Setting the course

A new transport policy for 2020

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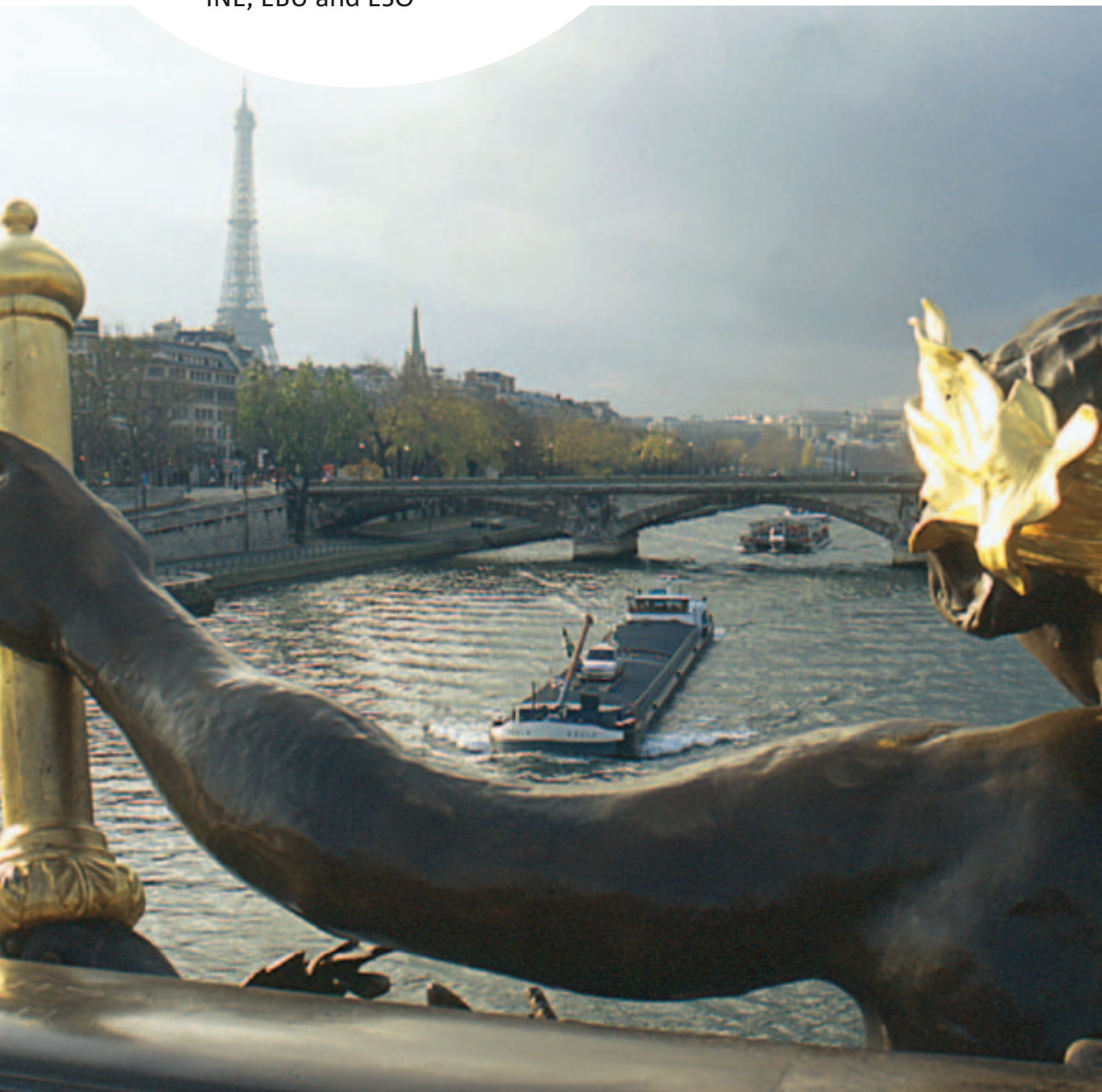

Foreword

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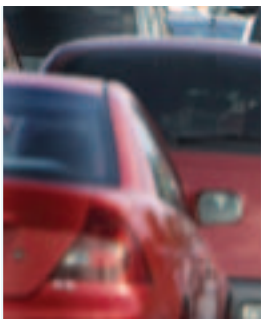
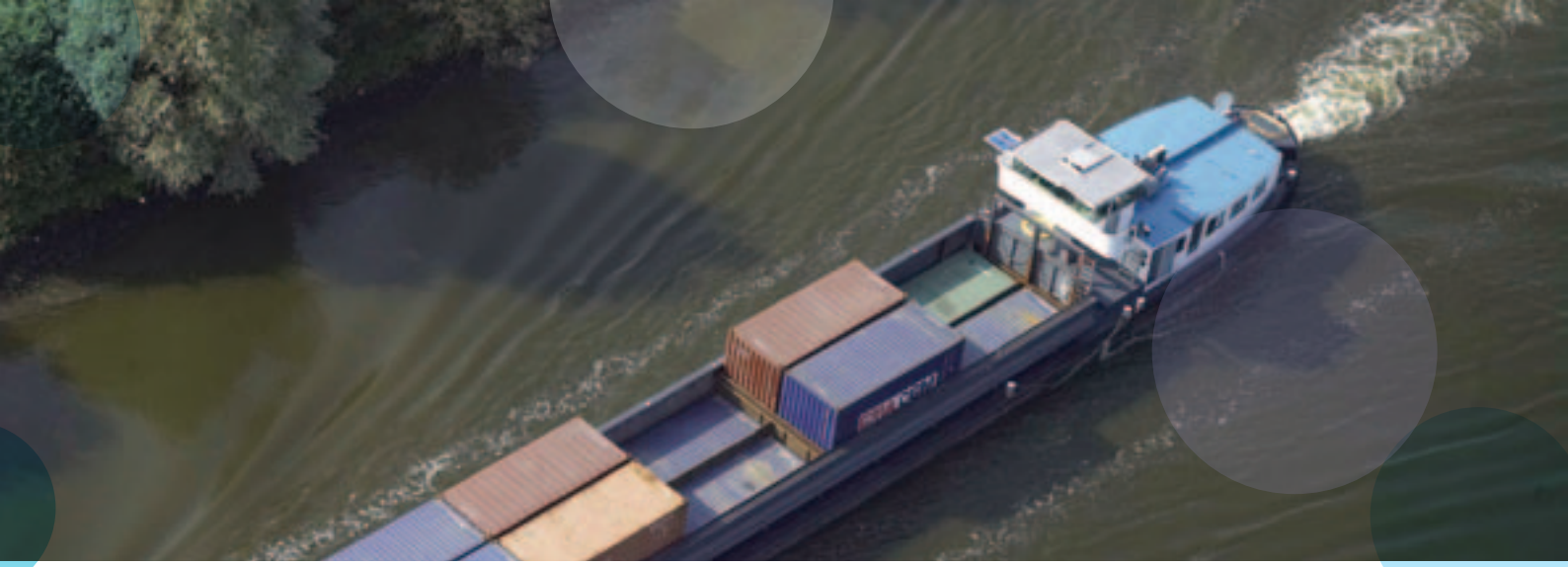
A world without transport is a world without trade and thus without goods. The iPads we use, the raw materials for our buildings, the clothes we wear and the food we eat – all these goods are transported to us. A world without transport and goods is impossible to imagine. But climate change, dwindling natural resources and traffic jams all point to the necessity of creating different and more sustainable ways of transport if we want to maintain our competitiveness and way of life. As the need for goods transport is unlikely to decrease, how we transport goods must change radically.

The keys to driving growth and decarbonisation are already available in inland waterway transport. There are exciting examples where inland navigation is playing an important role in innovative integrated logistics and where barges of the future are combining cutting edge design and the use of new fuels.

The inland navigation community is committed to multiplying these successful examples over the coming years. By preparing the right framework conditions now, in line with the EU2020 Strategy, the inland waterway transport sector will contribute to jobs and growth in a decarbonising economy.





We want to work in partnership with the European Commission, the European Parliament and the Member States to double the overall modal share of inland waterway transport in the EU by 2020 by:

- maintaining and upgrading the quality of Europe's existing asset, the network of rivers and canals that connects the core areas of the continent
- taking away all barriers for the integration of inland waterway transport into competitive cross-modal supply chains
- encouraging and rewarding the creation of innovative logistics concepts
- developing an eco-competitive fleet sailing on a mix of new fuels and smart propulsion systems
- attracting from in and outside the industry new people for challenging careers in a sector which has jobs to offer.

The EU transport patterns are at a turning point.

The market must take the helm towards change, but the policy framework will make or break the course towards a competitive and sustainable economy. The EU will have to live for a long time with the transport decisions it is about to take. Moving inland waterways higher on the political agenda through establishing a permanent policy containing evolving actions and adequate financing will be one of the main elements for creating mobility which does not take away from the quality of life of future generations.

Let's make change happen, together

January 2011

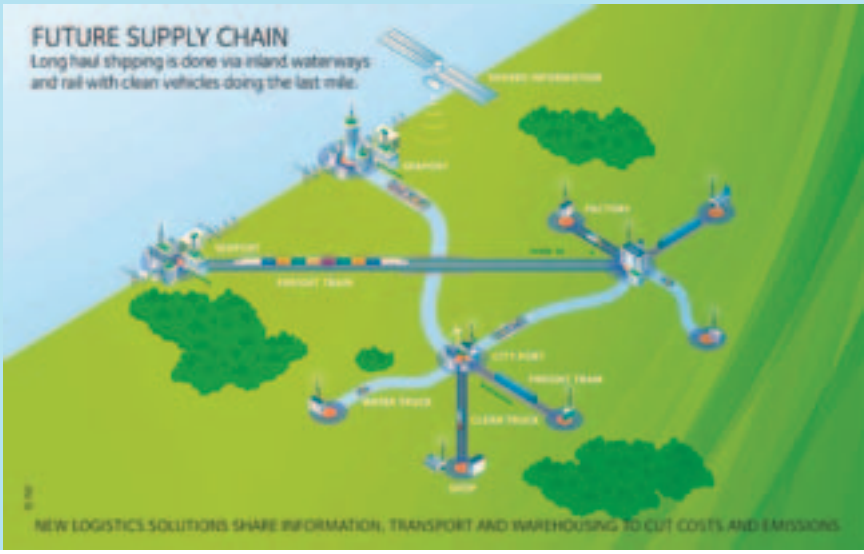
Theresia Hacksteiner
Secretary General
European Barge Union (EBU)

Henk van der Velde
Secretary General
European Skippers' Organisation (ESO)

Karin De Schepper
Secretary General
Inland Navigation Europe (INE)

OUR VISION

By 2020, 80% of EU citizens will live in congested urban areas. Particularly in the densely populated areas of Europe, road transport will be at a standstill. Cities will have turned this advantage to their favour. Inbound and outbound goods will be shipped using smart, clean and modular bargesby waterway. Multimodal terminals at strategic points of the network will have been modernised and equipped with intelligent logistics systems. The traffic of major seaports will continue to grow in a sustainable way, thus securing the supplies of hundreds of millions of citizens in important urban centres such as Rhein-Ruhr, Paris, Budapest and Vienna without adding to congestion or pollution, since there is still free space on rivers and canals.



THE TRANSPORT CHALLENGES

The EU transport policy has to urgently address three pressing problems in order to lay the foundations for a swiftly flowing and sustainable transport system

1. **Freight traffic is predicted to grow** by more than 50% by 2030, while current land infrastructure is already heavily congested and public budgets are cash-strapped – this requires an efficient synergy between all the transport modes.
2. Due to congestion, accidents, barriers and inefficiencies, the **costs of transport are increasing** and undermining the overall competitiveness of the Union.
3. Transport is still largely dependent on oil, which will become scarcer due to increasing worldwide demand and lower production outputs while at the same time **transport's share in creating carbon emissions is growing** rather than declining.

THE FUTURE SOLUTION

A growing number of front-running companies are actively pursuing more efficient ways of transporting goods with new processes and technologies that reduce cost, increase environmental care and reduce dependency on scarce resources.

The inland navigation sector shares with policy makers and front-running companies an ambitious vision of an innovative, smart and sustainable transport system consisting of green corridors, multi-modal ports and integrated intelligent transport systems (ITS) in which users and operators share information and transport.

Policy must play an enabling role in order to multiply these developments. Companies will gain reduced costs and seamless operations. Society will gain improved mobility and more quality of life.




WORK TO DO

The challenges are an important reason why the potential of inland waterway transport remains largely unrealised. With this publication, we propose feasible ways to partner together in order to meet these challenges and maximise opportunities for inland navigation and the entire transport system.

Opportunities of waterway transport

1. No congestion
- These only land network with free and sustainable transport capacity
- Existing waterways can take much more traffic without creating traffic jams and taking land
- Expanding from traditional bulk to maritime containers and new continental markets such as alternative fuels, waste and fast moving consumer goods
- Ideal for bundling base freight volumes in modal merge solutions
- Becoming increasingly attractive for short distance journeys

2. Cost-efficiency
- Low-cost transport solution
- Reliable, safe and secure
- River information services (RIS) for more safety, security, fuel efficiency, traffic and transport planning
- Integrated investment in waterways acts as a catalyst for regional and environmental development, it fosters leisure and tourism and it assists water supply and flood defence

3. Low environmental impact
- Most energy-efficient transport mode
- Lowest carbon footprint
- Decreasing pollution
- Multi-purpose infrastructure planning and development

Challenges for waterway transport

1. Future-oriented infrastructure
- Solving the current maintenance backlog
- Increasing quantity and quality of transhipment facilities
- Preserving space along waterways which is under pressure for non-transport use to avoid a reversed modal shift
- Halting the disappearance of smaller ships and the neglected maintenance of small waterways
- Insufficient connection to and co-operation with other transport modes, co-modality
- Integrating climate change impact on water levels and navigability in planning

2. Multi-modal market without barriers
- Ensuring that transhipment costs and formalities stop making inland waterway transport unnecessarily expensive
- Start-up cost of modal shift and innovation projects vs limited investment capacity of small and micro size waterway businesses
- Mental shift of non-water users and operators with transparent bonus/malus system

3. Jobs and growth
- Solving shortage of operators and crew by creating a stimulating training and business climate

4. Green vessels and fuels
- Eco-competitive legislation
- Start-up costs of green innovation projects

Future-oriented infrastructure

Creating a core network linking economic centres

"The industry needs a waterway network with high-quality corridors, so that big volumes can be shipped in an reliable way between North & South and between East & West. Bundling volumes across the industry, to achieve scale, is another key element to make co-modality, involving inland shipping, a cost-efficient solution"

Kris Verhulst,
Senior Logistics Manager,
Procter & Gamble

VISION

Important EU main ports situated on rivers and canals can sustainably manage the growth of traffic volumes from and to their hinterlands thanks to free capacity on waterways of high quality. This unique selling point will make sure that hundreds of millions of EU citizens can continue to be provided with all the products and commodities they need and EU goods can continue to be exported to the world.

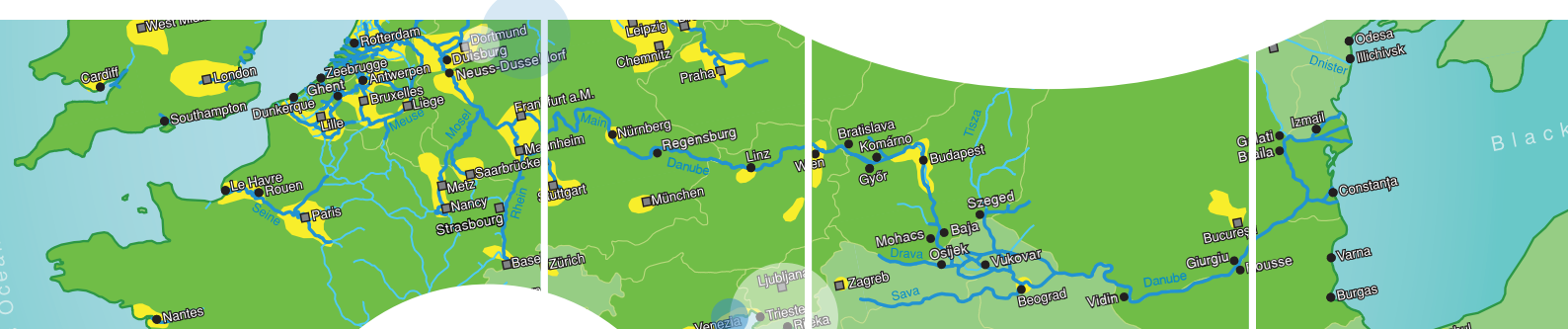
Multi-modal connectivity in the hinterland is provided by a network of inland ports and terminals. Some act as inland logistics hubs, bundling and unbundling freight flows thereby attracting industrial distribution centres and creating added value. Others act as city ports with waterways playing a key role in shortening the last expensive mile by bringing consumer goods, building materials and alternative fuels as deeply as possible into cities - thus reducing congestion and pollution - and by shipping waste out.

The waterscape is a rich environment in cities and in the countryside where burst of activities happily co-exist. Besides transport and logistics, other functions such as alternative energy production and distribution for transport and other uses, housing, leisure, tourism, water supply and management and last but not least biodiversity and climate change adaptation are developed in harmony. This turns rivers and canals into lifelines for the economy providing good return on integrated investment.

TARGET

By 2020, all core inland waterways will form a leading network of green and smart corridors providing the opportunity for sustainable growth thanks to:

- well-maintained and upgraded quality waterway infrastructure
- quality sea and inland port interfaces connecting waterways to other transport modalities
- fully deployed river information services (RIS) interconnected and interoperable with other modal intelligent transport systems (ITS)



HOW TO GET THERE

1. Creating quality infrastructure in the trans-European networks (TEN-T) and beyond

- Including waterways of class ≥IV or those waterways linking major production or consumption areas in the TEN-T core network as well as developing a few new high capacity links connecting major production or consumption areas
- Ensuring appropriate and timely maintenance of the main and connecting waterways, locks and bridge clearances of the TEN-T comprehensive network as this has a positive influence on efficiency, cost-effectiveness and fuel savings
- Creation of sufficient capacity in seaports and inland ports, efficient use of existing capacity and provision of quality facilities
- Creation of sufficient space along waterways to ensure operational safety as well as waiting berths and mooring facilities to meet sailing and resting time regulations.
- Developing a few new high capacity links connecting major production or consumption areas
- Preserving space for waterway transport and logistics along waterways with wharf programmes and co-habitation on the highly sought after waterfront. To illustrate, a Belgian quay wall scheme has shifted over 250 million tonnes onto the waterways over a period of 10 years.
- Structural maintenance of small waterways which represent about half of the European waterway network and have, above all, a feeder function to the main network. A Belgian study has shown that the benefits of freight shipment on small waterways largely suffice to cover the total costs of maintaining them including the costs of non-navigational functions.

2. Targeted investment

- The energy and carbon footprint should determine TEN-T investment priority for all modes of transport. 20% co-financing for investments which lead to a 20% carbon decrease of transport by 2020 in line with the EU 20-20-20 strategy, 30% or more for investments scoring a 30% decrease or higher
- Such an approach implies multi-modal assessments of TEN-T projects instead of modal ones to avoid the parallel investments of the past
- At least 20% of the TEN-T budget should be dedicated to developing waterway transport infrastructure in order to remove all bottlenecks

3. Ensuring an integrated approach

- An integrated and transparent legal framework for environmental rules combined with the “Working with Nature” approach to avoid bureaucratic delays in the planning and execution of waterway and port projects
- Climate change mitigation and adaptation policy should be in balance with an integrated approach preventing competing uses.

“The potential of waterway transport is enormous, but reliable infrastructure is the starting point to realize it”

Luc Malysse,
Inland Waterway Transports,
Dry Bulk Manager, Cargill

A multi-modal market without barriers

The full integration of transport modes for a seamless supply chain

"We discovered multi-modal barge solutions work very well, even on distances below 100km, but we should avoid transshipment costs kill system innovation in the start-up phase"

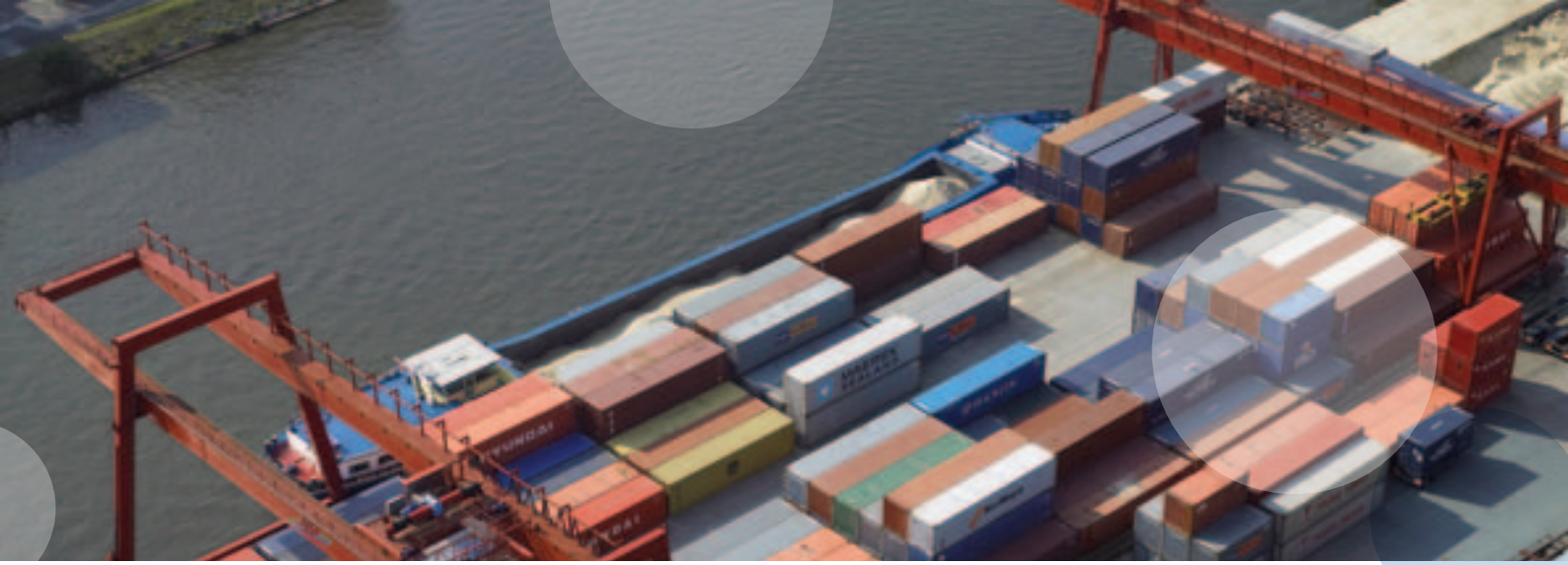
Edwin Wenink,
Logistics Manager, FloraHolland

VISION

The full deployment of intelligent transport systems (ITS), their interconnectivity and interoperability creates the "internet of things" for transport, with goods and vehicles connected to smart networks. A single electronic environment for transport information exchange and data management optimises route planning, real-time tracking and tracing and seamless paperless procedures across modes and borders covered by a sound data management and protection policy. The cooperation between companies in freight transport and logistics is encouraged in order to avoid empty runs and to bundle freight volumes, resulting in a lean and green transport system, tapping the full potential of inland waterway transport.

TARGET

By 2020, multi-modal transport should be as easy to use as uni-modal road transport resulting in a congestion free and low carbon transport system



HOW TO GET THERE

1. Investment in innovation must be encouraged rather than thwarted

- Transport users who stick out their neck and create a modal shift must be rewarded in the start-up phase with a low burden eco-bonus to overcome the transhipment costs in modal merge solutions.
- Demonstration and pilot projects of operators who invest in promising new logistics and transhipment technologies must be supported.

2. Lean administrative business environment

- River Information Services must be integrated technologically and operationally with eFreight and eCustoms in order to create a single cross-modal window
- Development of the Port formalities directive and "Blue Belt-Blue Lane" concept to ensure that they tackle seamless handling of inland waterway transport in seaports
- Eliminate the top five list of high impact barriers on the economic viability of operations: Regulations and directives which have an averse effect on congestion-free and sustainable transport solutions must be reviewed without reducing safety and protection levels (e.g. ADNR, ISPS, waste transport directive especially its diverging implementation in the different Member States)

3. Levelling a sustainable playing field

- Regulation on improved transparency of labelling the environmental impact of vehicles must refer to a EU certified and field tested calculation system enabling transport users and public investors to make well-informed choices. This is not currently possible given the wild growth of unverified and contradictory calculators
- Preferential treatment in handling, dues and tariffs in ports for sustainable modes and vehicles

4. Promotion

- Campaigns are supported to inform shippers and logistics service providers about the possibilities of inland shipping in multi-modal transport and to provide students and on-the-job learners with inland navigation learning modules

Jobs and growth

Inland waterways has jobs to offer

"The human factor is our driving force!"

Nick Bramley,
chair European Transport Federation

VISION

The crisis overshadowed the shortage of entrepreneurs and crew members within inland navigation for a while, but the forecasted growth once again creates a sector with jobs to offer. A positive business and investment climate attracts new entrepreneurs who along with excellent navigation skills think and act in supply chain terms. More general awareness about inland navigation and its careers brings new people with different experience than shipping to the sector. These new recruit receive high quality education with state-of-the-art training tools and stay tuned thanks to the facilitation of lifelong learning.

TARGETS

By 2020:

- Newcomers, career changers and interested companies will have easy and fast track access to the inland shipping market without compromising on training quality
- The Standards of Training and Certification in Inland Navigation (STCIN) will be implemented and guarantee job mobility across Europe

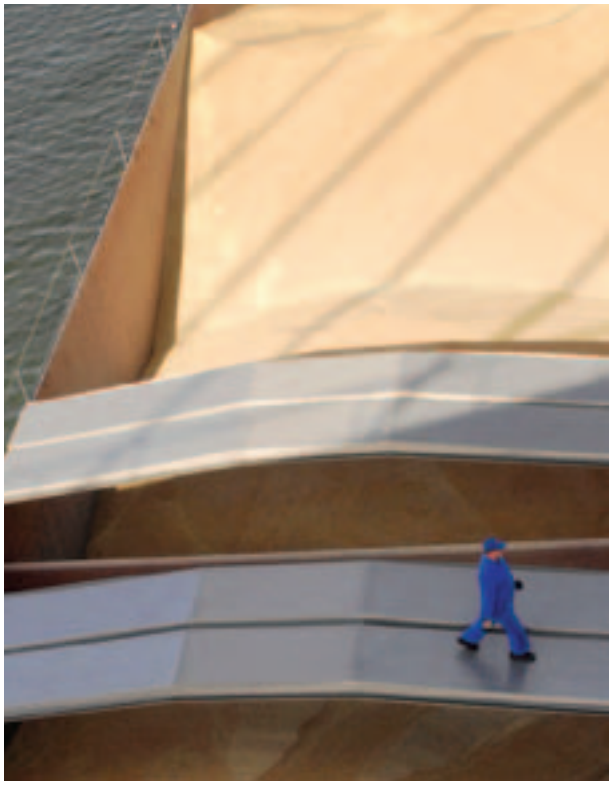
HOW TO GET THERE

1. Attract people outside the industry

- Provide support for inland navigation recruitment campaigns which also address greater public awareness about working in inland navigation
- Increase job attractiveness through creating harmonised working conditions including social security and staffing requirements
- Providing access to capital, including via joint ventures (capital risk management)

2. High quality education & training

- quality education & training
- Developing and implementing common professional education and training standards (STCIN) which provide harmonised minimum educational levels throughout Europe
- Support for the development high standard learning and eLearning tools to ensure outstanding quality of education and permanent training in the inland waterway transport sector, in close cooperation with the industry and EDINNA, the educational network of inland navigation schools and training institutes
- Standardisation and certification of simulator technology to allow for use in short track education and examination



"Modern professional education is crucial"

Arjen Mintjes,
Chairman EDINNA, European Network of Inland Shipping Education Institutes

Green vessels and fuels

Achieving the EU sustainability objectives

VISION

The EU wide availability of low-sulphur fuel in 2011 improves the performance of diesel engines, and this is further enhanced by smart steaming and energy saving devices, saving fuel costs and carbon. Thanks to public support programmes, the installation of after treatment equipment reducing air pollution by 85% accelerates. New-built vessels kick start the switch to alternative fuelling via hybrid systems and lightweight, resistance reducing ship design. Small barges go increasingly electric and hydrogen powered, while larger vessels set course with alternative fuels such as LNG and second generation biofuels.

TARGETS

An appropriate innovation funding package to support the achievement of

- 30% carbon savings by 2020, 50-70% by 2050
- 10% renewables by 2050
- 95% air pollutant reduction by 2020
- climate change resilient newbuilt ships

"With diesel–electric propulsion, the Ecotanker reduces fuel and carbon by 45% and pollution by 90%"

IGOR JANSEN,
VOF Amulet Ecotanker

"The carbon reduction of the electric beerboat in Utrecht is equivalent to 11 soccer fields of forests"

JAAP DE JONG,
Harbour Master of the City of Utrecht

HOW TO GET THERE

1. Create a comprehensive innovation funding package tailored to small and microsize businesses, including pilot and implementation projects related to

a. Energy efficiency and carbon savings

- Support of smart steaming training campaigns on simulators
- Support of the development and implementation of energy saving tools, propulsion, vessel design and lightweight builds (also important for climate change resilience)

b. Slashing air pollution

- Encourage engine replacement and installation of after treatment equipment for retrofitted and new-built vessels
- Encourage mono and dual fuel propulsion (e.g. with LNG) for retrofit and new-built vessels

c. Alternative fuels

- Encourage a switch to clean and renewable energy carriers such as batteries and hydrogen or combined propulsion for short range operations and city transport solutions
- Encourage a switch to usage of a diverse energy mix such as LNG, liquefied biogas and second generation biodiesel for long range operations

This package should also cover logistics fleet innovation.

2. Eco-competitive regulation and soft law

- Reduce the cost of alternative fuels via taxation policy consistent with decarbonising goals
- Set emission ceilings encouraging innovative concepts and ensure that prior to implementation generous state aid rules enable innovation deployment
- Ensure that technical innovation is not hold backwards by technical regulations.
- Accept ISO-standards for cold ironing and payment systems in sea and inland ports
- Create differentiated port charges on the basis of a green award system
- Ensure that public procurement rules incentivise the introduction of low carbon transport solutions and create a low-burden eco-bonus to encourage private transport users to apply similar standards
- Phase-out subsidies for initiatives and actions incompatible with the 20-20-20 agenda in all transport modes

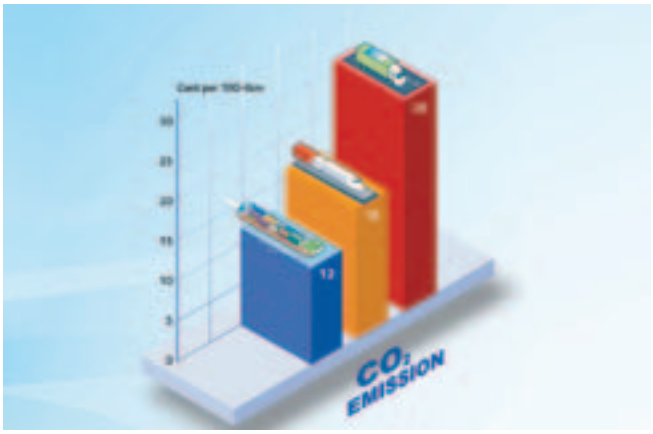
3. Attention points for research and innovation programmes for innovation

- Ensure small-enterprise friendly access to funds
- Focus on demonstration and pilot projects as well as business plans to ensure market transfer
- Focus on cost reduction mechanisms to enable wide-scale deployment of decarbonising technologies
- Ensure EU investment in development of a diversified and cost-efficient renewable energy mix

4. EU investment in alternative fuel production and distribution capacity and network

DID YOU KNOW THAT ALREADY

for carbon & energy, waterway transport is leading the way



- According to a 2007 study by Planco, inland waterway transport is currently the transport mode with the lowest carbon emissions.
- Between 1990 and today, the sector saved some 15% in fuel consumption.
- The current situation in the Netherlands, where waterway transport holds a modal share of 31% but only represents 5% of the greenhouse gas emissions without any important clean technology improvement, clearly demonstrates that modal shift policy makes sense.

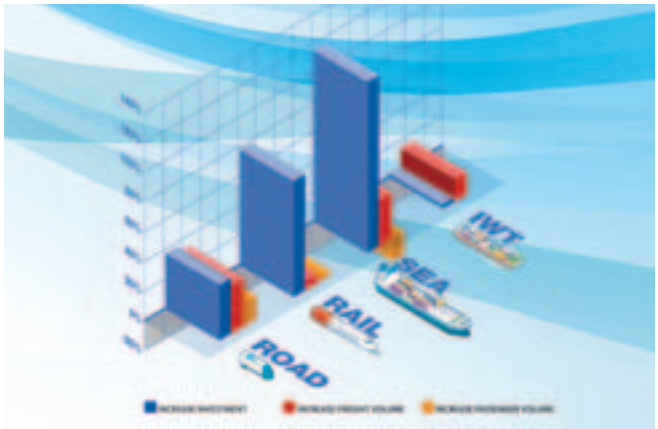
for seaport-hinterland transport, waterway transport keeps Europe's core regions accessible

- In well-developed waterway regions, the modal share of waterway transport is up to 30% and higher. In the ports of Antwerp and Rotterdam, inland waterway transport takes a share respectively of 32% and 57% of the port hinterland movements and still has enormous spare capacity. Thanks to waterway transport, the port of Rotterdam daily avoids 100,000 truck movements. Likewise, emerging ports like Constanta are also counting on inland navigation for their sustainable hinterland transport: it is no coincidence that several container liner services on the Danube were successfully established over the last few years.
- To ensure accessibility and sustainable growth, major seaports such as Antwerp and Rotterdam have put in place strong modal split targets of up to 45% for container movements by barge. They are investing in efficient nodes, "extended gates" to the hinterland served by inland ships to bundle freight volumes and avoid congestion. At the same time, this will reduce costs, waiting times, carbon emissions and pollution.

the waterways & ports cluster is a significant source for jobs and growth

In Germany, 400,000 jobs depend directly and indirectly on inland port activities. In Brussels, the Union's capital, the port activities create 12,000 direct and indirect jobs.

investment in waterway infrastructure provides excellent return



Between 1995 and 2004, the EU invested some EUR 800 billion in transport infrastructure, allocating 64% to road transport, 32% to rail, 3% to seaports and 1% to waterways. Inland waterway transport managed to grow by 14.5% more than other transport modes, despite the lowest investment. Spending more to overcome a serious maintenance backlog is necessary to tap all its potential.

A PERMANENT POLICY AND RESOURCES TO DEVELOP WATERWAY TRANSPORT

ANCHOR 1 *accessible seaport-hinterland*

Major EU seaports have set modal split targets for containers of up to 45% by inland waterway transport, as waterways are the only way to bypass saturated land networks and to sustainably supply hundreds of millions of EU citizens in the long term. Since this means that container volumes by barge must quintuple in the next years, a Strategic Masterplan sea-hinterland for waterway transport is required to realize these ambitious modal split targets. The Masterplan should cover a network concept of quality waterway corridors and transhipment infrastructure, flexible fleet capacity, full RIS deployment, the integration of traffic, transport and documentation systems and a spatial planning which makes sustainable and seamless goods supply by water to its citizens possible.

ANCHOR 2 *congestion-free continental transport*

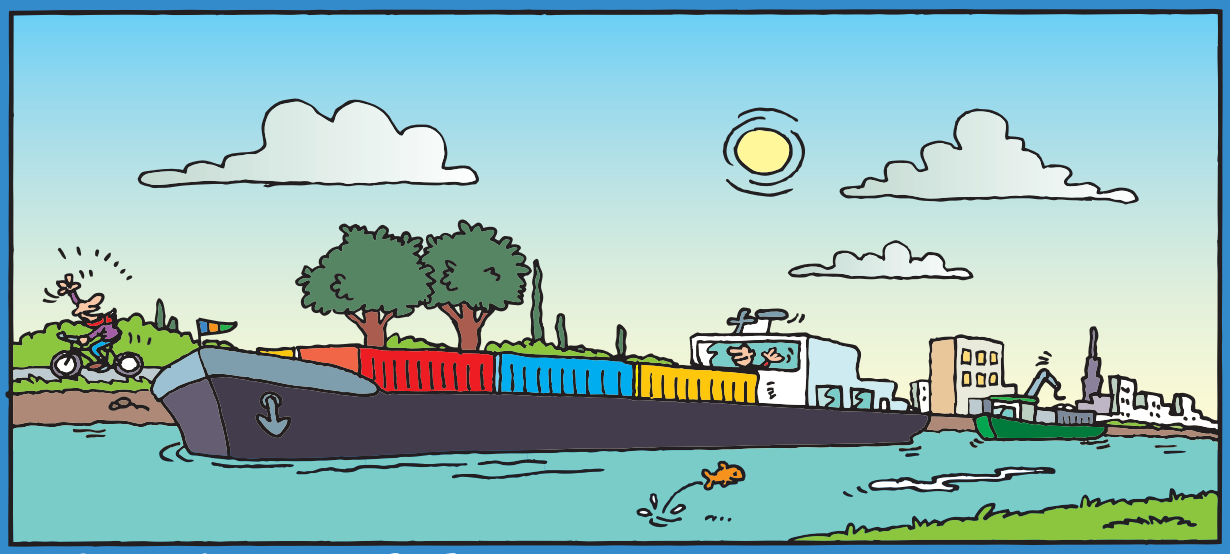
Front-running companies are starting to involve inland waterway transport, even for fresh produce, via emerging inland logistics hubs between destinations across the continent. This opens new markets besides the traditional markets for inland shipping in areas such as waste, new fuels, fast moving consumer goods, building materials, etc. Developing this potential requires the same measures as the Strategic Masterplan sea-hinterland. Transhipment which represents a critical cost factor provides a greenfield for innovation and unlocking it should be encouraged using all possible policy means. This also includes the integration of waterfreight installations at the urban riverfront in order to make the best use of the scarce space in cities and reduce the last expensive mile.

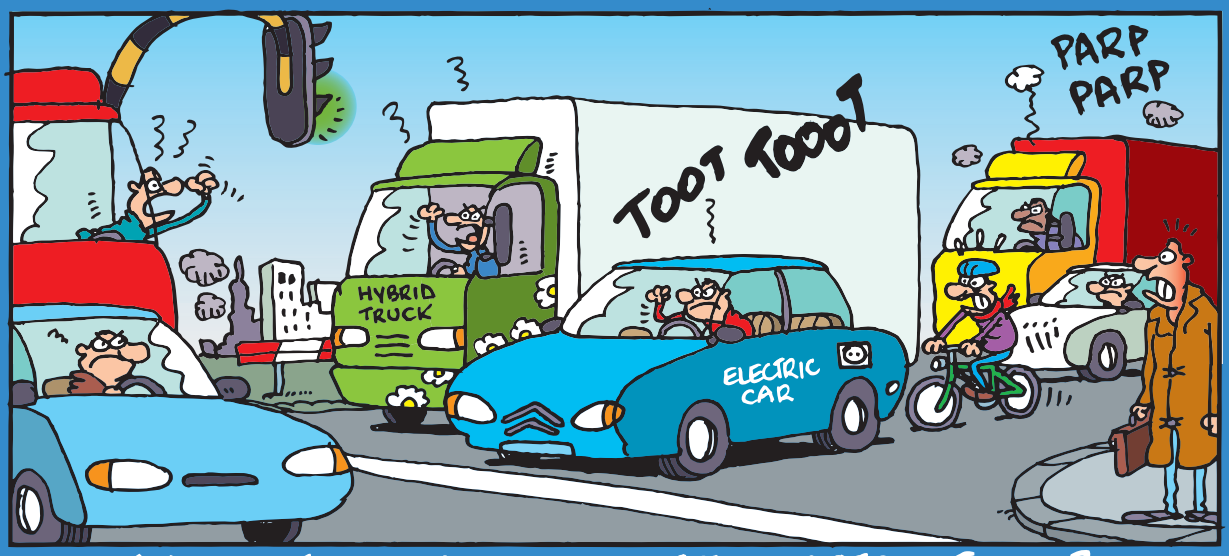
ANCHOR 3 *jobs and growth*

Once the crisis is digested, the considerable growth potential of inland waterway transport will create a sector with jobs to offer. The human factor is crucial for the development of a competitive and future-oriented industry fully integrated in the supply chain. To speed up the arrival of newcomers and career changers, a combination of high quality and fast track education is required with the perspective of career opportunities and job mobility. Finally, incoming entrepreneurs will only be triggered by an attractive business and investment climate with sound access to capital as ships are capital intensive in comparison to other transport vehicles.

ANCHOR 4 *eco-competitive fleet*

Notwithstanding the energy efficiency and low carbon impact of inland shipping, the ageing fleet needs to start preparing now for the new generation of green vessels. This means building on the success of the first barges of the future which are now entering the market and combine cutting edge design with the use of new fuels. For multiplication across the industry, the implementation cost of new technology and a renewable energy mix for long and short haul operations must go down by tax and subsidy policy consistent with the environmental goals and tailored to a sector dominated by small and microsize enterprises. Finally, the switch to new fuels is only realistic if an efficient production capacity and distribution network is in place.





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