

A communication in inland waterways transportation Creating the framework conditions for development

The strong growth of passengers and goods on Europe's roads results in more traffic jams, longer and less reliable journey times for commuters, transporters and distributors. Costs to business and society start to escalate since traffic grinds to a halt, and the competitiveness of Europe is at stake. Building one's way out of road congestion will not put an end to increasing traffic volumes. Only smart growth making effective use of multi-modal solutions will combine economic development with sustainable mobility.

Europe has a network of rivers and canals linking major cities and towns, centres of commerce, industry and ports. Where inland shipping was traditionally active in bulk markets for long distance transports, liberalisation has opened new and promising horizons. The boom in container traffic reveals how waterway transport also carries high value goods on short distances in a cost-efficient way. The steady growth in usage over the last 10 years underlines the demand to relieve congested areas for moving freight from producer to consumer.

The inland shipping sector consists for a large part of small and medium sized enterprises, many of them family-owned. They have the ambition to innovate, but under the pressure of tightening bank lending and crippling regulation they are compelled to cut investments. This is a pity, because the sector has jobs to offer and provides genuine opportunities to keep goods flowing. Setting the right framework conditions will help it to pursue longer-term goals important to increase competitiveness and to make an excellent contribution to sustainable mobility.

Overview of measures for short-term period

1. **Marco Polo:** Adaptation the programme to market needs. Authorisation of national programmes copied from the European initiative without notification to cut administrative procedures. If this would reveal impossible, a tailor-made sector programme as foreseen in the white paper 2001 should be considered.
2. **De minimis rule for transport** and **State aid guidelines** to enhance transparency of state aid opportunities for modal shift, start-up aid, innovation in logistics, technology, environmental performance and safety.
3. **FP7 research:** attention for inland shipping in RTD programme and particular focus market applicable research by including pilots.
4. **Environmental legislation:** regulations push innovative market developments.
5. **Administrative barriers:** An overall survey on regulations and procedures at the level of the Member States, River Commissions and the Community enable to identify the need for transparency, simplification, harmonisation, one stop shops and RIS tools. The nomination of national focal points would be very helpful.
6. **Recruitment and training:** The acute shortage of workers requires a European wide campaign. High-quality training in all involved countries enhances the potential of high skilled workers and the competitiveness of the sector.
7. **TEN-T follow-up:** follow-up of projects according guidelines and criteria; prevent conflicting land use with negative impact on mobility; maximize implementation of RIS by inclusion in objective of multi-annual indicative TEN-T programme 2007-13 to optimise multi-modal transport management.
8. **Promotion:** kick-off support for new promotion structures to enhance public-private networking for modal shift and innovation and to steer mobility management.

1. GOODS: facilitate modal shift to reduce congestion

CHALLENGE: enhancing efficient access to waterways

In order to influence the decisions of transport users to shift goods to the water, lowering the thresholds to using multi-modal solutions is paramount. As a matter of fact, multi-modality is more complex than single road options. Transport users are ready to shift and inland shipping businesses can ship more goods if there are effective connections to the waterways in combination with cost-efficient transshipment facilities.

1.1. **Marco Polo**: The proposal of the European Commission on the Marco Polo II programme can be adapted to the specific aspects of the inland distribution market (SME transport organisers, short and medium distances, growing market of low weight goods) to reduce increasing congestion and its nuisances more effectively. Enhancing the participation of SMEs in the programme is also consistent with overriding policy objectives.

1.2. **National Marco Polos**: Having a national grant approved by the European Commission is a long procedure, especially for transport users and operators who have to adapt fast to changing markets. Undoubtedly, an adapted Marco Polo programme could also be a good tool to fight congestion within countries without the European dimension. The European Commission could therefore authorise grants from Member States on their territory, based on the same principles and criteria of the European programme but without the lengthy notification procedure.

1.3. **A waterway branches policy**: Some Member States have introduced tailor-made measures to attract transport users to the waterways:

- the French programme "embranchements fluviaux" led in the period 1997-2003 to 35.3 million more tons on the waterways with an average public co-financing of 17.2%.
- The forecasts for the Flemish "kaaimurenprogramma", initiated 4 years ago, indicate some 100 million more tons on the waterways by 2010. Most companies transship more than they initially committed to.

These two national measures are particularly successful because the governments' incentive to industry to invest in waterside freight facilities commits partners to carry out long term modal shift projects.

National and regional promotion bureaux play a positive role by providing networking opportunities and by offering information & advice on grants.

The European Commission plans an extension of the "**de minimis rule**" to transport. INE is convinced that in a liberalised market a ceiling of EUR 100,000 per undertaking in three years will not lead to a distortion of competition, especially if the state aid is used to realise objectives for a better use of multi-modal transport, innovative freight concepts and the development of niche markets such as the movement of waste and recyclables by water to relieve residential areas. Finally, the activation of the "de minimis rule" for transport would put an end to the current discrimination between enterprises of the transport sector not benefiting from the rule and enterprises not belonging to the sector but carrying out transport activities and as such benefiting from the rule. INE suggests introducing **state aid guidelines**, in combination with an extended de minimis, to provide more transparency for national aid programmes and encourage common learning between Member States on how to conceive successful measures and tools aimed at attracting investments.

Finally, if it would reveal impossible to adapt the current Marco Polo proposal to the market reality of SMEs, the reflection should be initiated on a dedicated **European waterway branches programme** as raised in the White Paper on Transport of 2001.

1.4. Additional incentives enhancing modal shift

- A neutral treatment of transport modes at terminals: It is obvious that the total cost price plays a decisive role in the choice of transport means. Transshipment costs determine the final price of shipping goods by water. The price in terminals for loading and unloading barges is often higher than the transshipment charges for trucks and rail wagons. The use of cost-saving transshipment equipment could be encouraged. There are also other incentives to make handling transport mode neutral.
 - At the container terminal of Lyon, there is an identical handling rate for road, rail and inland shipping transport, which results in a significant increase of inland shipping operations.
 - During the works on the road ring of Antwerp, the Flemish government, the port authority and terminal operators decided to cover the extra costs for handling, normally charged for inland shipping and night shifts, to keep goods moving in and out of the port.
- Effective use of spatial planning policy: Efficient and integrated land use planning is a key to unlock the development of freight by water. For inland shipping, waterside freight facilities are the indispensable link for the loading and unloading of vessels and for the onward distribution of cargo in multi-modal solutions. Locating warehouses and logistics centres near to waterways contributes to the grouping of cargo, optimises the capacity use of inland shipping, changes traffic patterns and provides opportunities for increased regional development.
 - The UK compiled a best practice guide to assist operators and authorities through practical advice and examples. The guide shows how good spatial planning can help support and encourage the carriage of more freight by waterways.
 - The case of Airbus: without access for the world's biggest aviation constructor to the waterway in France, the assembly of the A380 in Toulouse would not have been possible with negative consequences for some thousands of workers in the region.
- Innovation & technology transfers: Innovation is a key driver to contribute to the Lisbon goal of developing a knowledge-based economy. The EU spends an important budget on research and this budget will increase. In order to have a maximal effect, R&D schemes should focus on the commercial application of knowledge and technology. Especially for SME companies, the market viability of new projects is of major importance. INE therefore recommends the European Commission to impose more pilots in the R&D projects of the upcoming FP7 to test innovative concepts in real-life business environments. INE also suggests improving the tax environment for R&D. Finally, INE welcomes the revision of the R&D state aid framework to facilitate the access to finance and risk capital, as well as the public financing of R&D and innovation.

2. MODERNISATION & INNOVATION: incentives for a competitive and eco-efficient fleet

CHALLENGE: trigger investment of SMEs to support EU competitiveness and sustainable growth

Liberalisation has led to specialisation and higher quality requirements. Shipping operators have invested in larger ships (> 2,500 tons) to attain better economies of scale and to raise the profitability of operations. Logistics trends and eco-efficient technology evolve constantly. Innovation is a driver of growth, but difficult access to finance throughout the entire life cycle of an enterprise makes SMEs reticent about translating ambitions into reality. It is important to create the right framework conditions enabling

inland shipping to develop as a modern and competitive sector and to contribute effectively to more sustainable mobility.

2.1. Incentives for market innovation: The vessels and barges navigating in Europe are very diverse according to the waterway corridors they serve, but all operators have to keep pace with logistics trends and growing quality standards. Investments in ships are very capital-intensive. A revision of Marco Polo taking due account of the SME market and the authorisation of national Marco Polo programmes can contribute to innovation, but there are other instruments which are likely to be more appropriate to cover this issue.

Some national Member States succeeded in triggering investment in the innovation of vessels via tailor-made financial incentives.

- the « Plan wallon d'aides au transport par voies navigables » is a scheme in cooperation with the ministry responsible for SMEs to help them to modernise their fleet. The aid scheme is so successful that it has been prolonged until 2006. Between 1996 and 2003, participating enterprises invested on average EUR 6 for each EUR 1 of public money.
- Until 2003, the Flemish authorities stimulated modernisation of the fleet. Evaluation of the programme shows that for each EUR 1 public co-financing, barge operators invested EUR 12.

The extension of the “**de minimis rule**” to transport would undoubtedly give more room to Member States to put into practice a mobility policy by facilitating private investment in transport capacity, hence supporting the competitiveness of the sector as well as enhancing overall mobility in regions with navigable rivers and canals. The **state aid guidelines** should also cover this type of aid opportunities adding to more transparency for national aid programmes and encouraging common learning between Member States and regions. The need for **market-oriented research** has already been mentioned. Finally, national and regional promotion bureaux can act as **innovation poles**, analysing trends in the market, the sector and society, as well as providing information, advice and networking opportunities for new projects.

2.2. Safe and eco-efficient inland shipping: The negative effects of transport on the environment and human health increasingly impact on public budgets. More inland navigation brings benefits such as increased safety and security, energy-efficiency and low emissions. When comparing negative external effects caused by different modes of transport, the carriage of goods by waterways has the lowest comparative share, less than 1%. As well as using fuel very efficiently, inland shipping produces low emissions with low noise and is visually inobtrusive – a powerful combination of the environmentally friendly and socially acceptable. This is however no reason for the sector to stand still. Ongoing investments in environmentally enhanced engines and new technologies further cut emissions. Research on zero emission vehicles takes place to reduce fossil fuel dependency. Stimulation by the EU and Member States of the sector's efforts can contribute to progressive emission reduction and better energy use. Environmentally friendly investments can be enhanced by the same instruments recommended for innovation (enhanced access to capital, state aid, market-oriented research) and by making new technologies more attractive than conventional ones. Appropriate environmental regulation will accelerate the introduction of cleaner fuels.

3. ENTREPRENEURSHIP: incentives for a dynamic and future-oriented sector

CHALLENGE: increase entrepreneurial initiatives

Rabobank, the leading inland shipping bank, warns that the ageing of barge operators and a lack of investment by the government in smaller waterways will increasingly hinder

the growth potential of inland shipping. Transport users have a growing interest in moving goods by small waterways over short distances for mobility reasons, but limited profitability linked to investment and operating costs progressively leads to a shrinking market of small vessels.

However, a Flemish study shows that existing freight transport on the small waterways already generates sufficient societal benefits to completely cover the costs of maintenance and operation of the infrastructure. There is a strong motive to retain this traffic and to strengthen it by means of proper maintenance and operation of the waterway infrastructure. There are additional opportunities to maximise societal added value by including recreational shipping and sustainable tourism in integrated plans for regional regeneration.

3.1. Incentives for starters: To curb the growing shortage of vessels of 1,250 tons and less, the inland shipping sector needs new and ambitious entrepreneurs focused on innovation and expansion. The combination of high investment costs and a conservative lending policy of financial institutions repel new entrepreneurs to enter the market. This will not change if thresholds remain too high in comparison with other professions. Creating appropriate access conditions to credit and to venture capital is paramount.

Some Member States and organisations have initiated the reflection on which financial instruments to develop in order help new entrepreneurs to overcome the initial access to capital and raise profitability prospects:

- The Walloon fund "SOWALFIN" is an undertaking of public interest established in 2002 to create and develop SMEs incl. the inland shipping sector. Sowalfin provides bank guarantees and additional loans. It is too early to assess the impact of the fund.
- Flanders will introduce by the end of this year a general scheme for SMEs: the "Vriendenlening" to make loans to SMEs start-up businesses fiscally attractive and "Arkimedes" to activate risk capital by offering the risk capital market an extra euro for each euro of private means invested in an SME. In addition, there will be government guarantees for venture credits and risk capital.
- In France, big shippers from the cereals and construction materials sector reflect with the industry about supporting the financing of new vessels to ensure sufficient capacity of entrepreneurs to carry goods by inland waterways.
- Promotion offices noticed that leasing companies start to show interest in the inland shipping business.

Learning from the concrete experiences of DG enterprise, the EIB and EIF, by removing the barriers to financial access for SMEs, the European Commission could carry out a survey with the sector to investigate which type of measures may be of particular interest for inland shipping operators and examine the set-up of a dedicated inland shipping **start-up and innovation fund**.

- In the Netherlands, the inland shipping organisations examine the start of a dedicated inland shipping innovation risk fund, with the support of two market parties and associated to the existing maritime innovation fund, to cover risks of new projects in an effective way.

All envisaged solutions should take as a starting point that the inland shipping business operates in a market environment incl. the inherent risks. No measure should lead to pseudo-public service.

3.2. Training for entrepreneurship: A competitive environment such as the transport industry requires effective business administration skills to guarantee success in the provision of logistics services. Business-related modules should be made accessible to all inland shipping entrepreneurs as an essential ingredient to empower the sector to meet the challenges ahead.

Some national examples following the European framework on access to the profession:

- Flanders organises business administration since 1999 by distance learning for new entrants. At the moment, 40% of existing operators already took part. With regard to starters, almost all, for the moment being, have family ties in the inland shipping business. Flanders hopes to attract new trainees outside of the inland waterways transportation sector.
- Since 2002, France has a higher education system for young inland shipping entrepreneurs. The programme of Elbeuf, under the authority of the CNAM (national conservatory for arts and business) and the ITIP (institute for international transport and ports), covers both nautical, technical qualifications and logistics-business oriented education. Some 15 to 20 people per year will obtain their diploma.

3.3. Remove burden of administrative barriers: There are still many administrative barriers such as the number of different certificates, manning regulations, food measures, classification surveys, traffic rights etc., which are not compatible with the aim of an internal market for shipping and unnecessarily complicate the task of start-up businesses. The EC currently increases efforts to systematically screen existing and new EU legislation on the excessive administrative burden on businesses knowing that "less red tape = more growth". This exercise should be extended to national and other regulations in vigour for inland shipping. Carrying out a detailed survey can assess the main barriers and lead to concrete proposals of simplification and, where necessary, harmonisation. Promotion bureaux could be particularly helpful in spotting problems and delivering input on market compatible solutions.

- The Flemish promotion bureau discovered that an entrepreneur needs some 60 documents to run a ship. The variety of documents required and the opaque administration are a time-consuming labyrinth. For example, small vessels must have at least 2 boatmasters on board under the current Belgian regulation. Technical innovation and common practice in the Netherlands show one boatmaster can navigate the ship without putting safety at risk, raising profitability prospects.

Since no single administration has captured all the potential gains from ICT, it should be examined where RIS can offer added value in the reduction of red tape and the creation of one-stop-shops. The final aim is to streamline operations and enhance cheaper and faster start-ups.

It is self-evident that measures for starters also benefit existing operators.

4. JOBS & TRAINING: enhancing high-quality employment

CHALLENGE: encourage sustainable and future-oriented employment

Globalisation and a growing trend towards a 24-hours economy also affect activities of the inland shipping business. Not only the number of barge owners decreases, the shortage of workers aggravates while the employment rate increases. In western Europe, the scarcity of highly qualified personnel is becoming acute. In eastern Europe, skilled workforce is still available, but the question is until when. Structural measures are necessary to ensure that the inland shipping development potential is not jeopardised by a declining number of workers.

4.1. Free movement of workers: The problem of the decreasing working population in western Europe could be temporarily solved by attracting qualified personnel from new EU countries and accession countries. Some inland shipping companies already employ staff from eastern Europe, but the practice still faces a lot of administrative barriers

related to work permits limited in time. The European Commission could examine how an accelerated opening of the EU15 European labour market could facilitate cross-border employment.

4.2. Recruitment programme: More structural solutions are necessary than attracting boatmasters from countries where there is still reserve capacity. Working in the inland navigation market is certainly different from most shore activities, but provides prospects of a promising career. It will be necessary to make groups of youngsters, without family ties in the inland shipping business, aware of the positive perspectives of the profession. A general tool is the set-up of a broad communication campaign across Europe building the image of the sector. More specific tools have to be envisaged. By involving employment agencies, the unemployed could participate in conversion programmes. Investment in high-quality training and in career opportunities can boost the attractiveness of the profession as well.

Some national examples:

- In the Netherlands and Belgium, communication campaigns were launched ([work@water](#) and are you waterproof) to attract youngsters to choose for a waterborne career. The tools included TV spots, PR-material, information booths and packages for schools and employment agencies, open-doors events, simulation games. In Belgium, the majority of positive reactions came from the +35.
- Flanders organised, in cooperation with regional employment agencies, an accelerated boatmaster training and exam to convert the unemployed. According to the criteria of the employment agency, the fact that 34 persons without inland navigation background have been put at work is to be considered as a success.

5. INFRASTRUCTURE: reliable waterways for more mobility

CHALLENGE: create an effective and sustainable multi-modal network

The European waterway network is an arterial system that reaches deep into the heart of many towns and cities. High-performance waterways are catalysts for sustainable mobility of goods and people. They provide a vital link between coastal and inland ports and major sites of manufacturing, industry and commerce. We have to make sure that the development of inland waterways transportation is not thwarted by a lack of maintenance. The suboptimal use of an entire waterway can depend on one single bottleneck. Reliability is paramount to sustain growth and mobility.

5.1. TEN-T waterways: A dedicated IWT coordinator for TEN-T may be a good suggestion, but INE is aware that it is almost entirely in the Member States' hands to carry out the necessary works according to the criteria of the guidelines. Between 1983 and 2003, the TEN-T support to waterways did not amount to more than 1.62% of the budget. It is not difficult to imagine that the backlog in waterway maintenance in most Member States is enormous. The priority projects for waterways are aimed at removing the most well-known barriers for the growth of current traffic and the development of new freight flows. INE invites the European Commission to maintain pressure on the start and the progress of the works. Additional works such as regular dredging, improving lock capacity and raising bridge clearance are relatively cheap measures to increase the productivity of shipping operations. The socioeconomic return of such measures is not to be underestimated. Member States' action boost investors' confidence. Full loads mean better prices and increase the attractiveness of modal shift. Promotion bureaux, gathering public and private interests, could help to bring important files on the agenda of the MIP and non-MIP TEN-T programmes.

5.2. **Sustainability mobility** is of course more than energy-efficiency and low emissions alone. Free space is becoming scarce in the EU. Making better use of the existing waterway network stands for smart land use and a halt to habitat fragmentation. The enlargement of the Union has led to the enlargement of the river network. Maintaining and upgrading these waterways is an opportunity to accommodate sustainable development. A better integration of environmental and transport initiatives should take place. Fragmented policies increasingly lead to conflicting land use, where in reality win-win situations are perfectly possible benefiting sustainability and mobility. The preparation of a best practice guide could be a first step to enhance cross-sector dialogue and solutions.

National examples:

- The planned Seine-Nord canal in France will cross the environmentally sensitive area of the Somme valley. By involving citizens groups and NGOs from the very start in the consultation and planning process, an in-depth dialogue took place about the needs and constraints to marry ecological values with mobility requirements. The final plans cover a flood defense scheme as well as a sophisticated nature restoration and creation programme.
- TEN-T project in Austria: 'Integrated River Engineering Project on the Danube to the East of Vienna': This project will improve the fairway conditions to the east of Vienna and the ecological situation of the National Park Donau-Auen. It can be seen as a showcase for modern river engineering measures with special consideration of the ecological requirements of the environment. Currently a similar project within the TEN-T framework is set up for the infrastructure improvement of the Hungarian section of the Danube between Gabčíkovo and Budapest.

In the framework of the WFD Common Implementation Strategy, DG ENV of the European Commission has agreed with the national water directors to assess the integration of sustainable water management and navigation. INE firmly advocates involving national waterway managers to this exercise in order to have a truly integrated view on the issue.

5.3. **River Information Services**: The progressive introduction of ICT enables efficient traffic management via permanent connections between vessels, waterway authorities and users. RIS therefore can contribute to more seamless traffic, enhancing the use of the existing network infrastructure and improving the services for the operators. To guarantee that RIS is fully implemented across borders, INE suggests to include the EU wide deployment of RIS in the objectives of the upcoming multi-annual indicative TEN-T programme.

A national example:

- Implementation of River Information Services in Austria: Already in 2003 a Test Centre for DoRIS (Donau River Information Services) has been established for the area of Vienna. After successful tests, the extension of DoRIS to the entire Austrian Danube will be achieved by the beginning of 2006. Parallel to this, the implementation of RIS in other Danube countries is under preparation.

5.4. **Alternative financing**: Financial institutions and industrial consortia start to show interest to invest via public-private partnerships in waterway upgrades that raise the profitability of shipping services.

6. PROMOTION: extend a positive and cost-efficient instrument

CHALLENGE: create a strong go-between for IWT operators, ports, users and public authorities

Aware of the potential of inland shipping, some Member States have taken the initiative of establishing promotion structures to introduce a market-oriented freight by water policy. The structure is different according to the country (promotion office, development agency, department of ministry or waterway manager, ...), but the aim is common. The establishment of a forum grouping all relevant public and private actors with the task to inform, to communicate and to network enables to develop a common vision on objectives and implement measures with the highest added value for growth.

Experience shows that, with limited means, existing promotion bureaux act as catalysts to effectively lower the threshold for the use of multi-modal solutions incl. inland shipping in supply chains vs. more simple single road solutions. By providing market-oriented information, advice, assistance to businesses on inland shipping and feedback to governments about businesses' concerns and barriers, such neutral interfaces can bridge gaps between business and government responding to the needs of both the private and the public level. They act as an information and contact point, create public support and facilitate network opportunities for innovation and modal shift projects.

Some examples:

- Since the establishment of the Inland Shipping Promotion Council in the Netherlands, inland navigation has increased by 30 million tons. Inland waterways transportation today has a modal shift share of 43%. New ship concepts have been tested and introduced in the market, e.g. the fully automated flour ship.
- In France, active promotion on freight development led to agreements between waterway managers, large industries and inland shipping operators to ship more cereals and construction materials by water in return for sound infrastructure investment and better transport services. Agreements are also concluded with seaports to develop an efficient hinterland policy strategy.

6.1. Set-up of promotion structures: Referring to EC support for short sea promotion bureaux and the eurinfo centres and the successful examples of the existing bureaux, the EC could assist with the start-up of promotion structures in more countries, leading to a European-wide network. The Danube for instance has high potential, but opportunities must be grasped. Austria gave a positive signal by establishing via donau in 1999. Next, similar promotion initiatives should follow in other Danube countries with close cooperation between the public and the private sectors to achieve a strong multiplier effect speeding up development. The cross-linking of these agencies would give a significant boost to effective networking to set the case for a performant Danube waterway.

6.2. Added value of a network: When joining forces, national and regional structures, each with their own public and private contacts, information and know-how, offer genuine opportunities to facilitate cross-border freight flows and to establish strategic partnerships for innovation. A European network with its roots at a local, regional and national level covering both public and private interests is a strong and pragmatic tool to:

- strengthen awareness-raising activities at European level
- network on pooling innovation, cutting red tape, optimising cross-border infrastructure, facilitating modal shift projects and providing targeted business advice.
- provide valuable input for a result-oriented European policy.