

# WATERWAYS

Newsletter **INE**

2007  
FEBRUARY

Editorial



*Transport plays a key role in improving economic conditions in the European Union and making it an attractive location for business. For this reason, Germany intends to focus on the following during its Presidency.*

*In Europe alone, there will be a 45 percent increase in the volume of freight traffic between now and 2020. This means that issues related to the ecological and economic efficiency and safety of the European transport system will become increasingly important.*

*Under the German Council Presidency, there will be a major focus on new measures to enhance safety in the waterborne sector. Logistics is at the heart of intelligent control of modern transportation enhancing safety, energy efficiency and swift transport flows. Innovative technology projects such as satellite navigation, the promotion and development of alternative fuels and propulsion methods make a major contribution in this regard. These projects help both to optimise transportation and to ensure a clean environment and are therefore of great significance for transport policy in Europe.*

*In the field of traffic management, the Galileo satellite navigation system will open up new possibilities in the future. It will be used, for instance, for control and monitoring systems in the waterborne, rail and aviation sectors. I would therefore support the European Commission in its endeavours to conclude the concession contract with the operators, thereby setting the stage for the next twenty years.*

**Wolfgang Tiefensee**

MINISTER OF TRANSPORT, BUILDING AND URBAN AFFAIRS

## Specialisation generates innovation

**The inland waterway sector is well known for its excellent safety record. Nevertheless, customers of tanker barging increasingly prefer double hull tankers to downplay all possible risks. Due to this trend, tanker companies face costly transformation challenges, but new market opportunities also appear such as two high-tech double hull vessels shipping electrode binders at a constant temperature of 220°C.**

### Strict safety requirements for inland tankers

Increasingly worried about their reputation, oil and chemical companies already introduced EBIS, the European Barge Inspection Scheme, in 1998 as part of their commitment to improve the safety of tanker barging operations. They exchange objective



© Reederei Jaegers

safety and quality data on tank barges, which an EBIS member company may consider to use or receive at its terminal. Some customers already announced they will only accept double hull tankers as of 2010.

### The cost of double hull tankers

The upcoming ban on single hull tankers means a financial headache for a lot of tanker companies, facing adaptation or the purchase of new ships. The Dutch company Nederlof has come up with a cost-efficient solution to turn single hull into double

hull tankers without losing considerable loading capacity. This is crucial for the profitability of small tankers. Some shipowners meanwhile discovered that double hull tankers open new market perspectives.

### The principle of a thermos flask

An ordinary product like pitch provides electrode binders for the production of anodes in the aluminium industry. Coal tar is a very sensitive product and transshipment is only possible when transported at a constant temperature of 220°C. Besides a double hull structure with a special heating mechanism, the shipowner Jaegers installed for its client a closed system of isolated pipelines and separate tanks to keep products apart and to safeguard a constant quality of the freight.

CONTACT [www.reederei-jaegers.de](http://www.reederei-jaegers.de)

## A vacuum cleaner on the water

The introduction of the container was one of the events that led to an innovative breakthrough in transshipping goods. Apart from that revolution, transshipment techniques are still pretty traditional today. A European research consortium, convinced that there is still room for improvement, elaborated the concept of a freight vacuum cleaner suitable for loading and unloading all types of dry granulates. The prototype is developed for pellet transport in Finland but many companies already showed interest.

### Cost-efficient transport

Due to the cold climate, the Finns and their economy consume a lot of energy. Hence, energy policy is a burning issue and developing more efficient ways of energy use is a priority in Finland. Wood processing has always been a natural and vital industry for Finland, the most densely forested country in Europe, and could play an increasing role in producing energy but as wood-chips take up a lot of space, they are expensive to transport. Today, only local use within 50 kilometres is profitable.

### Fluctuations in demand

A new power plant near Jyväskylä on lake Päijänne will pioneer in introducing water transport, combining the Finnish asset of forests and lakes. According to the company, there is no other way to supply the annual amount of 6 million cubic metres of biomass. The challenge however was to address the large

- No transshipment facilities required
- Diesel-electric propulsion
- All types of dry granulates like pellets, flakes and powders can be transported

fluctuation in demand. In summer, when it is warm, there is virtually no need for heating and the fuel demand of the power plant drops to almost zero, while in winter the demand rises to great volumes.

### Automatic loading and unloading

The European research consortium designed a flexible ice-breaker with diesel-electric propulsion. The vessel's spudpoles are an additional ad-



© Järvi-Suomi Floating Association

vantage, allowing to keep position anywhere near the shore without requiring dedicated transshipment facilities. The pneumatic loading and unloading system automatically sucks the cargo on board. This is no luxury to collect its cargo from

18 open spaces around the lake. A nice example for other less evident areas, because the system can be used for all types of granulates such as pellets, flakes and powders.

**CONTACT** [www.creating.nu](http://www.creating.nu)

### CREATING for innovative logistics

The EU project Creating tests innovative solutions in logistics and technology. With 27 partners from 9 countries, the consortium combines research with concrete pilots, because the ultimate aim is that new concepts find their way to the market.

The project is co-financed by the 6th Framework Programme Research and Development of the EU.

**CREATING will present the final results at an international conference to be held in Rotterdam on 14 June 2007.**

# Green transport for green energy

**1,200 tonnes of wood pellets leave the port of Antwerp by barge every day to be delivered at a power plant in southern Belgium which supplies 200,000 households with green energy. The increased use of biomass originating from green-labeled wood forests in Canada and Poland is part of a new energy diversification strategy.**

*Interview with Rudy Willemse, logistics manager Electrabel*

## Is this transport of biomass your first experience with waterway transport?

Not at all, Electrabel already ships some 4 million tonnes every year on Belgian waterways, because we find it to be a very reliable partner. But it is our first transport of biomass from a seaport to a local plant. In 2005 we converted a traditional coal plant along the Meuse near Liège to operate on biomass. Its location on the waterway is ideal, because post haulage is no longer required and this keeps costs considerably down.

## Why did you choose inland shipping?

With roads grinding to a halt, inland waterways are a perfect just-in-time solution. With this project alone, we annually shift 10,000 trucks from the roads and it takes only 48 hours from the port of Antwerp to Liège. Inland shipping shows it is perfectly able to participate in complex supply chains. In this specific situation,



© R. Marinello/Dreamstime



© Degrave-Antverpia

all contact between the wood pellets and humidity or water must be

**“Inland shipping is perfectly able to participate in complex supply chains “**

avoided at all costs. Together with the transport operator we conceived a closed cycle allowing to supply the production directly from the push barge. This is truly innovative and avoids any intermediary storage, further downsizing costs.

## Does Electrabel have expansion plans for this project?

We now ship some 300,000 tonnes of wood pellets per year by push barge. The Suez group, to which we belong, wants to raise the share of green energy in its production from 15% to 18% by 2009. We look at supplying more plants with biomass, and with these positive experiences in mind, we will certainly analyse the possibility of using inland waterways even more.

**CONTACT** [www.degrave-antverpia.be](http://www.degrave-antverpia.be)  
[dga@degrave-antverpia.be](mailto:dga@degrave-antverpia.be)

## Renewable energy to account for 20% by 2020

The European Commission intends to maintain the EU position as a world leader in renewable energy, by proposing a binding target of 20% of its overall energy mix to be sourced from renewable energy by 2020. This will require a massive growth in all three renewable energy sectors: electricity, biofuels and heating & cooling. This renewables target will be supplemented by a minimum target for biofuels of 10%.

## Naiades one year on

### What is NAIADES ?

The European Commission issued at the start of 2006 the first comprehensive development programme for inland waterway transport to promote a better use of rivers and canals for freight transport across Europe. The programme consists of support, policy and legislative measures. The timeframe for the implementation of the plan is the period 2006 – 2013.

### Objective of NAIADES

Baptised Naiades after the river nymphs of ancient Greece, the EU programme aims to set positive incentives and scrap barriers for the development of inland waterway transport. By linking navigable waterways to the road, rail and short-sea networks, the EU wants to contribute to relieving traffic congestion, mastering energy use and sustainable distribution solutions.



© A. Jonquières - Pont de Bir-Hakeim, Paris

### Five strategic areas

1. Creating a sound business climate to attract new markets
2. Stimulating fleet modernisation and innovation
3. Attracting new workforce and increasing skills
4. Promoting inland waterway transport
5. Providing an adequate and smart waterway infrastructure

### Measures initiated so far

- Screening of administrative barriers to inland shipping
- Funding handbook providing information on regional, national and EU aid opportunities
- Harmonisation of technical requirements for vessels
- Proposal on fuel quality
- Proposal to harmonise rules for land transport of dangerous goods
- Adoption new regulation on inland waterway statistics
- Better financial support for waterway infrastructure priority projects and the implementation of the traffic management system "RIS" across Europe
- Dedicated research for inland shipping innovation

### Work ahead 2007-2008

- State aid guidelines for inland waterway transport
- Set-up of an inland waterway innovation fund
- Creation of administrative one-stop-shops
- European development plan for waterway infrastructure and transshipment facilities
- Spatial planning giving higher priority to (re-)developing industrial zones nearby waterways
- Recruitment campaigns to attract newcomers in the sector
- Creation EU-wide promotion network
- Legislative proposals on engine emissions, on the harmonisation of boatmaster certificates and manning requirements



2006

INE

### INE annual report 2006 online

Read about the political milestones and the activities of Inland Navigation Europe

[www.inlandnavigation.org](http://www.inlandnavigation.org)

You can follow the implementation online on our website.

*Water is the way to go!*

### INE - Inland Navigation Europe

Office 6G65 ■ Koning Albert II-laan 20 ■ B - 1000 Brussels  
 Tel. +32 2 553 62 70 ■ Fax +32 2 553 62 72  
[info@inlandnavigation.org](mailto:info@inlandnavigation.org) ■ [www.inlandnavigation.org](http://www.inlandnavigation.org)