube navigation with many years of experience
- High density of Danube ports with efficient handling and storage facilities for agricultural and forestry products.

TO DO

- Transshipment equipment must be expanded (e.g. more cranes, suction pumps for bulk) and special equipment (e.g. cleaning plants for barges)
- Storage capacity must be expanded
- Bundling of transports in order to ensure sufficient capacity utilisation.

Recycling products: low value

Advantages of inland shipping:

- Cost efficient transport solution, esp. for bulk cargo
- High volume of recycling products in urban areas and industrial locations along the Danube axis
- High loading capacity of Danube vessels
- Reliable partners in Danube navigation with many years of experience in transport, transshipment and storage of these products.
- High density of Danube ports with efficient handling and storage facilities.

TO DO

- Apart from iron scrap, the markets of recycling products are volatile and requires flexibility in availability of barge
- Simplification of administration and introduction of "one-stop-shops", which provide all relevant services from one source.



"The study identifies promising market segments for the Danube and sets the basis for more cooperation between logistics players so key production and sales markets can be connected by water."

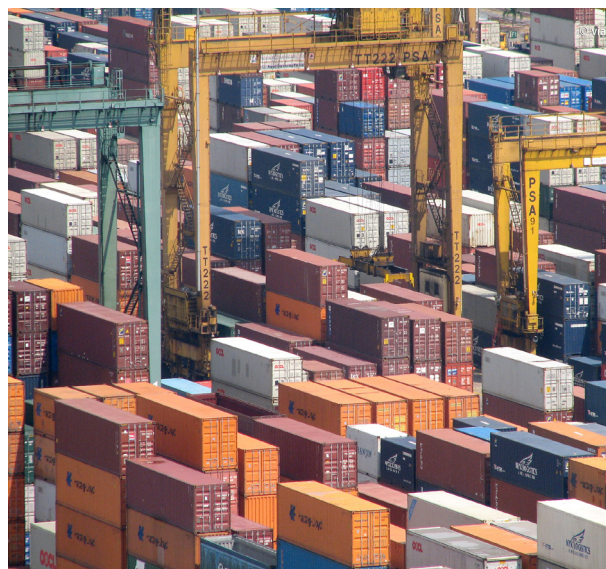
Recommendations to facilitate modal shift

- Raise more information and awareness about inland navigation & promising markets – for business sector**
 - User friendly & up-to-date information on specific markets and their logistics possibilities
 - Dedicated events for specific markets
 - Show cost advantage
 - Neutral platforms for the cooperation between Danube ports, shipping companies, forwarders and industry
- Promote industrial locations in the vicinity of ports and terminals**
 - Foster Danube logistics promotion centres as "one-stop-shops" in Danube countries (provision of consulting and assistance to the industry from the initial planning phase of business locations followed by regular know-how exchange regarding Danube navigation)
 - Continuous holistic service provision.

- Ensure good navigation status and remove bottlenecks**
 - Implementation of Fairway Rehabilitation and Maintenance Master Plan & FAIRway.
- Simplify and harmonise administrative processes for inland waterway transport (esp. customs clearance, controls of border police and navigation surveillance)**
 - Foster transnational working initiatives on control procedures e.g. Serbian-Hungarian, etc.
- Improve facilities in ports and transshipment sites along the Danube**
 - Extension of national and international funding opportunities for port development (esp. for downstream Danube ports).



PLATINA 2 is a multi-disciplinary project to implement the European Action Programme for the promotion of inland waterway transport (NAIADES 2). A consortium of 12 organisations from seven European countries including relevant stakeholder groups from the inland waterway transport sector, and in close cooperation with the European Commission, contributes to the promotion of inland waterway transport as a sustainable transport mode. It ran from autumn 2013 to spring 2016.



The project focused on 4 themes, for which the main conclusions were:

Markets & Awareness

- Research on market transparency and synergistic actions allows better understanding of market structure, opportunities and bottlenecks for enhanced cooperation in inland waterway transport.
- Promising high potential niche market segments in the Danube region revealed: high and heavy cargo, renewable energy resources & biomass and recycling material.
- High potential for continental cargo transport over water identified in several European regions

Innovation & Fleet

- Innovative technologies are available for greening of Inland waterways transport and is on display in the Greening Tool. Further work is needed on financing and emission rules.
- Recommendations on how to bridge main knowledge gaps will allow better calculation of the external cost of emissions to air from Inland waterways transport
- Most priority issues for research and innovation are tackled in EU and non-EU projects, some require further action, e.g. modernisation of small older ships.

Infrastructure

- European inland navigation policy needs to consider differences of various waterway corridors.
- Large datasets for monitoring waterway infrastructure development in EU are fragmented and confidential. New options to use data for policy analysis identified.
- RIS already supports navigation and traffic management; needs to be developed for logistics operators.
- Regular rehabilitation & maintenance are essential for competitive waterway infrastructure and benefit from exchange of experiences across waterway corridors.

Jobs & Skills

- Technical standards for ship-handling simulators provided a basis to introduce simulators as a tool to modernise and harmonise professional qualifications in Inland waterways transport.
- The concept for electronic service record books contributes to the creation of an equal level-playing field.
- Learning materials for future logistics decision makers create awareness and knowledge of Inland waterways transport as a modality in the transport chain.

The partners in the project:

- viadonau – Österreichische Wasserstraßen-Gesellschaft mbH (coordinator)
- Voies Navigables de France
- Bundesverband der Deutschen Binnenschifffahrt e.V.
- Promotie Binnenvaart Vlaanderen VZW
- Inland Navigation Europe
- Dutch Ministry of Infrastructure and the Environment
- PANTEIA BV
- Entwicklungszentrum für Schiffstechnik und Transportsysteme e.V.
- Centar za razvoj unutarnje plovidbe d.o.o.
- STC - Group
- Centrul Român pentru Pregătirea și Perfecționarea Personalului din Transporturi Navale
- Stichting Dunamare Onderwijsgroep Haarlem

FOR MORE INFORMATION

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