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STRENGTHENING INLAND WATERWAY TRANSPORT

PAN-EUROPEAN CO-OPERATION FOR PROGRESS

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EUROPEAN CONFERENCE OF MINISTERS OF TRANSPORT (ECMT)

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The ECMT is a forum in which Ministers responsible for transport, and more specifically the inland transport sector, can co-operate on policy. Within this forum, Ministers can openly discuss current problems and agree upon joint approaches aimed at improving the utilization and at ensuring the rational development of European transport systems of international importance.

At present, ECMT has a dual role. On one hand it helps to create an integrated transport system throughout the enlarged Europe that is economically efficient and meets environmental and safety standards. In order to achieve this, it is important for ECMT to help build a bridge between the European Union and the rest of the European continent at a political level.

On the other hand, ECMT's mission is also to develop reflections on long-term trends in the transport sector and to study the implications for the sector of increased globalisation. The activities in this regard have recently been reinforced by the setting up of a New Joint OECD/ECMT Transport Research Centre.

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FOREWORD

"Pan-European Co-operation towards Strong Inland Waterway Transport: On the Move" was a workshop organised by the ECMT, together with the UNECE, the Central Commission for Navigation on the Rhine and the Danube Commission and held on 22 and 23 September 2005. The purpose of this event, which was aimed at both public and private sector decision-makers in inland waterway transport, was to prepare for the Pan-European Conference on Inland Waterway Transport to be held in Bucharest on 13 and 14 September 2006. The main aim of the workshop was to take stock of developments since the previous Pan-European Conference, which had been held in Rotterdam in September 2001. That conference had stressed the need for a concerted effort to strengthen inland waterway transport at pan-European level and, with that purpose in view, the Ministers at the time adopted a Declaration setting out the goals to be achieved and the action to be taken.

The workshop organised on the above basis reported on progress made in implementing the Rotterdam Declaration as well as on outstanding problems and possible future initiatives. This publication contains the papers presented at the workshop. The first of these addresses the state of development of the inland waterway market in the European Union, on the Rhine, in the Danube basin, and in the Ukraine and Russia. The following papers review the conditions of competition in this sector, including market access conditions, harmonisation of social, technical and environmental legislation, the integration of the labour market at pan-European level, and infrastructure user charging. Development and its impact on the environment was the third topic addressed by the papers presented at the workshop.

As well as the keynote papers, this publication gives a summary of discussions at the workshop and the conclusions it reached. The ample statistics to be found in the many annexes will also be of great interest to readers. All of the papers presented will be distributed as reference documents to participants at the Bucharest Conference.

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Jacqueline Tammenons Bakker, Director General Civil Aviation & Freight Transport, Ministry of Transport, Public Works and Water Management, Netherlands

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Ladies and Gentlemen, fellow colleagues, welcome to this Workshop on Pan-European Co-operation towards a Strong Inland Waterway Transport: on the Move. It is an honour to speak to you today.

I am delighted to see that all the international organisations which are active in inland navigation have joined forces to realise this workshop. I thank the European Conference of Ministers of Transport, the European Commission, the United Nations Economic Commission for Europe, the Danube Commission and the Central Commission on the Navigation of the Rhine for their efforts.

The Ministerial Conference in Rotterdam was held 4 years ago and much progress has been made since 2001. This workshop is a good opportunity to look at what we have achieved and the new challenges that have arisen in the meantime, in anticipation of the Ministerial Conference in Bucharest in September 2006.

So let us look at how far we have got, discuss some of the concrete results, sketch the challenges we are facing and try to indicate how the sector itself feels about various topics, on the basis of the four sections of the Rotterdam Declaration.

But first I would like to say something about the development of inland shipping. The growth of inland navigation is partly dependent on the growth of the global trade volume. Although this was practically zero in 2001 and 2002, it has been picking up again since 2003 and is expected to show a growth of 5.5% in 2006. In theory, this means that business should improve for inland navigation, as well. Incidentally, one sector, that of national and international container traffic, has resulted in spectacular growth in inland navigation lately. In Germany there was a doubling in the period from 1995 to 2003. Last year there was a growth of 38% in the north-south traffic between France and the Benelux countries. This was despite the fact that there were handling delays for inland waterway vessels in the seaports due to the growth in maritime container flows.

If we look at the whole Pan-European picture, we have an internationally classified waterway network of more than 16 000 kilometres available for inland navigation in the “Europe of the 25”. Inland waterway transport accounts for more than 210 000 million t-km, with a fleet of about 12 000 motor vessels and tug-pushed barges. Approximately 80% of these t-km are realised in the countries situated along the Rhine, while about 9% are realised on the Danube and the Rhine-Main-Danube connection. There are enormous possibilities for expansion here.

Infrastructure

The Rotterdam Declaration states that the development of a modern, environmentally friendly, efficient network of waterways is a must for both the promotion of inland waterway transport and the improvement of sea and river transport.

I am particularly pleased that in France the planning of the Seine-Nord is being tackled with great speed. It is important for France, Belgium and the Netherlands because it will enable a shift in transport from road to water in the north - south corridor between the big ports of Paris, Antwerp, Rotterdam and Amsterdam. This connection has been given the status of TEN corridor and I feel that this is quite justified.

Within the framework of the ECMT, a study has been carried out into best practices so that infrastructure can be realised which takes other functions of water into account. After all, water has other functions: water supply and hydro power, to mention a few. This research will be presented during the session on infrastructure tomorrow.

The challenge now lies in tackling the necessary infrastructural projects while complying with the findings of the study. The Trans-European Networks are, of course, particularly important, partly in view of the recent, and expected, expansion of the EU to the east. The Rhine-Main-Danube connection promptly springs to mind in this respect. In its National Action Plan, Austria has recently shown how it will be tackling the Danube to the east of Vienna. I trust that Germany will improve the bottleneck between Straubing and Vilshofen adequately, while taking the other functions of the river into account. This would give the east-west inland waterways route in Europe the most significant boost since the realisation of the Rhine-Main-Danube connection.

Incidentally, we have learned in the Netherlands that simply having a waterway network is not enough. A network can only be used if inland ports are realised, too. In the Netherlands, the added value of inland ports to the economy is almost as big as that of all our seaports put together. This is why, at the conference in Scheveningen, EU member states were called upon to share their knowledge on the development of intermodal nodes and to stimulate trade and industry to set up businesses at the waterside or close to an intermodal node. By "intermodal points", I am referring to inland ports, terminals and logistic centres, of course.

Incidentally, within this framework, I believe that it is very important to base your infrastructural policy on transparent financial arguments. Decisions can only be taken if the added value can be compared with the costs. This is one of the most important conditions which have to be met if we are to look forward to political decision-making with confidence and sway public opinion in our favour. Only then will we be able to get sufficient financial resources released for managing and maintaining waterways and removing bottlenecks and, ultimately, achieving a high-quality network of waterways.

Apart from infrastructure itself, it is also important to improve our use of it. In 2001 the ministers responsible for inland navigation asked the governments involved to set up the Pan-European River Information Services before 2005. I am pleased to say that this has been realised and that we adopted the European River Information Services Directive in the Council in 2004. The River Information Services will make a very significant contribution to the competitive strength of inland navigation. Not only will it greatly improve efficiency, but it will also take nautical safety even further.

The fact that we have a Directive which lays down norms does not mean that we have made it. The most important thing now is to implement the River Information Services as broadly as possible, with the focus primarily on harmonisation and interoperability. National governments will be taking the lead in this implementation, but it is essential that the business community subsequently utilise the advantages to the full. By that I mean not only those providing the transport services, but those requiring the transport services, too. If the exchange of information between the various parties which are active in the different transport modalities is improved, goods can be transported more efficiently and therefore more profitably.

What does the business community think about all this? The European Barge Union and the European Skippers Organisation listed the top ten priorities of Inland Navigation to be supported by the European Union and national governments in their publication of last November. The first place went to the Inland Waterway Transport Policy Master Plan for freight transport and second place went to an excellent infrastructure and an extended European waterway network. The latter would include a European stimulation fund to remove bottlenecks and to realise the missing links within the Pan-European network. Incidentally, I wonder whether they are not conveniently ignoring the fact that infrastructure is not an EU task. The tasks which such a fund would have would therefore be practically non existent.

The business community also recognises the importance of the development of River Information Services because it makes Inland Navigation attractive to modern supply chain management.

Harmonisation of legislation and access to the market

The request from the ministers in Rotterdam for the reinforcement of co-operation in terms of legislation was well received by the European Commission, the United Nations Economic Commission for Europe and both River Commissions. This co-operation concerns the field of Pan-European harmonisation of technical, safety and manning regulations. In its top 10 priorities for 2004-2010, the sector rightly asks for the reduction of unnecessary administrative and financial burdens by harmonising legislation and technical requirements. A considerable success can be reported in this respect: in a joint working group of the European Commission and Central Commission for the Navigation on the Rhine, Directive 82/714 and the Regulation on Inspection of Shipping on the Rhine have been harmonised to enable the mutual recognition of certificates. This means that it will be possible to operate throughout the whole EU with a single certificate.

The European Union has, of course, recently been expanded with the accession of various inland navigation countries such as Poland, the Czech Republic, Slovakia, Slovenia and Hungary. The accession of Romania and Bulgaria is also in the pipeline.

Just this weekend, I heard the news that Turkey will formally apply for full membership of the Danube Committee at the moment of the revision of the Belgrade Act. The world of Inland Navigation is indeed expanding.

These developments have made the institutional issue in inland navigation more pressing. The EFIN (European Framework for Inland Navigation) report has given a boost to the discussion on the institutional frameworks. This issue has now been put at the top of the agenda, partly thanks to my colleague, Mr. Karamitsos, of the Commission. He is also planning to include this topic in the Communication he is currently preparing. I would like to see this leading to far-reaching co-operation between the international regulatory organisations, within a year. This is my challenge to you. And then we will be able to look at our progress at the Ministerial Conference in Bucharest. In my opinion, it is essential that we improve this co-operation before we start talking about setting up a new institution.

In response to the appeal of Rotterdam, a group of volunteers within the United Nations Economic Commission for Europe listed the legal obstacles inland navigation is up against. But listing the obstacles does not make them go away. It is up to us to take up the challenge here. In this framework, it is gratifying to note that one of these obstacles has now been overcome: the Convention on the contract for the carriage of goods by inland waterways CMNI, has now gone into force. The Netherlands will be ratifying the convention towards the end of the year. At this point I would like to repeat the appeal made at the Ministerial Conference for your country to ratify the CMNI if it has not already done so. Another obstacle currently being tackled is a general, shared definition of the freedom of shipping on the Danube in the framework of the revision of the Belgrade Act. It will not come as a surprise to you when I say that I support the maximum possible stretching of this freedom.

The negotiations on the mutual recognition of boatmasters' licences have not been completed yet, either, but I am confident that they will be successful.

Those active in the sector see competitiveness and innovation as essential to economic development. They formulate this as "a level playing field in a liberalised market with fair competition". The business community is calling for the harmonisation of rules and regulations and

the ratification of relevant international conventions. They think that the solution to the disparities in legal instruments and regulations is to be found in a European organisation for Inland Waterway Transport. This organisation would have autonomic competences to implement a coherent European Inland Waterway Transport policy. I support the sector in its aim of a level playing field, which would enable fair competition. As I have already said, I think that co-operation is important. And until co-operation has been realised, it is definitely not time to start talking about new institutions.

Safety and sustainability

In 2001 the ministers felt obliged to call for the further development of safety norms and measures against water contamination, air pollution and noise nuisance.

I am happy to report progress in this field too: Belgium and France will soon be ratifying the Convention on Collection, Discharge and Reception of Waste arising from Rhine and Inland Navigation. If the convention has gone into force by the time "new" member states accede to the EU, the next step will be to enlarge its scope by enabling other countries to participate as well.

Inland navigation is a safe, efficient transport modality. There are, however, two reasons why we must work hard at lowering the environmental impact resulting from inland navigation:

- To meet the EU Directives for air pollution and water quality.
- In order not to lag behind the other continental modalities.

Air quality really must be improved. Air pollution is mainly due to emissions from engines. A substantial share of the total nitrogen oxides emissions in inland navigation countries, that is, between about 15% and 25%, results from inland navigation. European air quality norms are currently exceeded in several urban and industrial regions in Europe. These areas include the Rijnmond region here in the Netherlands, the Ruhr region in Germany, Northern Italy, and cities such as Paris and Budapest. In the Netherlands, we have run into problems because of this. We have been unable to realise infrastructural projects in certain areas since further development would only make the situation worse. This risk also applies to waterways projects. I am now referring to constructing new waterways, but also to expanding the capacity of existing waterways. I am mentioning this because if an air quality bottleneck is spotted at an early stage, compensatory measures can be thought up. For instance compensation can be sought by levelling the emission with the reduction that is achieved through reduced road transport.

Limiting the environmental impact caused by inland waterway vessels is, and will always be, important. This is the only way inland navigation can continue to develop within the available environmental space and be a clean alternative for road transport. The European Directive 2004/26 for emissions from engines does not go far enough. We must tighten the norms after 2007, and preferably as quickly as possible. After all, we have to take into account the fact that it takes more than 20 years before norms for new engines are applied to all existing ships. I would therefore advise you to lay down a norm in 2012 which is just as strict as the Euro 6 norm for trucks. As far as I am concerned, we could simultaneously set a norm for 2016, to ensure that the emission of nitrogen oxides and fine dust are practically reduced to zero. For this norm it is important that the European norm for the sulphur content of fuels is further sharpened after 2008. Engine manufacturers and fuel suppliers can cope with this, as long as the norms are known long enough in advance. We are, after all, talking about the same technology as that used in trucks.

None of us can ignore it any more: the world is no longer the same since 9/11 and the recent attacks in Madrid and London. The Security Directive is on its way and it is also of great importance for inland navigation. In the new directive, security will be seen from the point of view of the whole transport chain. The challenge for us lies in good implementation, so that we can maximise the effect on safety while keeping the burden for the business community to a minimum.

The inland navigation sector's attitude towards safety needs no further explanation; it is calling for the harmonisation of technical and safety norms based on the highest existing standards. The sector is, however, asking for incentives for the investments required for quicker installation of new engines in vessels. In the Netherlands we have responded to this request by setting up a subsidy scheme which was approved by the European Commission on 5 July 2005. The contribution depends on the size of the engine and amounts to a maximum of € 20 000 for an engine and € 200 000 for a catalytic converter.

As regards measures in the field of security, the sector requires mandatory measures based on the principle of proportionality on a European level to avoid distortion of competition.

Promotion

The Ministerial Conference in 2001 called for measures to bring the advantages of inland navigation to the attention of the public and of the branch. This has been tackled in various ways, including by means of the conference we held last year in Scheveningen under the title "The Power of inland navigation". This workshop can also be used to put inland navigation on the map.

The communication now under preparation by the European Commission suggests that a European network for the promotion and development of inland navigation be set up in the future. I think that this is an excellent idea. If you remember, a similar measure was taken for Short Sea Shipping and it gave the sector an enormous boost.

In short, there is a great deal going on regarding inland navigation at the moment. The title of this workshop could, therefore, not have been more appropriate: inland navigation really is on the move. I hope that you have a successful workshop and trust that you will be able to produce enough input for the Bucharest Declaration in the next two days.

Part I

INLAND WATERWAY MARKET DEVELOPMENT IN A PAN-EUROPEAN CONTEXT

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Chapter 1

EU AND RHINE MARKETS

Dr. Holger Platz, Director, Planco Consulting Gmbh

Preliminary remark

The paper looks at the four themes highlighted in the programme, namely:

1. Market development, themes, problems.
2. Logistics, inter-modality.
3. Co-operation.
4. Action expected from governments.

Given the short time available, no attempt will be made to analyse all developments on the EU market for inland waterway transport, and instead the emphasis will be on a number of aspects that would appear to be important. No reference will be made to detailed statistics, insofar as their quality is often poor in any case and international comparisons are not always possible.

1.1. Market development: themes, problems

But first a few figures:

- Over the past 15 years, total growth in the volume of inland waterways traffic in Europe has been slight. In the "top" three countries taken together (Germany, the Netherlands, and France) growth in volume terms was only 16%, whereas total transport demand over the same period rose by 41%. Accordingly, the share of inland waterway traffic in these three countries fell from 17.6% to 14.4%.

- It is to be noted here that in the case of the leading country in volume terms (Germany), this growth in inland waterway traffic is still inflated as a result of German reunification. It would be more accurate to say that the level of traffic on the German market is stable.

- This is a similar trend to that of rail freight whose market shares continue to dwindle. Put simply, the situation may be summed up as follows: Growth in the demand for freight traffic is as robust as ever, but nearly all of the extra traffic has been absorbed by the roads. Neither the inland waterways nor the railways are losing much of their traditional traffic, but their share of the extra traffic is small.

- Container traffic represents an exception. The volume of container traffic carried via the inland waterways is growing rapidly (up 17% in 2004 in Germany alone). Individual ports

are announcing growth of more than 40%! The situation in the Netherlands and Belgium is likely to be similar.

Signs that attitudes are changing:

- There are signs that attitudes are changing – in the political sphere, and also in the shipping and logistics industries.

- In the *political* sphere, there has long been talk of the need to transfer at least some of the growth in traffic away from the roads and onto the railways and inland waterways.

  Accordingly, public investment in the railways increased significantly, to the detriment of the roads, and whereas for a long time the same could not be said of the inland waterways, at least not in Germany, in recent years they too have been the focus of more attention.

  Belgium first started making it easier for its inland waterways to compete back in the mid 1990s.

  In Germany, the federal government commissioned the 2002 Planco study on future prospects for the inland waterways, thus triggering an intense debate on necessary measures in this particular branch of the transport industry.

  The EU Commission followed suit with its PINE study.

  In the Netherlands, the inland waterways have for a long time enjoyed a high level of support under Dutch transport policy.

  Last year, also with the help of Planco, Northrhine-Westphalia, by far the most important *Land* in terms of German inland waterways transport, developed a concept for dealing with inland waterway traffic. Now, the *Land* is pushing for the concept to be implemented.

  Although this change in attitude has yet to produce any specific large-scale measures, the debate it has triggered has set a process a motion that will make political action easier and maybe even compulsory.

- *Industry*: Changing attitudes are also starting to emerge in the shipping and logistics industries. The fixation with HGV traffic is beginning to fade, and specific projects for transferring traffic onto the inland waterways are becoming increasingly common. The introduction of the lorry toll on German motorways has reinforced this trend. Although in transport statistics the impact is barely noticeable, in future it will be increasingly apparent.

Forecasts – Future trends

- All available forecasts (e.g. Prognos (2002), NEA (2003), Ecorys (2002)) predict that inland waterways traffic in western Europe stands to grow, albeit to differing degrees. Admittedly, such growth will continue to lag behind the increase in road freight traffic, but the growth gap between the two sectors will become narrower. The same is expected to apply in the case of rail traffic. However, wishful thinking would seem to have had a hand in these forecasts. They are dependent at any rate, sometimes explicitly, sometimes implicitly, on a policy that actively favours the railways and *inland waterways*. This presupposes certain changes in transport policy.

- In this context, different market segments will of course continue to develop in different ways:

  - Strong growth in seaport-hinterland traffic, both international and national:

    a) Particularly in container traffic.

    b) Also in traditional market niches as a result of the globalisation of trade (e.g. coal, scrap, cars, recycling materials, wood products).

  - Slight growth in (domestic) inland traffic, other than seaport-hinterland traffic.

  - Continuing dominance of traffic on the Rhine, for several reasons: exemption from duties on the Rhine, suitability of the Rhine for big, low-cost ships, concentrations of large manufacturing and consumer industries and cities along its banks.

  - Growing dynamism of river-sea traffic, particularly between the Rhine and Great Britain, Scandinavia or the Iberian Peninsula.

  - Other areas with inland waterways, apart from the Rhine-Schelde delta, are experiencing a decline in traffic volume compared with Rhine traffic. On a smaller scale, however, their growth prospects are very promising (once again particularly in seaport-hinterland traffic).

  - What is lacking still is the spread of intermodality involving the inland waterways from seaport-hinterland traffic to national and European inland transport, which represents by far the greater volume of traffic. For as long as dynamic growth in the inland waterways sector is limited mainly to seaport-hinterland traffic, the necessary and possible contribution of the inland waterways to relieving congestion on the roads will not materialise. For intermodality to spread to national and European inland transport, containers must be easier to stack and better suited to pallets, and the cross-border networking of national waterway systems must be improved.

1.2. Logistics and intermodality

- With the continuing globalisation of trade, transport market structures are changing. Intermodality is becoming the norm, at least the combination lorry – sea – lorry, and often even the more complicated chain of lorry – rail or inland waterways – sea – rail, or inland waterways - lorry.

- This applies to not only container traffic but also the more traditional bulk freight (e.g. goods made of metal or wood).

- The length of the transport process is still important, but so, increasingly, is the reliability of agreed delivery deadlines. The transport chain involving the inland waterways is also becoming faster as timetables become denser (daily departures) to cope with the growing volume of traffic and intermodal connections become more routine and hence quicker. Increasingly, the inland waterways outshine roads in terms of their ability to respect tight deadlines, and, given the opportunity they provide for floating storage, they support manufacturing industry's policy of promoting just-in-time delivery and minimal storage.

- Deliveries between industries are a booming business, as semi-finished products are transported to and from industrial firms on their way to locations all over the world.

- Consequently, the integration of the transport process into the overall logistics system and industrial production processes is becoming increasingly important.

- Individual transport undertakings, whether it be shipping companies, inland ports, transhipment firms or haulage contractors, are unable to cope with the systemised integration of intermodal transport into overall logistic, industrial processes. The services of logistics companies used to operating internationally are required.

- These logistics firms have to be convinced that, overall, the more complicated transport chain involving the inland waterways is more advantageous than the more organisationally straightforward door-to-door transport by road.

- To that end, they need proof of the specific advantages of the intermodal transport chain (cost, reliability, possibility of saving on storage). Simply highlighting the benefits for the environment will not help, and this is where the weak spot lies – very few inland waterway players have developed a constructive marketing approach.

- Recently, growing emphasis has been placed on one important player who has a lot to gain from more inland waterways traffic: seaports. Seaports are finding it very hard to cope with the explosion in container transhipment and can be helped if more use is made of the inland waterways to ship the containers to decentralised distribution centres. The hub-and-spoke concept is back in the limelight again after many years of discussion without much progress.

1.3. Co-operation between interest groupings

Co-operation is becoming more and more important. While not taking the place of competition, it is becoming increasingly necessary for being able to compete. Three particular areas of co-operation are important: co-operation between politics and trade and industry, and I shall come back to that later; co-operation between inland ports and seaports; and co-operation between the different players along logistics chains (modes of transport, freight forwarders, shipping agents, logistics integrators).

Co-operation between inland ports and seaports

- Inland ports and the inland waterways are unable to market their services efficiently by themselves. They need the help of logistics integrators – principally freight forwarders – to build up transport chains and attract the interest of shipping agents, but many small inland ports are unaccustomed to actively developing the services they provide. It is easier for them if they join forces and co-operate with seaports. In recent years there have been some interesting new cases of co-operation:

  - In the context of the EU-funded INTERREG programme inland ports in Northrhine-Westphalia are working together with seaports in Belgium, the Netherlands and Great Britain to raise market awareness of the services provided by the ports and inland waterways and submit joint tenders with freight forwarders (InterPorts project).

  - Projects implemented with the help of EU funding under the Marco Polo programme have helped to transfer certain traffic away from the roads by involving inland ports and inland waterways in the transport chain.

- Inland ports in the southern Netherlands have been co-operating for years so that by working together with other logistics providers inland waterways transport can play a bigger part in empty container logistics or the transport of waste, for example, and so that bigger consignments suitable for transport via the inland waterways can be assembled by grouping together smaller orders more suited to the roads.

Co-operation along the transport chain

- In all cases, what is important is not for inland ports to replace essential system integrators, generally freight forwarders, but for them to draw their attention to the opportunities provided by inland waterways transport. Internationalisation and multimodality call for more co-ordination and co-operation along the transport chain.
- This is illustrated by two further requirements: the growing need for a streamlined, low-cost organisation of logistics chains and for the integration of tangible transport operations with intangible information flows.

1.4. Action required by the governments

As already mentioned, there are signs that inland waterways transport may be undergoing a political revival. As yet, however, new policy decisions are still insufficient. The 2003 Planco study made a series of proposals.

One statement stands out above the rest: only a whole rack of measures combining all the relevant players can signal a positive turning point for the inland waterways. There are many such players:

- Economic policy and transport policy, which must establish new framework conditions.
- The transport and logistics industries, inland ports and seaports.
- Supranational organisations, such as the CCNR (Central Commission for Navigation on the Rhine) and the EU Commission.

Government policies can have a moderating role in this context, but must also make their own contribution towards shaping a new approach to transport.

Germany has already set up a "forum for the inland waterways and logistics", where the political sphere, trade and industry, and associations come together to develop and support implementation measures. The forum is important for two reasons: (1) It is a permanent, rather than temporary, structure and (2) It should provide an opportunity to single out action expected from governments, i.e.:

- Equal treatment of transport modes

  This applies mainly to infrastructure policy, which should not focus exclusively on promoting rail. This is not to be interpreted as being against rail transport but rather in favour of the inland waterways, which need to be further developed and therefore require more investment than is currently the case. It is unrealistic to claim that ships should be adapted to the inland waterways, rather than the inland waterways to ships, which are getting bigger. To apply such a principle is to stand in the way of the aforementioned forecasts.

Fortunately, it would seem that the difference that has existed for years between the inland waterways and other transport infrastructure in terms of their poor state of repair is not as acute as it was, even though this dangerous trend has yet to be reversed.

- Better international networking of highly developed waterways (Danube, Rhine-Rhone, Schelde-Seine, Havel-Oder, etc.), obviously on the basis of sound cost-benefit analyses.

- More attention paid to waterways transport (inland waterways and inland ports) in the training of logistics experts and freight forwarders, with the co-operation and active support of the transport and logistics industries.

- New approach to regional policy

  The regional distribution of logistics and industrial firms is a good indication of the opportunities available to the inland waterways. Previous decades have seen a progressive shift away from inland ports in favour of locations with good road connections. This trend must be reversed, but this will be impossible without political support, including finance, insofar as sites close to ports have high infrastructure costs that have to be borne by the owners, who tend to be municipal. Admittedly, these extra costs are later offset by social benefits, but those reaping the benefits are not the municipalities that have to shoulder the cost burden. Consequently, the social remit to develop the inland waterways must be extended, and in many *Länder* the balance shifted, to include the promotion of industrial sites in the vicinity of ports. A good example of this is LogPort, a industrial wasteland converted by the port of Duisburg into a modern trimodal logistics centre.

- Aid policies: bulk traffic must not be neglected

  Owing to the high growth in container traffic, large sums were allocated in subsidies, in Germany at least, to develop container terminals in inland ports. One consequence of this has been that inland ports prefer to invest in container terminals and tend to neglect bulk goods. This is a dangerous trend.

- Use of best practice

  The international exchange of positive experiences could, and should, be improved with the help of documentation based on best practice. A good example is the newsletter published by the ShortSeaShipping Promotion Center.

- Competition policy

  Other policy areas, which might seem irrelevant at first sight, must also be reviewed. A German example in this respect is competition policy, one of the aims of which is to protect private firms from unfair competition from companies operating under public ownership. To that end, public inland ports are severely restricted in terms of the co-operation agreements they can sign. However, services that rely on co-operation with other logistics players are a *sine qua non* of successful marketing. Consequently, competition policy makes it harder for inland ports to pursue a market-oriented approach. This goes against the interests of both transport policy and economic policy.

Chapter 2

DANUBE MARKET

Dr. Erno Keskeny, Vice-Chairman of the Danube Commission, Ambassador

It would have been a great pleasure, indeed, to begin my report with some joyful news and tell you that, as it had been planned by the authorities of Serbia and Montenegro, the pontoon bridge in the city of Novi Sad, the last obstacle to a free navigation along the Danube, will be removed on September 30. Instead, the local authorities consider it necessary that the pontoon bridge be preserved because the Sloboda Bridge in Novi Sad is still under restoration. According to the latest information, the removal of the pontoon bridge is to take place in mid-October.

As for **the economic situation in the Danube region**, it should be pointed out that inland waterway navigation is playing an ever bigger role in terms of traffic and shipments. This is primarily due to the fact that transportation by inland waterways is more economical and less harmful to the nature than railway and road haulage. It is just for these reasons that the European Union proclaimed the Pan-European transport corridor VIG, which crosses the European continent from the North Sea to the Black Sea, to be one of the priority transport projects.

The Danube inland navigation market has some specificities which I dare mention here. It is to be regretted, but the indices of the economic activity of Danube shipping enterprises are not yet available to the Danube Commission Secretariat, so it is impossible to present a full picture of their economic and financial condition. Nevertheless, it is obvious that there has been **a decline in the number of shipping enterprises and vessels** in most of the Danube Commission member-countries in recent years. Some of the enterprises have encountered the problem of qualified personnel.

In some years, as a result of shallow waters ships cannot move when loaded to capacity, so the cargo needs more ships to be transported. The low water level in the Danube increases the expenses of the freighters. The non-typically low water level in the river in 2003 had a negative effect on the operation of many ports on the Danube which received less cargo than usually and cargo traffic partly shifted to motor roads and railways. Navigation never stopped but encountered difficulties and vessels were underloaded.

The Danube Commission member-countries took necessary measures, such as special hydro technical works, strengthening of the coasts and others, but they proved insufficient to ensure minimum navigation conditions.

The latter half of 2004 saw a continuous growth of an average gas oil price which started in the second half of 2002. Gas oil price is one of the factors that determines inland navigation expenses and greatly influences its results.

According to most of the shipping companies, in the early half of 2004 **greater use was made of the hold capacities**, especially in the fourth quarter of 2004. As a result, most shipping enterprises engaged in dry cargo transportation, assessed their operation in year 2004 as satisfactory, on the whole. Many enterprises recorded best achievements just in the fourth quarter. Although the branch on the whole demonstrated quite good results last year, it should be noted that the continuing growth of gas oil prices in 2004 created problems for many private firms because of insufficient freight.

The volume of **container transportation** also continued to grow in 2004. For instance, as many as 1.94 million TEU were transported by inland waterways in Germany, which is by some 17.4% more as against the previous year. Transported in containers were 13.5 million tonnes of cargo or two million tonnes over that in 2003. The growth of inland container transportation in the last years was accompanied by a bigger role of containers on international sea routes.

The continuous growth of the container transportation share is welcome by railway companies and operators of intermodal transportation. An acute competition takes place not only between enterprises of one and the same type of transport, but also between different types. On some routes railway traffic and inland navigation are major competitors.

According to market participants, a bigger share of water traffic as compared with railway transportation is due, on the one hand, to higher flexibility of shipping, and, on the other hand, to higher costs of railway haulage. **The costs of railway haulage** are particularly high for railway traffic between container terminals. The share of railway haulage is bigger at places where there is no direct connection with the usable inland waterways. The share of different types of transport also varies depending on the time factor. Railways are usually preferable at the time of low water and for providing supplies to power stations.

Many shipping enterprises engaged in inland navigation hope that when road charges are introduced, **the volume of water traffic will increase**. This will be particularly true in respect of cargo carried by motor roads running parallel to a waterway with high traffic capacity. Although, pending the introduction of road charges, freighters revealed keen interest in ships and rails, no information has been received so far to confirm a substantial increase in these types of transportation.

The developing national economic complexes offer even larger consignments of finished and semi-finished products for shipment, so the Danube transport facilities should be ready to accept them. Presently many logistics operators do not adequately use the Danube waterway because of water level unpredictability and ships concentration in the locks. Should the share of container shipping on the Danube be as big as that on the Rhine, the number of annual lorry runs along the Danube corridor could be reduced. It would be expedient to organize improved regular routes for the Danube container traffic to be supported by the river information systems.

As for a perspective inland navigation, I dare say, as a permanent representative of the Hungarian Republic, that we advocate the formation of a new Pan-European structure to co-ordinate co-operation of the interested European countries, from the Netherlands to Russia, no matter be it an agency or some other organisation. I am convinced that the new Pan-European structure will demonstrate success in upholding the interests of inland shipping enterprises.

The **Committee for preparing a diplomatic conference to revise the Belgrade Convention**, headed by a Hungarian diplomat, Ambassador Arpad Prandler, will soon round off its work. The Committee's regular session will be held in Belgrade. We believe it possible to convene a diplomatic conference in Belgrade early in 2006.

Chapter 3

RUSSIAN MARKET

Overview of the Russian market of inland waterways transport

Mr. Evgueni Kormyshov, Deputy Chief,
Federal Agency for Merchant Marine and Inland Shipping (Russian Federation)

The navigable waterways of the Russian Federation extend along some 101 800 thousand km. Although Russian inland waterways are the longest in the world, they are not used on a full scale and not evenly by different basins. Navigation is most intensive on the so-called Unified Deep Water System of Russia (UDWS) in the European part of Russia. UDWS makes part of the European Agreement on Main Inland Waterways of International Importance (AGN) and, at the same time, are the routes of the international transport corridor North – South.

The main water arteries of this system are the Rivers Volga, Kama, Don and Neva as well as the Volga-Don, Volga-Baltic and Moscow Canals. The system extends to some 6 500 thousand km with a guaranteed water depth of 360 cm. The parameters of UDWS are suitable for vessels of up to 5 thousand tonnes carrying capacity. All inland waterways have a well-developed infrastructure for traffic organisation and management.

Ports represent an important part of the inland waterway infrastructure. Altogether, 126 ports operate on Russian inland waterways. Most of the river ports are equipped with railway access, thus making it possible to transship goods from water to railways and road transport. The volume of cargo turnover in river ports amounts to over 200 million tonnes per year; whereas the existing cargo handling capacity of most of the ports is only used for 40-50 per cent.

The State control over inland water transport has a three-layer structure. The Ministry of Transport develops the State policy and lays down the legislative basis in this field, whereas the Federal Agency of Merchant Marine and Inland Shipping, together with its local branches, provide for navigational conditions, govern State property and render State services in river transport. The Federal Service for Supervision in the Field of Transport performs overall control and supervision.

At present, over 1500 enterprises and private entrepreneurs having licenses for this type of activity carry out transportation of goods and passengers on inland waterways; the non-governmental sector has a dominant position in this field carrying over 90 per cent of goods and passengers. In the early nineties of the last century, the State practically ceased to render services in the field of transport and since then has been performing only regulatory functions and keeping inland waterways in an appropriate condition.

The maximal volume of goods movement by inland waterway was achieved in 1988 (over 580 million tonnes). Later on, it decreased significantly and bottomed out at 100 million tonnes in the middle of the 90's. Since 1999, the situation has improved and in 2004 already 136 million tonnes of goods and some 30 million of passengers were carried by inland waterway. Nowadays, less than 4 per cent of the total volume of transportation by all modes of transport in the Russian Federation are carried out by inland waterway. So, the share of transportation by this mode of transport in Russia is similar to that in Europe in total, being at the same time considerably less than that in such countries as Belgium and the Netherlands. Forecasts, based on the analysis of industrial activities of shipping companies and on the growth of economic output of the Russian Federation, allow envisaging a further increase in the volume of transportation by inland waterway of up to 230 million tonnes by 2010.

The fleet of Russian inland navigation vessels is numerous and consists of various types of ships. On 1 January 2005, the Russian River Register counted over 29 000 thousand vessels of various tonnage and capacity. They include some 15 000 thousand of self-propelled and non-self-propelled cargo vessels of a total carrying capacity amounting to about 12.7 million tonnes including 2.5 million tonnes of oil tankers. The total capacity of tugboats is 1.9 million kW. Although the total number of vessels has been reduced by 20 per cent over the last 15 years, many vessels are idling due to the insufficient cargo base. This problem is particularly hard on eastern basins. The average age of vessels has exceeded 25 years and urgent steps by the Government are needed to promote the renewal of the fleet.

Mixed river-sea vessels hold a prominent place in the inland water transport of Russia. During the period of industrial depression when the volume of goods presented for transportation went down dramatically bringing shipping companies to a financial crisis, a majority of large shipping entities managed to stay afloat thanks to direct transportation of goods without transhipment between Russian river ports and sea ports of Europe performed by river-sea vessels. Under the conditions of ever growing international trade, the number of vessels of that type has nearly tripled over a short period and amounts today to 1 100 vessels. In 2004, over 30 million tonnes of cargo were carried by river-sea vessels. Over 90 per cent of international trade was carried out by large shipping companies, such as “Volgotanker Co.”, “North-West Shipping Co.”, “Volga Shipping Co.” and “White Sea - Onega Shipping Co.” which own the largest number of such vessels.

The use of river-sea vessels for international trade is attractive for shipping companies since, in addition to their profitability, the vessels can operate all-year-round. During the winter season, when Russian inland waterways are frozen for 3 to 8 months a year and river-going vessels idle at their moorings, river-sea vessels continue their navigation at sea areas. River-sea vessels are considered, therefore, the most prospective type of vessels at the present time. Due to this reason, notwithstanding the stagnation in new vessels’ construction, almost all large shipping companies envisage the construction of river-sea vessels. Currently, a number of such vessels of carrying capacity up to 6 500 tonnes are built at Russian shipyards.

There are, however, a few restraints for further development of river-sea shipping in Russia. These are the bottlenecks on inland waterways that developed during recent years. But the main difficulties relate to international shipping. In the early nineties of the last century, the river-sea vessels started to encounter problems when calling the some European seaports due to the lack of international regulations concerning that type of vessels. Maritime administrations had some doubts regarding their safety standards. Russian authorities had to negotiate with those administrations in each particular case and present relevant calculations by recognized organisations. It has been proved that, subject to the limitations imposed on those vessels, such as the area and season of navigation, wave heights and distance from the coastline, they are just as safe as sea-going ships. Finally, the

agreements were concluded with all maritime administrations concerned regarding the unobstructed calling at their sea ports of Russian river-sea vessels. This work could have been avoided if there had been relevant international regulations concerning this type of vessels. In our view, the work on elaboration of international regulations on river-sea vessels could be undertaken within the UNECE which already envisaged the consideration of the question. Moreover, the formulation by the international maritime community of reasonable exemptions from the conventional requirements for river-sea vessels, together with the reduction of port dues (taking into account short voyages and frequent calls at ports), could give a new impetus to the development of that sort of shipping not only in Russia but also in other European countries.

When considering the economic and social importance of inland water transport within the whole of the Russian economy, one has to recognize the conformity of the sector to practically all the requirements of modern transport. These are transport and ecological safety and reliability. At the same time, the water transport is not good enough as far as the flexibility and the speed of goods delivery are concerned. Unfortunately, at present the latter aspects seem to be the most important for shippers' choice of the mode of transportation. Due to this reason and taking also into account that the future belongs to modes of transport which are economical and environmentally friendly, the 2001 Pan-European Conference of Ministers of Transport, held in Rotterdam adopted recommendations called to support and promote the development of inland water transport in Europe and to unify the rules governing this sector.

Some provisions of the Declaration adopted by the Conference are being implemented in the Russian Federation; others have not been realized yet. The reasons for this are the particularities of the development of the water transport over the last years and its place in the State economy. Although Russia has the longest waterway network in the world, only a small part of goods is carried by inland waterway, the major part of them being carried by inland waterways of the European part of the Russian Federation. This situation cannot be considered as acceptable, of course. Having advantages vis-à-vis other transport modes, such as low transportation costs, existence of natural waterways and environmental friendliness, inland water transport, nevertheless, is not competitive enough against the road and railway transport.

As a result of the developments in the State economy during the last 15 years, the composition and directions of cargo flows saw a dramatic change. Two main cargo flows have been established, oriented to the river estuary ports located in St. Petersburg and Rostov-on-Don. The volume of goods carried in these directions are 17.5 and 19 million tonnes per year, respectively. The concentration of cargo flows in the above directions resulted in exhausting the traffic capacity of the Volga-Baltic and the Volga-Don waterways. The time required for passing these waterways has nearly doubled due to the excessive number of vessels and subsequent waiting time. A further increase in cargo transportation on these waterways is impossible without their major reconstruction and requires substantial investments. Another bottleneck on the waterways of the European part of Russia is the Gorodetsky Lock on the River Volga. Large-capacity vessels have to wait for 2-3 days to pass the lock due to low depths. If the current rate of lowering the water level persists, theoretically the UDWS can in the future be divided into two parts, the southern and the northern ones. To prevent that sort of development, the Government of the Russian Federation is considering the construction of a new low-height step.

Solving the above-mentioned bottleneck problems on Russian inland waterways is one of the tasks to prepare the opening, on a mutual basis, of inland waterways for transit by foreign vessels. As it is known, within the development of the so-called North–South Transport Corridor, the Government of the Russian Federation agreed that the Rostov-on-Don – Astrakhan waterway section should be ready for opening for international shipping by 2007 and the St. Petersburg – Volgograd waterway

section – by 2010. By that time, we shall have to solve the following problems, besides increasing the traffic capacity in the bottlenecks: to establish a new vessel traffic management service, reorganize the pilot service and adapt the infrastructure for vessel servicing. Furthermore, there are certain divergences in the legislation governing the inland waterway transport in the Russian Federation and in the countries of the European Union. It should be noted that thanks to the joint work in the framework of UNECE, a significant approximation of national technical requirements for vessels, rules of the road and signalling on inland waterways has been achieved. The remaining divergences do not seem to be insurmountable and only time and mutual will are needed to overcome them. Some of these divergences could be annulled through the harmonisation of our national requirements, but certain legal provisions of the Russian law will have to be adapted to by countries whose vessels seek to enter Russian inland waterways. It concerns, for example, the minimum age for boatmasters; Russia will not be able to recognize boatmasters' licenses issued to persons under 18 years of age. Our stringent position in this matter is justified by the need to ensure safe navigation on waterways equipped with complex hydraulic works.

However, already nowadays one may speak of the actual partial openness of Russian waterways for international traffic. Thus, the main river estuary ports, such as Astrakhan, Azov, Rostov and St. Petersburg are open for calls by vessels flying foreign flags. The most active European ship-owners not only transit Russian inland waterways but also carry out freight operations between Russian ports, after having registered their companies in the Russian Federation and obtained the right to fly the Russian flag. The highest activity in this field is showing by Turkish entrepreneurs; the number of vessels belonging to them is counted by tens and is increasing from one year to another.

Many changes have taken place both in the economy and in inland water transport in Europe since the Rotterdam Conference. But, just as four years ago, one criterion continues to be of utmost importance: *no considerable growth and development of inland water transport is possible without regulatory measures to be taken by Governments and by the international community*. Given the lowest specific impact of inland navigation on the environment and its capacity to contribute to the reduction of congestion in road and railway transport, in our view, measures should be considered for more favorable taxation with regard to inland water transport. To the same purpose, there is a need for a Pan-European approach to: (i) supporting the purchase and modernization of cargo and passenger carrying vessels, (ii) assisting Governments in ensuring effective co-operation of inland navigation with other modes of transport and (iii) making the sector attractive to the investors. The steps taken towards the public-private partnership (PPP) in the development of infrastructure should be supported by a greater involvement of Governments. This particularly concerns the elimination of bottlenecks on inland waterways. We believe that, by encouraging shippers and transport operators and ensuring a greater engagement of Governments, we will strengthen the inland water transport and enhance the sustainability of the whole transport system of Europe.

In conclusion, a need should be emphasized for further co-ordination of efforts and joint elaboration of mechanisms for solving the problems of inland navigation by all European countries within UNECE, the most essential issues being put on the agenda of the Ministerial Conferences which should be held regularly. Given the geography of the previous Pan-European Conferences on Inland Waterway Transport (Budapest - 1991, Rotterdam - 2001, Bucharest - 2006), the next Conference of Ministers of Transport might be organized in one of the CIS countries.

Main inland navigation problems and possible solutions

Alexandr Zaitsev, President, Association of Ports and Shipowners in River Transport

Noting the important role of inland water transport which has both economic and ecological advantages as compared with other modes of inland transport, one should mention, however, the fact that the volume of cargo movement by inland waterway is far from being sufficient. Rates of growth of inland navigation are restrained by a number of obstacles such as the seasonal nature of vessels' operation and multiple bottlenecks in the network of inland waterways. The Declaration adopted by the Rotterdam Pan-European Conference on Inland Water Transport calls for the development of a modern, environmentally friendly and effective inland waterway network as a prerequisite for the further development of inland water transport, elimination of bottlenecks with due regard to the development of the inland navigation fleet as well as economic and ecological aspects.

For reference. The Russian Federation possesses a well-developed inland waterway network of over 101.7 thousand km. Transport activities are performed by 1 675 shipping companies and individual entrepreneurs possessing some 10 thousand cargo vessels. The absolute majority of the companies are joint stock companies. The State owns a controlling share of 25.5 per cent in 23 of them. 126 river ports carry out cargo handling activities on inland waterways. All the ports are joint stock companies, the State owns a controlling share and non-privatized property in the form of quays and water areas that are rented long-term by joint stock companies. The Association of Ports and Shipowners of Water Transport unites 190 ports and shipping companies. In 2005, the Association celebrated its 10th anniversary. The main reason for uniting river enterprises in the Association is the co-ordination of their activities aimed at solving general transport-related problems of production, scientific and research, social and economic nature, representation of interests of the industry at the State instances of legislative and executive power, legal protection of their interests. The results of the first decade of work show that the Association, as an all-Russia union of river transport enterprises can and should continue its successful work also in the future.

The Concept for Development of Inland Water Transport of Russia that was approved by the Government in July 2003, defines the main trends of its development and tasks and methods of governmental regulation in this field. The Concept provides also for the development of infrastructure projects on Pan-European transport corridors No. 2 Berlin – Warsaw – Minsk – Moscow – Nizhny Novgorod; No. 9 Helsinki – St. Petersburg – Moscow; and on international transport corridor North – South using mixed river-sea shipping vessels primarily for international trade.

The increasing importance of the water transport will require significant redistribution of cargo flows. In order to attract new cargo flows, the industry has to offer services of at least the same quality as that of other modes of transport and this at significantly lower rates. The advantages of water transport as the most environmentally friendly mode of transport nowadays should be used on a full scale. At present, waterway transport only performs about 3 per cent of total cargo turnover by all modes of transport. Goods transport in direct combined railway-water communications has significantly decreased, river transport is not competitive as compared with railway transport in some directions. Deficiency of up-to-date cargo handling systems and port terminals together with the excess of old-fashioned and inefficient cargo handling machinery and equipment hamper the development of container transport by inland waterway. Investigations carried out on some river ports under the TACIS program have shown the need for reconstruction of the ports into logistics centres

with comprehensive development of container terminals. There is also a need to establish an information and reference system on cargo flows and organizing continued monitoring of the cargo base available.

Creation of a Unified Deep Water System (UDWS) in the European part of Russia linking five seas through the construction of the White Sea-Baltic Canal, Volga-Baltic Canal, Volga-Don Canal and Moscow Canal has motivated the construction in the sixties of the twentieth century of a unique transport fleet consisting of mixed river-sea shipping vessels of 1.4 – 5.5 thousand tonnes carrying capacity. These vessels are able to operate not only on inland waterways and lakes but also at sea areas. The fleet of such vessels made it possible to organize the international carriage of goods directly to foreign sea and river ports and vice versa. At the present time, more than 700 river-sea shipping vessels are used for international cargo transportation. They make 14 thousand calls a year at some 670 ports of 46 countries of Europe, Asia, Northern Africa, Middle East and the Far East. International trade by mixed river sea vessels amounts yearly to 30 mln tonnes; it is cost-effective and there is a clear demand for that sort of trade at the market. Furthermore, river sea shipping provides for a greater competitiveness of water transport enterprises. Unfortunately, the time has come for intensive renovation of these types of vessels. The average age of river-sea shipping vessels exceeds 20 years, while some of them have been in operation for more than 30 years and are no longer admitted to ports of some countries. Shipowners are not in a position to engage themselves into massive new shipbuilding due to high taxation rate, lack of State support and access to easy terms credits. The governmental Decree, "On measures of State support for renewal of fleets of merchant marine and river vessels" providing for a partial payment of interests from the budget has not brought the results expected due mainly to cumbersome bureaucratic procedures for obtaining the above taxation relief.

Insufficient development of the State border checkpoints has become another serious problem leading to non-productive demurrage of vessels at sea and river junctions. Vessels have sometimes to stay idling for 2-3 days to cross the border. Excessively high canal, pilot and other dues put further limitations on inland navigation. For example, the Astrakhan canal dues for 100 km of sea route amount to US$ 6 000 per vessel; which is one of the reasons for the reduction of vessel traffic to/from the Caspian Sea. The Government of the Russian Federation has granted a relief from custom dues for sea-going vessels of gross tonnage over 1 000 tonnes belonging to foreign owners and chartered by Russian companies under time- or bareboat-charter contracts when used for the international carriage of goods and passengers. There is a need to extend this provision also to inland navigation vessels.

Some expectations by the shipping industry are based on an envisaged adoption by the Duma of a Federal Law "On the second international register of ships" aimed at encouraging the return of vessels under the Russian flag.

One difficult problem is to lower the share of transport costs for domestic consignees, amounting nowadays to about 20–40 per cent of the commodities' price.

In our view, the European transport community pays little attention to the development of the transport water corridor Volga – Don – Danube. This water route will provide for connection with countries that have no direct access to the sea and will connect the largest inland water arteries such as Rhine – Main – Danube – Dnieper - Don – Volga. The significance of the Danube – Don –Volga route is highlighted by the involvement of countries of the Caspian Sea basin. The aforementioned corridor can serve more than 15 countries of Western, Central and Eastern Europe and, in the middle term, a Pan-European water transport ring could be formed using the Baltic Sea, the Black Sea and the Azov Sea coastal routes. Furthermore, the idea of establishing a container line Paris – Moscow could again become popular.

Chapter 4

UKRAINIAN MARKET

**Valery Raiyu, Deputy Director, Inland Waterway Navigation,
Ukrainian Danube Shipping Company**

Ukrainian Danube Shipping is an Ukrainian shipping company whose fleet carries out one-third of all cargo traffic on the Danube. The company has universal and special river and marine fleet, container facilities and fulfils cargo transportation in the Black Sea and the Mediterranean basins, as well as all along the Danube from the mouth to Kehlheim. Apart from that, the fleet fulfils river-marine intermodal carriage, with cargo handling in Ukrainian ports.

As is known, it was pointed out at the Rotterdam Conference on inland waterway transport in 2001 that the potential of water carriage was not fully used in cargo transportation in Europe. The Rotterdam Declaration specified the main lines of activity of the countries interested in developing water transport and set the tasks of making maximum use of, rationally improving and strengthening the positions of inland water transport in Europe.

In should be noted in this connection that today transport capacity of the Danube as the main trans-European water artery is not used to the full extent. This is obvious, especially in conditions of present-day development of Europe–Asia transcontinental co-operation which requires the attraction of great transport potential.

According to estimates by specialists in the sphere of international water transport, the volume of transit cargo traffic along the Europe–Asia axis via the Black Sea and the Danube basins is to grow by 35–40% by 2010.

All the above circumstances make it imperative that specific steps be taken to improve navigation conditions and raise the passing capability of the "Danube – Black Sea" natural arms and canals, with simultaneously increasing the capacity of ports, river tonnage and their efficiency.

From the scientific point of view it is important to estimate the actual transport capability of the Danube so as to develop, on its basis, a series of measures to maintain a reliable navigation situation and ensure an optimal shipping regime all through the year.

According to statistics by the Danube Commission, an intensified navigation and a continuous growth of cargo transportation along the Danube have been registered in recent years. This is connected with a gradual restoration of a free navigation on the Serbian section of the Danube, which was practically blocked following the destruction of bridges during the hostilities in Yugoslavia in

1999 and, to some extent, with the resumption, after a prolonged interval, of river-marine shipping in the Ukrainian part of the Danube delta.

In this connection, the resumption of sea ships navigation on the Ukrainian section of the Danube through the Bystroye arm is a significant contribution by Ukraine to the development of the international transport system of the Seventh International Transport Corridor (ITC 7) since it provides an additional alternative and reliable communication of the Danube with the Black Sea.

On the other hand, the resumption of river-marine navigation via deep-water "Danube – Black Sea" waterway through the Bystroye arm meets the strategic national interests of Ukraine, a country that has made a course towards deeper mutual relations with the European Union and a complete integration into its structures the priority of its foreign policy. The alternative Danube – Black Sea communication also complies with the European and international norms of fair economic competition and excluding dominance by any one party.

The deep-water "Danube – Black Sea" waterway, through which navigation in the Ukrainian part of the river was regenerated, played the role of a tool that has ruined the one-country monopoly of exit from the Danube into the Black Sea and undertook a part of transit cargo traffic.

Apart from that the restoration of navigation as said above and the commissioning by the Russian Federation of the second parallel lock of the Kokchetavsky hydro power complex which connects two rivers, the Volga and the Don, makes it possible for Ukraine and Russia to develop, as part of co-operation in water transport, a new transport route: "Big transport ring" the Danube – Black Sea – the Sea of Azov – the Don – the Volga with an exit to the Caspian Sea.

Thus, Asian freighters from the Caspian Coastal Plain will also receive access to this route which will allow to transport cargo by river-marine vessels from the Caspian ports with reloading, at the ports in the delta of the Danube, to river barges to be delivered to the Danube countries.

In perspective, this route can be used as a base for a new transport system with full rights of an international transport ring which will unite the Black Sea, the Sea of Azov and the Caspian Sea, on the one hand, and the Baltic Sea and the North Sea, on the other hand.

Ukraine is open for co-operation with all interested countries. In order to create favourable conditions to encourage transit cargo traffic via its territory Ukraine undertakes measures aimed at expanding the capacity of its ports for all the nomenclature of goods, increasing the capacity of container terminals and carrying out intermodal and combined cargo transportation.

Appropriate measures have been taken to ease at Ukraine's border crossing posts customs procedure and control of transit cargo following from the Black Sea to the Danube and vice versa. Such "single-window" points make customs clearance short-time.

Danube navigation problems

Danube navigation problems are connected, in the main, with the fact that until now free shipping has not been ensured because the restoration of the bridge in the area of Novi Sad (Serbian section) proceeded too slow.

Moreover, in some places, especially in the middle and lower reaches of the Danube, no work is being carried out to maintain their effective and reliable shipping condition and no steps are being taken to ensure and improve the navigation situation.

There are instances of vessels demurrage due to irregular operation of the locks, in particular, in the area of Dzherdap. Preventive maintenance of the lock equipment on the Romanian and Serbian sections is carried out in summer time when navigation on the Danube is most intensive.

The development of co-operation with the countries of Europe's other water basins also encounters a lot of artificially created obstacles. For a long time now regulatory problems have been hindering the Ukrainian ships navigation on European waterways which are within the authority of the Central Commission for the Rhine Navigation (CCRN) and are connected with the Danube basin.

Thus, a restrictive navigation regime on the Rhine was introduced for our ships on October 17, 1997 under the Second Supplementary Protocol to the 1868 Manheim Convention. This act actually makes impossible free access to the basin's markets and cargo transportation along the Rhine – Main – Danube line for the vessels flying the flag of Ukraine.

Apart from the restrictions of this Convention and the statutory requirements raised by some countries and the European Union, there emerge substantial difficulties (now, with the expansion to the East) for East-European countries, connected with technical specifications of the ships, navigation and qualifying requirements to crew members, mutual recognition of certificates of registry, captain's patents, etc.

The expansion of the European Union to the East results in a tougher regime of border crossing for Ukrainian ship-owners and staying in the territory of EU countries for crew members.

Here is one example. Slovakia does not recognize identification cards of Ukrainian seamen, nor does it admit crew members to its territory.

Moreover, ship-owners are held liable for customs clearance and strict time limits are established for cargo delivery in the territory of the EU.

The new situation resulted in that, following the demand of the European Union, bilateral agreements on visa-free border crossing between Ukraine and many countries of Eastern and Central Europe, such as Romania, Bulgaria, Slovakia and Hungary, ceased to be effective.

This means that the objectives and tasks of expanding Pan-European co-operation towards a free and strong inland waterway transport in Europe, as declared by the European Conference of Transport Ministers in Rotterdam in September 2001, come across serious obstacles.

One more aspect deserves mentioning. As a result of the embargo and two Balkan crises, especially that in 1999, ship-owners of the countries which did not take part in the hostilities in the Balkans sustained enormous material and financial losses.

The said events which also spread to Yugoslavia's territory along the Danube inflicted substantial damage to the Ukrainian Danube Shipping Company which lost some of its ships and there were casualties among crew members.

Financial losses of the Danube Shipping Company are also connected with the fact that for several years already there is no free navigation on the Danube. Our shipping company had to pay huge sums for raising the pontoon bridge in the area of Novi Sad.

All this has led to the destruction of the system cargo base of the Danube basin, and reorientation of the cargo traffic and the efforts to return it to the Danube have not been a success so far.

Whereas previously the question of paying compensation to the Danube shipping companies which had suffered financial damage was on the agenda of authoritative bodies of the United Nations and the European Union, now this problem is a rare item under consideration.

Part II

LEVELLING THE PLAYING FIELD

STRENGTHENING INLAND WATERWAY TRANSPORT: PAN-EUROPEAN CO-OPERATION – ISBN 92-821-1354-X – © ECMT 2006

Chapter 1

IS THE LEGAL FRAMEWORK OF EUROPEAN INLAND NAVIGATION SUITABLY ADAPTED?

Jean-Marie Woehrling, Secretary General of the Central Commission for Navigation on the Rhine (CCNR)

According to widespread opinion, there are "legal obstacles which hamper the establishment of a harmonised and competitive Pan-European inland waterways transport market" (point 13 of the Declaration adopted by the Pan-European Conference in Rotterdam, 6 September 2001).

The aim of my presentation today is to identify the nature of these legal obstacles and how significant they are.

1.1. Heterogeneous or uniform nature of legal instruments applicable to inland navigation

It is often said that inland navigation in Europe would be torn asunder by several different legal systems – that resulting from the Mannheim Convention, that set up by the Belgrade Convention and that resulting from Community treaties. The diverse nature of these legal systems would be one of the obstacles to the development of this transport mode.

Although in theoretical terms this is not inaccurate, this view corresponds less and less to the actual situation in the field. A silent revolution is under way, which is in the process of harmonising technical and legal rules for inland navigation in Europe.

- The revised version of Community Directive 82/714 on technical specifications for vessels, which will come into force shortly and which contains the ruling regarding inspection of vessels on the Rhine, now contains the same technical specifications for vessels (that is regarding the Rhine and inland waterways with the same characteristics). As a result, there will be mutual recognition of certificates for Rhine vessels and of Community certificates. Now that a significant number of Danube states have joined the European Community, these technical rules will also apply to a considerable length of the Danube. Uniform technical specifications for vessels are now more or less accepted.

- Regarding boatmaster certificates, a similar process is in hand. The CCNR presented proposals to the European Community which constitute a harmonised framework for delivering certificates for the Rhine and the European Community. Once this has been set up, this framework will enable mutual recognition of Rhine and Community certificates. Such a framework could also be set up for the Danube Commission. To complete this measure, the Rhine and Danube Commissions are discussing the question of a harmonised regime for the verification of specific knowledge required for certain stretches of the rivers (Streckenkenntnisse).

Furthermore, an initiative has been launched to harmonise employment profiles, i.e. the references used by States to define the different functions (boatman, etc.) and the corresponding vocational skills. Work has started on an inventory and comparison of these employment profiles and will be presented at a seminar to be organised by the CCNR in Rotterdam on 9 November 2005. The outcome of this initiative could be the establishment of common references for national training institutions.

- Regarding the transport of hazardous substances, the ADNR of the CCNR served as the basis for defining the pan-European ADN agreement shortly to come into force. This will ensure that the content of the ADN and the ADNR is identical so that they will be recognised as being equivalent. If a Community directive is adopted, it will adopt the same standards. Here again, in this field, uniformity is almost completely ensured.

Thus, despite the difference between legal systems, uniformity of the applicable rules is ensured or will be in the near future. It is no longer correct to talk about inland navigation in Europe being divided by different legal systems. Uniformity is being achieved pragmatically, taking mutual account of what has been achieved by the other parties involved.

Some work still has to be done to complete this process. But the method chosen is the right one. The time is right to invite all institutions concerned to continue their task of aligning the substance of technical specifications.

Whether or not we should go beyond this raises two questions:

- This begs the question of whether or not the various legal foundations of these specifications, uniform or in the process of becoming uniform, should be abolished. Uniform legal foundations for rules, if harmonised by other means, would create a monopoly in preparing standards, thereby running the risk of making the preparation of these standards less efficient, as is the case for all monopolies.

- Is absolute uniformity a good thing? The account taken of the specific characteristics of certain inland waterways or of certain sectors of activity must be maintained. It is important to continue reflecting on what must be uniform and what must remain specific.

1.2. Access to markets

Integration is well advanced in this field: and such integration is now also well developed within the Community territory; the Community principles of freedom of access henceforth apply to a good part of the Danube; moreover, all Member States of the Community, and consequently a large number of Danube States, have full access to the Rhine market. This means that the principle of freedom of access to markets for transport by inland waterways has been widely ensured.

Where can progress still be achieved?

- Cabotage

Even within the European Community, cabotage (defined as transport between two ports located within the same State) is not entirely open to vessels registered in a State other than that of the place of transport. It may only take place on a "temporary basis". If such transport is to be carried out on a permanent basis, then the carrier must set up a head office or establishment in the State concerned and

be licensed to carry out international transport (Rule CEE 3921/91 of 16th December 1991 art 1). On the non-Community Danube, such transport can only be carried out by a national carrier.

There are no such restrictions on the Rhine: Rhine cabotage there (transport between two locations on the Rhine) is open unconditionally to all Community nationals and to Switzerland. Moreover; licence to carry out Rhine cabotage may be granted to carriers who are nationals of another country.

This raises the question of whether such cabotage should be further liberalised. This would only be possible satisfactorily if the operating conditions were harmonised from the social and tax points of view. No doubt there will have to be further clarification of the legal regime relative to cabotage (see points 5 and 6 below).

- Reciprocal liberalisation of Community and non-Community markets

The European Community will very shortly be enlarged to include inland waterways in Romania and Bulgaria. And this logically raises the question of Serb and Ukrainian inland waterways linked to the Community waters of the Danube. (Russia for its part is a distinct market not linked with Community waterways).

Integration is partially realised to the extent that it concerns transport on the Danube (excluding domestic transport). In order to go further, agreements will have to be concluded between the European Community and the non-Community Danube States. Until that time, it appears possible for bilateral agreements to be concluded between Member States of the Community and those States, provided that the Community prerogatives are respected (see recent decisions by the European Court of Justice): decision of 2nd June 2005 Commission versus Luxembourg C-266/05 and of 14th July 2005 Commission versus Germany C-433/05.

1.3. Contract law governing transport on inland waterways

The CMNI Convention has set up a common European regime for this transport contract. The convention came into force on 1st April 2005. Even though it only concerns a small number of countries (Hungary, Luxembourg, Romania, Switzerland, Croatia), it is destined to apply very shortly to an increasing number of transactions on inland waterways.

All river states in Europe are called upon to adhere to this Convention as quickly as possible.

Is there a need to go any further? Additional protocols to this convention have been foreseen. It would appear sufficient to have standard contracts and specimen general conditions for operation, developed by the sector for the whole of Europe.

1.4. Alignment of liability or tort law

Despite the considerable efforts to develop tools for harmonisation in this field (CLN, CLNI, CRTD, CRDNI, etc.) results obtained so far are limited. The only Convention which has become legally binding, the CLNI, has been ratified by only a handful of States and, according to some, would require revision.

Given the low level of interest in the matter, one might be tempted to draw the conclusion that further harmonisation in this field in not indispensable.

However, in order to avoid unfair competition, the same liability rules will have to be applied for the same services and the guarantees to be provided by market players are sufficient and equivalent. A revised CLNI could serve as a framework for achieving these aims.

In the meanwhile, each State must ensure that the liability regime applicable on its territory guarantees effective compensation for damage caused. In order to move in this direction, generalised compulsory insurance on certain inland waterways could be a simple and efficient measure.

1.5. Tax harmonisation

Is tax harmonisation part of the "level playing field"? Although it is required by those who believe themselves to be victims of unfair competition, it is on the other hand rejected by those who believe they should benefit from support and incentive measures. Indirect taxation has already been made uniform largely thanks to the Community regime of VAT; however, direct taxation is still an area where States wish to retain their scope for manoeuvre, in particular to support their inland navigation. Consequently the adoption of advantageous tax law for companies is considered as being legitimately accepted in competition between States.

Furthermore, when a tax measure's scope of application is territorial and it applies to all economic players in that territory, it cannot be considered as causing unfair competition.

Similar remarks could be made about public policy with regard to subsidies to navigation and entitlement to use infrastructures.

Under these circumstances, the aim of general tax harmonisation for inland navigation appears to be both debatable and not very realistic.

On the other hand, more limited actions should be favoured. Accordingly, if there is no harmonisation, it would be desirable to have sufficient transparency with regard to tax advantages or barriers. A comparative analysis could identify those measures which would encourage the development of inland navigation.

Moreover, the tax conditions for certain categories of services should perhaps be defined (cabotage).

1.6. Social legislation

In this field too, what is considered by some to be unfair competition, is seen by others simply as the establishment of a legitimate competitive edge.

Social harmonisation is scarcely possible on the European level, unless exceedingly cumbersome conditions are imposed on employers in some countries or by imposing an unacceptable deterioration of conditions for workers in other countries.

However, it is appropriate that clear, verifiable rules be applied. All too often, the situation is unclear thus creating a legal vacuum, which leads to legal constructs being worked out in order to avoid being subject to normal legal obligations. Consequently, it is desirable that clearer rules be defined regarding applicable law and that controls are made more efficient.

One solution proposed would be to apply the law of the country of origin of the workers, even if these workers are employed for a protracted period in another country where they are actually

providing the service. It would appear difficult to accept this method if the social conditions in the country of origin are essentially different from those of the country where the service is provided.

Care must be taken to ensure that workers carrying out similar tasks (on the territorial and functional levels) are subject to equivalent social regimes. Rather than trying to create uniformity of these regimes across Europe, it appears to make more sense to do this on the level of homogeneous territorial entities (for example a river basin).

1.7. Prospects for simplifying and reducing the legal framework

The present current of deregulation and simplification of administrative issues raises the question of whether certain regulations are not superfluous or overly meddlesome. In the context of inland navigation does it not make more sense to reduce the legal straight-jacket?

By reducing the regulatory constraints, it can indeed be possible to promote dynamism in these sectors and reinforce the sense of responsibility of economic players.

It should however be noted that the high level of safety of inland navigation is considered to be one of its assets, particularly with regard to the transport of hazardous substances. Maintaining this high level of safety is a widely accepted aim. Furthermore, new constraints relating to the environment appear to be inevitable (degassing of tankers, engine emissions of vessels, double hull, port facilities, etc.). Lastly, in view of the considerable development of passenger cruising, appropriate safety measures should be developed for that sector. Consequently it appears fairly unrealistic to consider reducing these requirements.

It is a question here of determining whether the same level of guarantee can be provided by less restrictive regulations. And this is a complex question. Uniformly applicable rules and legal security for economic players require detailed regulations. On the other hand, it may be possible to relax procedures, to facilitate arrangements and to avoid useless formalities. In particular, simplified procedures for declaration and inspection could be developed using one single processing unit. For example, legislation regarding vessel registration could be analysed once more with a view to simplification and avoiding any inappropriate requirements. Governments could be recommended to undertake studies along these lines.

Here again, it would be appropriate to examine the question of a satisfactory system for verifying rules applicable to inland navigation. The increasing degree of integration of inland navigation in Europe opens up the possibility of activities for inland navigation vessels on a network of inland waterways across Europe. The aim of generalised freedom of navigation under equal conditions of competition implies that the regulatory framework for this navigation activity can be effectively verified to ensure non-violation of applicable sectoral rules. Thus it is a question of finding a framework which will guarantee that order is respected without involving bureaucratic constraints on economic players. There are questions in this context as yet unanswered regarding the possibility for intervention and co-ordination of river police.

A co-ordinated system of traffic control would have to be developed for inland navigation based on:

- Co-ordination and exchange of information between national river police forces (in particular with a view to avoiding any duplication of inspection of the same vessels).
- Adopting a rule of "River State Control" drawing on Port State Control.

- Creating standardised ship's documents to facilitate inspection (ship's certificate, licence, etc.). The idea of having an ID document for the master regarding his crew seems worthwhile; this document would verify that the crew is in compliance with national legislation applicable thereto.

Conclusion

By way of conclusion, it can be said that the legal framework for inland navigation is relatively well adapted to evolutions in the field and its integration on the European level. As to harmonisation and opening up of markets, inland navigation is not lagging behind other modes of transport. The legal rules applicable to this activity do not constitute an obstacle to its development.

Although harmonisation of the legal framework can be further improved, it seems inappropriate if not even unrealistic to wish to bring this about through centralising all legal powers involved. On the contrary, exchange of information and concertation must be stepped up.

Among possible recommendations, the following could in particular be mentioned:

- Provide support for harmonising employment profiles with a view to facilitating worker mobility in this sector and creating an attractive working framework.
- Encourage States to ratify the CMNI Convention.
- Continue work on harmonised liability law in the field of inland navigation, by revising the CLNI Convention, in particular so that it can be opened to all European River States.
- Develop comparative studies of tax regimes and public subsidies for inland navigation.
- Clarify the conditions for applying social legislation in international inland navigation to prevent any possible unfair competition.
- Carry out studies to simplify legislation applicable to inland navigation.
- Develop a co-ordinated framework on the European level for monitoring transport on inland waterways.

Chapter 2

IMPLEMENTING THE DECISIONS OF THE ROTTERDAM PAN-EUROPEAN CONFERENCE ON INLAND WATER TRANSPORT

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Before informing you of the follow up by UNECE to the Rotterdam Conference, I would like to remind you, and I am sure there are in this room people who still remember this landmark event, that the very first Ministerial Conference dedicated exclusively to inland navigation issues was held in September 1991 in Budapest, organized by the Government of Hungary and the European Commission with the participation of UNECE.

Twenty-five nations represented at the Conference agreed then for the fist time to co-ordinate their inland water transport policies with a view to further development and promotion of inland navigation on the Continent along the following lines:

- Establishment of an adequate network of inland waterways of international importance.
- Harmonisation of technical and professional standards aimed at reciprocal recognition of national ship's certificates and boatmaster's licences.
- Building up an integrated all-European inland navigation system based on market principles.

As a result of this first Conference, UNECE put on its agenda as priority projects the elaboration, in co-operation with colleagues from EC and river commissions, of two legal instruments: (i) European Agreement on Main Inland Waterways of International Importance (AGN); and (ii) European Agreement on International Carriage of Dangerous Goods by Inland Waterway (ADN).

At the same time, the work was started on a complete revision of UNECE Technical Requirements for Inland Navigation Vessels with a view to ensuring such level of Pan-European unification in this field that the reciprocal recognition of ships' certificates issued on the basis of the internationally agreed standards could become possible.

Preparation of the Rotterdam Pan-European Conference on inland navigation matters was initiated by the Government of the Netherlands in September 2000 and was carried out within the Drafting Committee consisting of representatives of the Netherlands and Romania and of EC, UNECE, ECMT, CCNR and DC.

The Declaration adopted by the Conference comprises a list of main objectives and actions to be taken by Governments and international organisations concerned in order to accelerate in a concerted

and co-ordinated way the development of inland waterway transport towards a safer, cleaner and more competitive Pan-European transport mode.

The Rotterdam Declaration identifies the main problems of the European inland navigation as follows: "inadequate infrastructure, legal procedures and lack of harmonisation of fiscal, social and economic conditions for fair competition as well as of technical regulations, professional requirements and administrative procedures". The Declaration admits that partly because of these obstacles, inland waterway markets at a Pan-European level are today still fragmented and partly closed to third country operators. (Preamble, sections J and K).

It has to be noted that the situation, as rightly reflected in the Declaration, is mainly the result of the development traditions of the European inland navigation which, until recently developed in a geographically fragmented way, being based on particular river basins and river systems.

The Rotterdam Declaration calls upon the intergovernmental organisations involved in inland navigation to take appropriate actions aimed at the development of a safe, clean and competitive European inland waterway transport. The UNECE as a regional organisation of a Pan-European dimension dealing with legal, technical and safety issues in inland navigation is particularly suitable to tackle most of the items appearing in the Rotterdam Declaration.

That is why, already at its October 2001 meeting, the UNECE Working Party on Inland Water Transport considered and approved a comprehensive Plan of Action for the implementation of decisions taken by the Rotterdam Conference and set up a Group of Volunteer Experts with a view to preparing an Inventory of existing legislative obstacles that hamper the establishment of a harmonised and competitive Pan-European inland navigation market, as requested by the Rotterdam Declaration.

I should like to brief you on what has been achieved so far by UNECE member Governments in implementing the decisions taken by Ministers at the Rotterdam Conference.

- Infrastructure

  - The AGN Agreement, that entered into force in 1999 and counts currently 13 Contracting Parties[1] has become a most basic, most strategic tool for the development in Europe of a coherent network of inland waterways of international importance. The Inland Transport Committee adopted a resolution aimed at the earliest possible implementation of this legal instrument. UNECE member Governments are considering possible amendment of the Agreement with a view to making its provisions more acceptable for countries which have not yet acceded to it, and emphasizing the importance of coastal and sea-river routes.

  - The so-called Blue Book has been elaborated and kept up to date, containing detailed target and current parameters of the E waterway network. The Blue Book, together with the Inventory of Most Important Bottlenecks and Missing Links in the E Waterway Network, are major tools for monitoring the development of the network throughout Europe.

  - Work is under way to develop concrete river-sea routes in the context of the AGN Agreement.

  - Common principles and technical requirements for a Pan-European River Information Service (RIS) have been adopted together with international standards for Inland ECDIS

and Vessel Traffic Services (Inland VTS). Two more RIS related standards would be adopted in October this year, i.e.: on Electronic Ship Reporting and on Notices to Skippers.

- Legislative harmonisation and access to the market

  - **The ADN Agreement** elaborated by UNECE jointly with CCNR and DC and adopted in May 2000 has been signed by ten States and has four ratifications. The Agreement will enter into force after its ratification by seven States. ADN is a basic instrument for the safe carriage of dangerous goods on European inland waterways.

  - **The Budapest Convention on the Contract for the Carriage of Goods by Inland Waterway** (CMNI) elaborated jointly by UNECE, CCNR and DC and adopted at a Diplomatic Conference in 2000 has been signed by 16 European States and entered into force on 1 April 2005 after having been ratified by: Croatia, Hungary, Luxembourg, Romania and Switzerland. The Convention, for the first time, lays down a unified international legal regime for contractual responsibilities in inland navigation.

  - **The European Code for Inland Waterways (CEVNI)** was revised in 2002 and is applied Europe wide. CEVNI serves as a model for national and international (within river commissions) legislation relating to rules of the road, and signalling on inland waterways, night and daytime marking of vessels as well as waterway signs and marking.

  - **The Signs and Signals on Inland Waterways (SIGNI)** was revised in 2004 in order to put it in line with the revised CEVNI.

  - After lengthy and difficult negotiations, **Recommendations on Minimum Manning Requirements and Working and Rest Hours of Crews of Vessels in Inland Navigation** were adopted in 2004. The Recommendations are compatible with relevant rules of CCNR and, at the same time, take into account national legislation of other UNECE member countries in this field.

  - Recommendations on limitation of exhaust and pollutant particulate emissions from diesel engines used on inland navigation vessels have been adopted in 2004. They are compatible with both EC and CCNR provisions.

  - **Technical Requirements for Inland Navigation Vessels** have just been revised and put in line with the draft revised Directive 82/714/EEC. They take into account not only the Rhine rules but also national legislation and particularities of different river basins Europe wide including the River Danube. As expected, the new revised version of the Recommendations will be adopted by member Governments in October this year. In the meanwhile, the DC at its 64th plenary session in May 2005 agreed to align their Recommendations with the revised UNECE provisions.

  - Inventory of Existing Legislative Obstacles that Hamper the Establishment of a Harmonised and Competitive Pan-European Inland Navigation Market and Proposals for Solutions to Overcome them has been established by the Group of Volunteer Experts as a follow up to item 13 of the Rotterdam Declaration.

- Organisation of this **Workshop** has been agreed upon at the 48th session of the Working Party on Inland Water Transport in October 2004 and organized jointly by ECMT, UNECE and two River Commissions with a view to preparing the forthcoming Pan-European Conference on Inland Water Transport in 2006 in Bucharest, Romania.

Finally, I would like to introduce to you the findings of the Group of Volunteers regarding the legislative obstacles that hamper the further development of inland waterway transport in Europe and possible ways for overcoming those obstacles. The report of the Group of Volunteers may be found in document TRANS/SC.3/2005/1 available at the Workshop and at the website of UNECE. It is also reproduced in Annex C of this publication.

First, the report defines the "legislative obstacles" and classifies them into 7 different categories.

Before analysing each type of the obstacles, the report considers three scenarios for their possible elimination through the replacement of the current variety of regimes of navigation by a single one covering the whole of the European inland waterway network to be achieved either: (i) by establishing a new Pan-European governmental organisation; (ii) by setting up a system of multilateral Pan-European agreements/conventions dealing with various aspects of inland water transport; or (iii) by making the European Community the pivot of international rule-making for inland waterway transport. The Group of Volunteers comes, however to a conclusion that such sweeping reorganisation of the institutional landscape does not stand a large chance of being realized in the nearest future and proposes, therefore, that the search for solutions be based on the assumption that the institutional landscape will remain as it is, without changes or shifts in formal competences of different intergovernmental bodies.

The following solutions are proposed by the Group of Volunteers with regard to each of the legal obstacles identified.

2.1. Restrictions on transport rights of "foreign" vessels

The restrictions contained in the **Revised Convention on the Navigation of the Rhine** (Act of Mannheim) as amended by the Additional Protocol No. 2 – which reserves the right to carry out transport operations between points situated on the Rhine and its tributaries to vessels "belonging to the Rhine navigation" was found to be clearly incompatible with the idea of an integrated Pan-European inland water transport market as postulated by the Rotterdam Declaration. A possible solution proposed by the Group of Volunteers is to let the Additional Protocol No. 2 stand as it is, but nevertheless to open up Rhine cabotage to vessels of all European States. Since the Act of Mannheim entitles the CCNR to specify the conditions under which vessels not belonging to Rhine navigation may participate in Rhine cabotage, the CCNR could lay down, as a general rule, that European vessels not belonging to Rhine navigation (in practical terms the vessels of States which are not EU Members) may carry out Rhine cabotage operations provided that (a) they can prove a "genuine link" with their country of origin, and (b) that this country of origin in its turn grants the right of cabotage on its territory to vessels belonging to Rhine navigation.

The restrictions in the existing **Danube regime** concern mainly the reservation of domestic transport (within national territories of riparian States) for vessels of their own fleet and rather vague interpretation of the principle of "freedom of navigation" as stipulated in article 1 of the Belgrade Convention. The Group proposes that, in the course of the on-going revision of the Belgrade Convention, it should be made clear that the only meaning of the notion of "freedom of navigation" which is consistent with a free market system is the one that allows inland water transport operators to conclude transport contracts with any firm or natural person who wants to use their services,

irrespective of the nationality or the place of establishment of the former and the latter, and irrespective of the places of loading and unloading. Furthermore, the problems concerning national cabotage on the Danube could be solved within the framework of negotiations on accession of the European Community as a Contracting Party to the (revised) Belgrade Convention. The European Community and the Danube countries could use the negotiations on the Community's accession to grant market access to national cabotage on the Danube to each other's vessels, thus establishing the unity of the regime in this respect on the whole length of the river.

The Group found that the **EU navigation regime** is unclear as to the access of vessels of third States to the Community inland waterways and intra Community transport services. The Group proposes, therefore, to the EU to eliminate this problem by a renewed use of a mandate for negotiations between the EU and third countries on mutual inland navigation market access, given by the Council to the European Commission in 1992. The negotiation mandate referred to above could also be used to remove existing limitations on transport rights contained in a number of bilateral inland water transport agreements concluded between EU Member States and non-EU European countries.

2.2. Restrictions on access to and use of inland waterways and ports

Restrictions of this type take place in some European States where foreign vessels are not allowed to enter national inland waterways. The Group believes that the Agreement on partnership and co-operation, concluded in 1994 between the European Communities and their Member States on one side and the Russian Federation on the other, could serve as a framework for at least partially eliminating that sort of obstacles.

2.3. Existence of different regimes for technical requirements for vessels

According to the Group of Volunteers, the difficulties connected to the coexistence of various technical regimes (EU, CCNR, Danube (based on UNECE recommendations), etc.) can largely be solved by a combination of three elements: (1) application of the Additional Protocol No. 7 to the Act of Mannheim allowing CCNR to recognize ship's certificates (and boatmaster's licenses as well) issued by EU and third countries, (2) the current revision of EU Directive 82/714/EEC laying down technical requirements for inland navigation vessels, and 3) the EU enlargement process.

To ensure a common, non-discriminatory approach to the consideration of applications for recognition of ship's certificates, a harmonised procedure for such consideration could be elaborated and agreed upon by UNECE, EU and River Commissions.

2.4. Existence of different regimes for boatmaster's licences

The situation with respect to boatmaster's licences is comparable to that with respect to vessel's certificates. In the absence of the possibility of unification of the regime by means of a Pan-European Agreement[2], the solution will have to be found in **a mutual recognition of licenses**. This, in turn, presupposes harmonisation between the underlying regulations, and some form of co-operation to keep them equivalent in case of amendment.

Co-operation, with a view to harmonising regulations, already exists between the European Commission and CCNR and between the Danube Commission and CCNR with a view to future reciprocal recognition of relevant boatmasters' licenses.

But it might be laborious work to keep the above regulations co-ordinated. So an alternative solution could be to invite UNECE to update its resolution No. 31 on **Minimum Requirements for**

the Issuance of Boatmasters' Licenses in Inland Navigation with a view to their Reciprocal Recognition for International Traffic, in collaboration with the European Commission and the two River Commissions, to make it serve as a common standard on which the Community, Danube and Rhine legislations could be based.

2.5. Differences in regulations on the size and composition of crews, and on working and rest hours

Differences in legal rules on the size and composition of crews can present obstacles in cases where vessels crossing a border are confronted with regulations prescribing larger or more highly qualified crews than prescribed in their country of origin. The Group felt that the **Recommendation on Minimum Manning Requirements and Working and Rest Hours of Crews in Inland Navigation** recently adopted within UNECE and compatible with CCNR rules, could provide a Pan-European standard. The Danube Commission, at its 64th plenary session in May 2005, agreed to base their Recommendations on the above-mentioned UNECE provisions.

2.6. Restrictions on the freedom of pricing and contracting

Within the EU, Directive 96/75/EC stipulates that contracts in national and international inland waterway transport "shall be freely concluded between the parties concerned and prices freely negotiated".

A number of price controls and cargo sharing clauses occurring in bilateral inland water transport agreements between EU and non-EU countries have already become void after the recent enlargements of the EU. From the few remaining bilateral agreements which will ultimately remain in existence, price controls and cargo sharing arrangements can only be removed by the mutual consent of their Contracting Parties.

2.7. Lack of rules on competition

The Treaty establishing the European Community expressly prohibits all agreements between business firms, which have as their object, or effect, the prevention or restriction of competition. At the same time, the Agreements on partnership and co-operation between the European Community and its Member States, on the one hand, and several non-EU countries, on the other, may serve as frameworks for the development of competition law in those non-EU countries where this type of law is either nonexistent or insufficiently developed. The famous Bratislava Agreements of 1955 (concluded by Danubian Shipping Cos.) are currently in a process of change, making them lose the cartel-like elements they formerly contained.

2.8. Insufficient harmonisation of the civil and public law framework

The Group of Volunteers noted and regretted a limited number of Contracting Parties to a number of international legal instruments in force on inland navigation issues, both of private and public nature. At the same time, some other Conventions elaborated within CCNR and UNECE failed to enter into force due to insufficient number of ratifications.

On the other hand, the Group noted a successful co-operation between UNECE and two river commissions that culminated in the adoption in 2000 of the Budapest Convention on the Contract for the Carriage of Goods by Inland Waterway (CMNI) that entered into force on 1 April 2005.

2.9. Restrictions on the freedom of movement of inland water transport workers

Within the EU, citizens may freely take jobs in any country they like, while nationals of non-EU countries generally have only limited access to the labour markets of EU countries. Currently under discussion within the EU, is a draft directive on the conditions of entry and residence of third-country nationals for the purpose of paid employment and self-employed economic activities. This draft directive maintains the principle now generally applicable in EU Member States: to get a job in a Member State, a third-country worker must obtain a work permit, which is issued only if it is demonstrated that the vacancy in question cannot be filled by a worker from within the EU. However, the draft directive allows Member States to adopt, for a limited but renewable period, provisions according to which this last requirement is deemed to be fulfilled, without the need for an individual assessment, for a specific sector confronted with a labour shortage. Member States could use this rule to alleviate labour shortages in the inland water transport sector.

The free movement of workers may also be hampered by visa obligations, which could make it difficult for sailors to join or leave their vessels in countries other than their own. This problem could be solved by means of a Pan-European agreement following an example of the Seafarers' Identity Documents Convention recently adopted within ILO. But, in view of the relatively limited number of countries involved (most European countries nowadays admit each others' nationals without imposing visa obligations, at least for stays of limited duration), it might be more efficient to solve the problem by means of an agreement or agreements between the Governments concerned, aiming at facilitating the entry of each other's sailors into their territories. It might also be considered whether the scope of the ILO Seafarers' Identity Documents Convention can be extended so as to include inland navigation.

2.10. Restrictions on the right of establishment

Within the EU, the freedom of establishment in the inland navigation sector exists: any EU citizen may establish an inland water transport business in any EU Member State he likes. For nationals of third countries there normally will be restrictions, laid down by the national laws of Member States. Authorization for the establishment of such businesses is generally granted only if this will favourably influence employment and/or the economic development of the Member State concerned.

NOTES

1. These are: Bulgaria, Croatia, Czech Republic, Hungary, Italy, Lithuania, Luxembourg, Netherlands, Republic of Moldova, Romania, Russian Federation, Slovakia, Switzerland.

2. Some UNECE member Governments so far have opposed the adoption within UNECE of binding legal instruments on ships' certificates and/or boatmasters' licenses on the ground that they are bound by relevant CCNR and EU instruments and, therefore, will not be able to become Contracting Parties to a new Pan-European regime.

Chapter 3

HARMONISATION OF SOCIAL CONDITIONS: AN EXAMPLE FROM THE MARITIME SECTOR AT ILO

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3.1. Historical background

The International Labour Organisation (ILO) was founded in Geneva in 1919, as a consequence of the post first World War Treaty of Versailles.

Albert Thomas, a French diplomat, was its first Director General, from 1919 to 1932.

The ILO was then an autonomous organisation of the Société des Nations (SDN). It became the first specialised Agency of the UN, when this Organisation was created, in 1946, after the second World War.

The ILO is unique among UN agencies

The ILO's originality resides in its **tripartite** structure. The ILO has (in 2005) 178 member States and is constituted by:

- Governments.
- Employers.
- Workers.

These constituents are naturally represented in the Governing Body of the Organisation, which is the highest decision-taking body. The Employers are represented by the International Organisation of Employers (IOE), and the Workers by the International Confederation of Free Trade Unions (ICFTU).

Every year, in June, the International Labour Conference takes place in Geneva. It adopts the International Labour Standards whenever necessary.

The Secretariat of the ILO is the International Labour Office, based in Geneva (Switzerland). It works under the direction of an elected Director General.

3.2. The ILO and inland navigation

The ILO has already worked in the field of Inland Navigation, and has adopted the Hours of Work (Inland Navigation) Recommendation, No. 8, in 1920. The ILO keeps itself informed of social developments in this sector of activity.

The harmonisation of social conditions in Inland Navigation should naturally take place through the ILO, which has much experience in this domain. Consultations with the ILO can be undertaken at any time.

3.3. The maritime specificity of the ILO

The first maritime Conventions were adopted as early as 1920, a year after the foundation of the Organisation, thereby giving a clear indication that shipping was a specific activity.

It is remarkable that the Recommendation on Inland Navigation was also adopted in 1920.

Today, 30 Conventions (out of 185), one Protocol, and 29 Recommendations (out of 192) are specific to the maritime industry.

A Convention is an International Treaty (an international agreement between States parties) open to ratification, whilst a Recommendation merely represents either Guidelines or a recommended practice (usually of a technical nature that may [or may not] be enforced by law). It is not open to ratification.There is specific maritime machinery within the ILO:

3.3.1. The Joint Maritime Commission (JMC)

It takes place roughly every five years (The 29th session took place in January 2001). It is unique in the ILO system. It consists of 20 shipowners and 20 seafarers. The International Shipping Federation (ISF), and the International Transport Workers' Federation (ITF) act as Secretaries for the employers' and seafarers' delegates. Its work is based on reports prepared by the Office.

The JMC is the first step towards the possible adoption of new or revised standards.

A discussion between professionals is much easier, and will produce better results, than between generalists. Inland Navigation possesses active employers and crew representatives.

3.3.2. Preparatory Technical Maritime Conference (PTMC)

Sometimes called the Tripartite Meeting on Maritime Labour Standards (TMMLS) follows the JMC, if necessary. A questionnaire is sent to the constituents by the Office, which in turn publishes a « law and practice » report prepared on the basis of the responses to the Questionnaire. The PTMC will then propose the Agenda items of the next International Maritime Labour Conference to the Governing Body.

3.3.3. The International Maritime Labour Conference (IMLC)

It can replace or supplement the annual International Labour Conference. Maritime activities are the only sector to benefit of a specific Conference. The IMLC adopts or revises International Maritime Labour Standards, with a necessary majority of 2/3. It takes place roughly every ten years.

3.4. The current maritime standards

The most important ILO Maritime Labour Standard (IMLS) currently is the Merchant Shipping (minimum standards) Convention No. 147. It was adopted in 1976.

A complementary Protocol, extending its coverage, was adopted in 1996.

This Convention contains in Annex a number of other, more specific, maritime instruments.

Convention No. 147 is a legal basis for Port State Control. The Port State Control mechanism enables national inspectors to arrest a vessel on the basis of defective social criteria, as well as on safety and environment grounds. Convention No. 147 has been ratified by 51 States (August 2005), covering more than 53% of the world fleet.

Port State Control is the only efficient manner to ensure a level playing field for the industry, as well as decent working and living conditions for boats' crews. An equivalent system could be imagined on a regional basis.

The ILO has also adopted a number of Maritime Labour Conventions, covering many aspects of shipping, such as Minimum Age, Medical Examination, Repatriation, Articles of Agreement (or employment contracts), Food and Catering, Accommodation, Recruitment and Placement, Sickness and Injury, Prevention of Occupational Accidents, Welfare, Social Security, and Working Hours.

Many of these instruments contain provisions that are of importance for Inland Navigation, and that could be adapted to this mode of transport.

The International Maritime Labour Standards also include:

- Seven instruments on maritime fishing.
- Four instruments concerning work in ports.
- One instrument concerning inland navigation, as mentioned above.

It should be noted that Conventions Nos. 87 and 98, on freedom of association, are part and parcel of the IMLS.

These last two Conventions are of universal application.

3.5. Towards a consolidated convention

The recent past has determined the constituents of the ILO to try a new approach regarding International Labour Instruments, in order to get a wider ratification and a better implementation of these instruments.

A set of objectives was fixed, regarding in particular the maritime industry. One should vie for:

- An all-encompassing single instrument.
- Incorporating, as far as possible, all relevant standards.
- Draft in easily understandable language.
- Easy to update.
- Attractive to ratify to secure widest possible acceptability (wide-scale ratification).
- Easy to monitor and to enforce, in order to establish a real level playing field.

These objectives should be readily adaptable to Inland Navigation.

The basic approach underlined two primary purposes:

- To bring the system of protection contained in existing standards closer to the workers concerned, in a form that is consistent with this rapidly developing, global sector.

- To improve the applicability of the system so that ship owners and governments interested in providing decent conditions of work would not have to bear an unfair share of the burden in ensuring seafarers protection.

3.6. The structure of the new convention

The new Convention will be vertically articulated around the following:

- Articles:

  - Fundamental principles and rights.
  - Employment and social rights.
  - Procedural and final clauses.
  - New amendment procedure.
  - Tripartite Committee.

- Regulations:

  - Substantive rights and obligations.
  - Articles and Regulations establish framework of basic obligations.

- Code A and B, giving details for the implementation of the Regulations: mandatory standards and non-mandatory guidelines.

Horizontally, it will include five titles:

- *Title 1:* Minimum requirements for seafarers to work on a ship.
- *Title 2:* Conditions of employment.
- *Title 3:* Accommodation, recreational facilities, food and catering.
- *Title 4:* Health protection, medical care, welfare and social protection.
- *Title 5:* Compliance and enforcement.

Such a structure of the Convention text is adaptable to a future Inland Navigation instrument.

3.7. A new approach enforcement

A specific title on Enforcement (Title 5) clearly shows the importance of having a realistic instrument. It insists on the following:

- Responsibilities and measures.
- Chain of enforcement.
- Integrating international and national level.

- A certification system for labour standards: a maritime labour certificate and a declaration of labour compliance.
- Quality control procedures.
- No more favourable treatment clause for ships of non-ratifying Members.

3.8. A changed maritime landscape for the future

The new instrument will be addressing fair competition in the maritime industry through:

- Decent employment and social conditions to attract and retain seafarers, especially young people to the industry: social competitiveness, applicable also to domestic shipping.
- A level playing field through no more favourable treatment to ensure a healthy development of the industry based on fair terms.

The advantages of an ILO instrument for Inland Navigation would be of the same magnitude.

Chapter 4

INLAND WATERWAYS: CHARGING AND PRICING SUMMARY REPORT

Jeroen Bozuwa, Project Manager, ECORYS Transport

4.1. Background

In the White Paper the European Commission has expressed its interest in charging for infrastructure use as a means to increase efficiency and sustainability of the transport system. Economic theory clearly indicates that pricing policies based on marginal costs lead to better usage of the available transport capacity than pricing policies based on average costs or cost recovery rules.

The purpose of this study is to enable the Commission to prepare a Community Framework for infrastructure charging based on marginal costs on the inland waterways in the European Union.

4.2. Theoretical framework

The marginal (social) costs are defined as the costs generated by an additional transport unit when using the infrastructure. Some of these costs are internal costs and are borne by those who cause them, others are external marginal costs that are not borne by those who cause them, but affect third parties (such as pollution and accidents). If the external costs are however not borne by those who generate them, then the market mechanism fails to allocate resources efficiently. By taking into account the external costs in the marginal costs the volume of transport activity will reach the socially optimal level.

The study focuses on short run marginal costs, assuming that capacity of the infrastructure is constant. Long-run marginal costs include also the capital costs of increasing capacity to accommodate an increase in output; they are difficult to measure. Linking charges to long-run marginal costs would lead to inefficiencies where excess transport capacity exists. Although this study focuses on the short-term marginal costs an indication will be given of what happens if investment costs are included.

The short run marginal social costs generated when an additional vessel uses an inland waterway can be divided into the following main types of costs:

- *Infrastructure costs*: the increased costs of operating, maintenance and repair of infrastructure and technical facilities as a result of an additional vessel.

- *Environmental costs*: additional damage resulting from emissions to air, water and soil from an additional vessel, including noise pollution.

- *Safety and accident costs*: the economic value of the change in accident risk when a user enters the traffic flow (this risk relates to the user himself as well as to others). These costs include repair costs, medical costs, suffering and delays imposed on others as a result of an accident.

- *Congestion costs*: increased operation costs and costs of extra time spent travelling as a result of an additional vessel entering the traffic flow or an accident.

4.3. Marginal infrastructure costs

In order to determine marginal infrastructure costs three main approaches have been followed in five case studies;

- Econometric approach.
- Engineering approach.
- Cost-allocation approach.

The decision on the type of approach was driven by the availability and quality of input data. All three methods have advantages and caveats. *Econometric approaches* are based on observed behaviour of costs, but the observed costs do not always follow technical needs resulting from the use of infrastructure, i.e. do not necessarily reflect true marginal costs. *Engineering-based methods* are built on technical relationships between costs and usage of the infrastructure, but this does not necessarily reflect actual spending. It gives rather an estimate of marginal costs under the assumption that all infrastructure assets are properly maintained and renewed. Both econometric and engineering based approaches require a considerable amount of high-quality data with a demanding level of detail.

The *cost-allocation approach* tries to split up relevant costs into fixed and variable costs. Fixed costs do not vary with the number of vessels, variable costs have a direct relation with the number of vessels. For this approach the same applies as for the econometric approach: the observed costs do not necessarily reflect the true costs due to for example postponement of infrastructure costs. An advantage of this method is that the need for cost information is considerably lower compared to the econometric and engineering based approach.

In the case studies the econometric approach proved to be a problematic one: an adequate sample size with sufficient variability amongst the explanatory variables required disaggregate data for individual stretches of infrastructure and this kind of information was not always available. It became also clear that expenditures on maintenance and renewals are influenced by the financial resources of the organisation responsible: maintenance cost were low due to postponement or maintenance costs suddenly increased because there was not enough financial resources to replace parts of the infrastructure leading to higher maintenance costs. The engineering based approach was not practical at all: there was no knowledge available within the organisations to follow this approach.

The cost-allocation approach was the method commonly used. This method however required a thorough analysis of the available data, lots of interaction with the organisation providing the data and decision making which is always influenced by the judgement of the researcher. Also for this approach the same applies as for the econometric approach: the observed costs did not always reflect the true costs due to amongst others postponement of infrastructure costs.

Our view is that the methodological approach of cost-allocation to determine the marginal costs of inland waterways has potential as general approach to be used for inland waterways in other

countries. A potentially major inherent drawback of the approach is that it is depending on detailed data specific to the waterway concerned, which may not be readily available in other countries.

Before a common approach of cost-allocation can be introduced it is in our opinion necessary to introduce a common method of cost registration: how are the costs of waterways to be registered, what costs can be attributed to inland shipping (and what cost to for example flood protection, water management etc.), what kind of cost items have to be identified, what do these cost items comprise, what percentage of the different costs items vary with usage, etc.

4.4. Second best solution

As a result of the difficulties in obtaining the right data it was hard to determine the real current marginal infrastructure costs for inland waterways in the different case studies. As a second best solution, in order to get an indication of the marginal costs, the average user-dependent costs have been determined. These costs are determined by dividing the total (freight) user dependent costs by the total number of (freight) vessel kilometres (average (freight) user-dependent costs = total (freight) user dependent costs / total (freight) number of vessel kilometres). The following table gives an overview of the range of the average user-dependent costs per freight vessel-kilometre, which have been assessed in the various case studies.

Table 4.1 **Average user-dependent costs for freight vessels per waterway**

Waterways	CEMT	Lower	Upper
Amsterdam-Rhine Channel (NL)	VIb (6 400t-12 000 t)	€ 1.14	€ 1.15
Prinses Margriet Channel (NL)	Va (1 500t-3 000 t)	€ 0.27	€ 0.45
Van Starkenborgh Channel (NL)	Va (1 500t-3 000 t)	€ 0.67	€ 0.91
Basin Rhone-Saone (F)	1 500 up to 6 000 t	€ 0.06	€ 0.50
Danube – Austria (A)	VIa-c (3 200t-18 000 t)	€ 0.14	€ 0.18
Main-Danube Channel (D)	Vb (3 200t-6 000 t)	€ 2.45	€ 3.31

4.5. Marginal environmental costs

The marginal environmental costs consist of the damage resulting from emissions and/or noise pollution, caused by the usage of the infrastructure. These costs can be determined with a top-down approach, starting with the total costs on a macro-level and dividing them to the total amount of activity leading to the costs. This however will lead to average costs that generally do not account for differences in location, environment and conditions. Another method is the bottom-up approach, starting at a micro-level and modelling the path from emission to impact and costs. This method is called the *impact pathway approach*.

This impact pathway approach was developed in the EU funded ExternE project and can be considered as state-of-the-art for air pollution and noise valuations. The impact pathway approach can be based on the TREMOVE data. This data is required through a model that covers passenger and freight transport in the EU-15 countries plus 6 other countries. For the inland waterway transport 21 types of vessels and sizes of vessels are distinguished. Regarding the valuation of the emissions the BeTA database can be used, which eventually resulted from the ExternE project. In our opinion it is thus possible to determine the marginal environmental costs at least for the EU-15 countries.

For the noise costs a simplified *cost-allocation* method is proposed. Specific information is needed on the number of households that are exposed to a certain noise level. However this information should be relatively easy made available in the countries. The valuation of the noise pollution will ideally be based on a specific willingness-to-pay, but can also be based on the EC Workshop that established a valuation between €5 and €50 per household per dB per year. It must thus, according to our opinion, also be possible to determine the total noise costs for the different EU countries. However, to arrive at marginal costs – the additional noise costs that arise when an additional vessel enters the traffic flow – one can estimate the monetarised change in noise level and attribute the corresponding costs to the change in the number of vessels.

4.6. Marginal safety and accidents costs

A cost-allocation method is proposed to determine the marginal safety and accidents costs. In general, the *risk elasticity approach* is used. In this approach the *risk* must be determined, that varies between type of waterway, usage of infrastructure and type of vessel. The second step is to determine the *elasticity*, that is the relation between the risk and the number of users of the infrastructure. This is very difficult to determine. In previous studies, such as the EU funded UNITE project, this risk elasticity is set at 0.01. The third step is to determine the monetary value for changes in accidents frequencies, which are ideally based on the willingness-to-pay. Finally the last step is to determine which part of the safety costs is related to internal costs that are covered by paid insurance.

This approach requires detailed information on the number and severity of accidents on the inland waterway, and the involvement of inland shipping vessels within these accidents. This data will not be available on a detailed level for all countries. For the Netherlands the case studies have demonstrated that the registration level is not completely accurate. The data however showed that most accidents in the inland waterway transport do not lead to human losses, but only to damage on the infrastructure, vessel and perhaps cargo. The percentage of these costs that are covered by the insurance premiums is not known. In our opinion it will be rather difficult to determine the accidents costs in detail for the different countries, since in most countries the safety and accident statistics or not accurate, especially for the inland waterway transport. However, related to the total transport performance, these costs seem of minor importance.

4.7. Marginal congestion costs

The marginal congestion costs are very difficult to determine. In general the congestion costs for a specific mode of transport are determined using speed-flow functions or demand-delay functions. For the inland waterway transport, information on these functions is lacking. This requires detailed information on passing times of bridges and locks.

The congestion costs have rarely been estimated and are expected to be rather small. However for a waterway that has several locks and/or bridges that need to be opened, the congestion costs can be significant.

In a previous study ECORYS has developed a ‘waiting-time lock model’. In this model the relationship is modelled between intensity, capacity of the lock and average waiting time. Together with a valuation of waiting time for freight vessels the total waiting time costs in a year for a lock can be determined. Dividing these costs by the number of vessels will result in average congestion costs for one vessel.

The disadvantage of this method is that it is not the marginal congestion costs that are determined, but the average congestion costs. And these average congestion costs are already paid by

the inland shipping companies: by doing business the shipping company has already taken into account the fact that there will be waiting times for using locks. It would therefore be unfair to let shipping companies pay these congestion costs again, now only as really out-of-pocket expenses. This means that they have to pay the congestion costs twice. What we are looking for are the additional congestion costs that arise when one additional vessel enters the traffic flow. These are the real marginal congestion costs.

A practical way to determine these costs is by using the 'waiting-time lock model' for two following years. The change in the total waiting-time costs in the t+1 year can attributed to the change in the number of vessels and these costs can be seen as the marginal congestion costs. A further improvement of the method would be if the valuation of waiting time could be more specified, taking into account the type of vessels.

4.8. Practical guidelines

The main objective of the study was to provide the European Commission with a practicable and transparent methodology, which could be easily applied by the Member States in order to calculate infrastructure costs that could be allocated to freight vessels in particular. The last section of the report provides practical guidelines, which enable to:

- Translate yearly infrastructure expenditures to yearly infrastructure costs.
- Calculate the various constituent elements of the marginal costs for inland shipping.

4.9. Guidelines to come from yearly expenditures to yearly costs[1]

For a number of reasons maintenance costs being registered by administrators do not always reflect the actual yearly infrastructure costs. When infrastructure expenditure figures are available (preferably for three to four years but at least for two years), infrastructure administrators should perform the following data checks, and if necessary should adapt figures accordingly, in order to translate yearly expenditures into yearly cost:

1) *Has the waterway been upgraded to a higher CEMT category during the years for which the cost figures are available?*
   If the waterway infrastructure has been upgraded, maintenance costs must be increased since upgrading of infrastructure will result in lower regular maintenance costs for the relevant year(s) the waterway has been upgraded. This will be of relevance especially for dredging costs and embankment costs.

2) *Have there been tight budgetary restrictions resulting in backlogging of maintenance?*
   Budget restrictions are expected to result in relative low actual maintenance expenditures. This should be determined using the factors from which the expenditures should be upgraded to arrive at the actual costs, which are necessary to prevent backlogging.

3) *Have any reservations been made?*
   It has to be determined whether or not reservations are made in one year that results in lower expenditures in the next year. If reservations have been made waterway authorities/administrators have to assess the actual amount of these reservations first. Subsequently, actual expenditures have to be corrected from year to year.

4) *Are infrastructure costs always been registered in the 'right' year?*
Sometimes bills are not being paid in the (fiscal) year the costs were actually made, however these costs show up in the next year. Therefore cost figures collected should be checked on yearly fluctuations (see also point 5).

5) *Are maintenance costs subject of strong fluctuations from year to year?*
Maintenance and renewal costs, which show relatively strong cost fluctuations from year to year, should be averaged over the years. High maintenance costs made in one year should be averaged over a 10-year period.

6) *Has there been a change in the cost registration method as a whole or in the costs registration of certain cost units?*
If this is the case, it must be determined whether cost fluctuations between years are caused by methodological modification, and if so a correction must be made.

7) *Has there been a shortage of personnel?*
If this has occurred in certain years, expenditures for personnel should be increased with the amount that is necessary to employ these people in order to arrive at the necessary costs.

When the expenditures on the inland waterway are translated into the necessary costs, one can start to calculate the total (short run) marginal costs of using an inland waterway. A practical way of doing this is hereafter.

4.10. Guidelines to calculate the various marginal cost elements of inland shipping

The report describes in detail how the various costs elements of inland shipping can be calculated. In this summary we provide the practical formulas for marginal infrastructure costs, accident costs, environmental costs and congestion costs.

In order to calculate marginal infrastructure costs a four step approach can be followed:

Box 4.1 **Calculating marginal infrastructure costs**

Step 1: Total infrastructure costs of an inland waterway made for inland shipping = **%** of total inland waterway costs made for inland shipping[1)] x total infrastructure costs of the relevant inland waterway

1) Share of total inland waterway costs made for inland shipping is 71% to 80% in the case studies

Step 2: Variable infrastructure costs of an inland waterway made for inland shipping = % of variable costs[2)] x total infrastructure costs of an inland waterway made for inland shipping[3)]

2) = 15-28% in the Dutch case studies
3) = Result of step 1

Step 3: Variable infrastructure costs of an inland waterway made for freight vessels = % of variable costs attributable to freight vessels x variable infrastructure costs of an inland waterway made for inland shipping[4)]

4) = Result of step 2

Step 4: Marginal infrastructure costs per vessel km = (variable costs in year t+1 – variable costs in year t) ÷ *(number of vessel km in year t+1 – number of vessel km in year t)*

In order to calculate marginal accident, environmental and congestion costs the following formulas can be applied:

Box 4.2 **Calculating marginal accident, environmental and congestion costs**

Marginal (external) accident costs per passage on a river/canal = (total damage costs per year to infrastructure + total costs per year of victims injuries/deaths x 0.5 + total administrative costs per hospitalized person) x risk elasticity ÷ number of tonne-kilometres

Marginal (external) air pollution costs per vessel kilometre per type of emission = emission factor per vessel kilometre per type of pollutant x monetary valuation of emissions

Marginal noise costs = Number of households or people exposed to a noise level > 60 dB(A) due to inland shipping x valuation of noise per household or person per dB(A)[1)] ÷ total number of vessel kilometres by type

1) Valuation of noise = € 23.50 per dB per household or € 10 per person

Marginal congestion costs per vessel = (total waiting time in year t+1 x value of waiting time[2)]) – (total waiting time in year t x value of waiting time) ÷ (number of vessels in year t+1 – number of vessels in year t)

2) Value of waiting time: € 78 per hour for container shipments and € 74 for non-container shipments

This is only a summary of the report prepared by ECORYS and METTLE for the European Commission. We also have to include a link to the EC webpage where the final report can be downloaded from: http://europa.eu.int/comm/transport/iw/doc/2005_08_04_charging_and_pricing_study.pdf.

NOTE

1. It must be noted that the guidelines proposed here will be preceding a more elaborated methodology which will be developed on behalf of the Commission in the study "From infrastructure expenditure to infrastructure costs", also headed by ECORYS. This future methodology will provide a real practical and policy solution for proper registration of infrastructure costs. Therefore the guidelines presented here can be applied, for the time being, to translate yearly expenditures on infrastructure into yearly infrastructure costs.

Part III

ENVIRONMENTAL ASPECTS OF INLAND WATERWAY TRANSPORT DEVELOPMENT

STRENGTHENING INLAND WATERWAY TRANSPORT: PAN-EUROPEAN CO-OPERATION – ISBN 92-821-1354-X – © ECMT 2006

Chapter 1

ENVIRONMENTAL IMPACT OF INLAND SHIPPING AND WATERWAY DEVELOPMENT

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The research project "Environmental Impact of Inland Shipping and Waterway Development" was initiated by the European Conference of Ministers of Transport (ECMT) in reaction to the ECMT Council in Prague (2000) and the Inland Shipping Conference in Rotterdam (2001). Both conferences propagated the development of sustainable transport and waterway infrastructure. The research project focused on the question how to support the development of inland shipping and waterways without causing damage to the environment and the ecological values of the waterway biotopes. This issue is a high priority for the development of the European waterway network, for almost all identified bottlenecks in the Trans European Network of waterways (especially in the Danube River) overlap with stretches of river that are regarded to be ecologically outstanding.

The project aims are to:

- Provide practical guidance on environmental protection in the development of inland waterways.
- Exchange experience on good practice.
- Identify outstanding issues.

The results of a desk study, consultations and interviews with experts and workshops with stakeholders (carried out by Royal Haskoning Coastal & Rivers) are as follows:

1.1. Environmental issues

Key problem is the canalisation of free flowing rivers. Especially in the strategic planning and assessment phase, much is to be improved. Spatial planning conflicts dominate the decision-making process. Water pollution or damage caused by the inland vessels, although possibly significant, is generally not regarded as a problem. Dredging however does pose a threat to the aquatic environment, not only the disposal of the dredged material, but also the reactivation of pollutants into the surface waters during the dredging process. Another significant threat to the environment is caused by operational discharges of mineral oil and lubricants, as well as organic substances (like PAH) due to shipping operations. These outstanding issues are already being addressed by the River Commissions (CCNR and ICPR).

The research project showed a significant difference in the way environmental problems are perceived, appreciated and dealt with in the various countries, despite similar legislations and procedures.

1.2. Policy & Strategy

The transport policies and environmental policies are not integrated. There are strategic visions for the water quality (Water Framework directive) for example, but a strategic international IWT vision is missing. This handicaps balanced decision making. It is essential that vision, policy and strategy are consistent and persistent, and meet the necessary political support at both the national and international level.

Rules and Regulations

All IWT countries have procedures and regulations in place e.g. regarding environmental impact assessment (EIA). Often these rules are strictly followed. The research project however shows 'simply following the rules' is not a guarantee for a successful project. An integrated approach from the very beginning in which all interests are addressed in a balanced way enables a timely preparation and implementation of the project avoiding unnecessarily delays.

1.3. Viability of Acceptable Alternative Solutions

Achieving an agreement on the development of inland waterway transport or any other infrastructure works, requires that alternative solutions can be identified and elaborated that match the (minimum) requirements of the interests of all parties involved. If such alternative solutions cannot be identified, agreement between parties with different interests cannot not be reached.

1.4. Overriding Public Interest

All regulations and procedures may be superseded by an overriding public interest. Many countries have developed jurisprudence, procedures and criteria for assessing whether or not to apply this principle. When developing an international transport network, however, international aspects and interests play a role.

In spite of the existence of a variety of international treaties and conventions, no general procedure, nor criteria have been developed as yet to deal with international aspects to the principle of overriding public interest.

1.5. Harmonisation of European Directives and Regulations

In many IWT countries the perception is that, while there is strict and binding legislation on environmental issues, there are only general guidelines regarding IWT. For example, there are no regulations on development of the Trans-European Network of Transport (TEN-T). It is felt that this may prejudice the development of inland waterways and the associated socio-economic interests in the future. Therefore it is important that the inland waterway transport sector be involved in the further elaboration and application of the Birds, Habitats and Water Framework Directives. In the latter case the inland waterway transport sector has to make sure that the (international) inland waterway transport interests are considered and respected in drafting the River Basin Management Plans.

1.6. Differences between countries

It has been observed that perception and application of the same or similar set of rules and regulations may differ from one country to another and lead to different perceptions, appreciations and approaches of the decision-making processes. These differences may be attributed or associated with:

- Cultural differences: In some countries strict enforcement of the rules and regulations is considered as sufficient, whereas in other countries the same or similar rules and regulations are more considered as a set of guidelines for preparing and implementing projects.

- Different levels of socio-economic development lead to differences in appreciation and valuation of social, economic and environmental interests, values and priorities.

- Differences in democratic tradition lead to differences in the way societal groups are organised and empowered and the way they are involved and have an impact in the decision-making process.

- Differences in stakeholder organisation will determine to what extent stakeholders and beneficiaries develop as a driving force in the decision-making process. It is obvious that both the level of socio-economic development and the constitutional and political setting in a country strongly determine to what extent stakeholders and beneficiaries may organise and exercise democratic rights.

1.7. Public Participation

Many IWT projects may fail because public participation is often too late. Ideally the public participates in all stages of project development, especially in the definition phase and the process of working out (realistic) alternative solutions for project problems. The European legislation and procedures however, are not very specific in the arrangements for public consultation and participation. The EU legislation and procedures only envisage formal steps for public consultation after completion of the environmental studies and submission of the project for approval. The member states are free to make specific arrangements for organising the process of public consultation. Experience and practice in a number of projects show that the progress of the EIA procedures and the probability that a workable solution be agreed upon in a reasonable time span greatly benefit by early involvement of beneficiaries and stakeholders: make them problem owner, accountable for and committed to finding integrated solutions.

The research project also showed, that at present, environmental information is poorly disseminated by governments, despite the Aarhus-convention that forces governments to share environmental and safety information with the public.

1.8. Guidelines and suggestions

Based on these results, the following 12 suggestions for improvement were drawn up:

1. **Open planning process**: If substantial (environmental) impacts are expected it is suggested that the Developer already in the formulation stage of the project involves actively all relevant stakeholders, following all steps of the European EIA Directive in an open planning process in a preliminary way.

2. **Project formulation documents**: It is suggested that the project formulation documents contain:

   - The information specified in Annex IV of Directive 97/11/EC.
   - Stakeholder analysis.
   - Communication plan.

3. **Publishing project formulation documents**: It is suggested that the Developer make this information also available to the relevant stakeholders.

4. **Consultation and involvement of all relevant stakeholders in**:

   Scoping: It is suggested that the Competent Authority provides the opportunity to all relevant stakeholders to participate in the scoping process and contribute to identifying the alternatives to be evaluated and drafting the Terms of Reference of the environmental studies to be carried out.

   Environmental studies: It is suggested that the relevant stakeholders are continuously informed about the progress and results of the environmental studies and are involved in evaluating and assessing the results.

   Environmental Impact Assessment process: It is suggested that the final results of the environmental studies and their summary in the Environmental Impact Statement and the Environmental Management Plan are drafted in consultation with the major stakeholders.

5. **Overriding public interest**: It is suggested to investigate whether or not this principle can be elaborated in specific terms regarding the development of the international inland waterway transport network.

6. **Transport development vision, policy and strategy**: In addition to the above formal screening activity, it is suggested that the Competent Authority evaluates the proposed project also with regard to the existing national and international/European vision, policy and strategy on the development of the transport network and infrastructure.

7. **Preliminary scoping in the project formulation phase**: In line with the suggestion the formulation of the project, it is suggested that a preliminary scoping is carried out by the Developer in consultation with the relevant stakeholders when formulating the project.

8. **Viability of alternatives**: It is suggested that the Competent Authority evaluates whether or not viable alternatives can be identified that meet the minimum requirements of all relevant stakeholders.

9. **Facilitator**: In project cases where it is to be expected that conflicting interests are difficult to reconcile, it might be useful to appoint an independent facilitator who will be responsible for the management of the process and the communication during the execution of the environmental studies. An important task for such facilitator is to try and achieve agreement on the process and procedures to be followed while conducting the environmental studies.

10. **Certification of information and results of environmental studies**: To facilitate the decision-making process it is important that all parties involved make use of the same factual information. It may therefore be considered to establish a mechanism that information and

results of the studies will be certified. This task may be assigned to a specific committee that acts as an advisory body to either the Competent Authority directly or to the independent facilitator mentioned in Suggestion 9.

11. **Monitoring plan**: It is suggested that the Developer elaborates the environmental monitoring plan in very specific technical, financial and institutional terms to ensure that the effects of the project and the mitigating measures are properly monitored, especially during operations where the monitoring responsibility lies with the Competent Authority.

12. **Open planning process**: It is suggested that the proposed project be conceived, formulated and elaborated in an open participative and integrated planning process where all stakeholders (government agencies, private sector, NGOs, public, etc.), from the early stages of preparation onwards, play an active role and jointly develop commitment to and ownership of the project.

1.9. Outstanding issues

The following issues are suggested for further elaboration and discussion in the 2006 Pan-European Conference meeting in Bucharest:

- An integrated (transport & environment) development strategy for Danube river corridor needs to be developed. Key players in this process will be the Danube Commission, the international commission fir the Protection of the Danube River (ICPDR) and the European Commission. This process should be initiated by and during the Austrian EU presidency.

- All member states should adopt an Open Planning process for future IWT development projects. This process should strengthen the involvement of relevant stakeholders in all project stages and dissemination of (certified) information to the public.

- Finally, during the next ministerial IWT conference in Bucharest, not only transport ministers and NGO's should participate, but their environmental counterparts as well.

Chapter 2

CONSIDERATION OF ENVIRONMENTAL ASPECTS IN PROJECTS ON GERMAN WATERWAYS

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The transport policy challenges become apparent in the forecasts for the current transport infrastructure planning in Germany. As a consequence of the economic and social development of Germany and Europe, the enlargement of the EU to the East as well as the globalisation of the markets, the demand for transport services will continue to increase.

The inland waterway mode as an indispensable element of the German and the European transport system will play an important part for mastering the traffic growth. For this purpose, the system *waterway - vessel m*ust be economically efficient and competitive.

In Germany, the overall economic assessments carried out to determine the necessity and urgency of a project are the underlying factors concerning decisions on investments in transport infrastructure. In this connection, environmental concerns have become more and more important.

The environmental responsibility in connection with the realisation of waterway projects is no longer restricted to the limitation of emissions but also covers aspects of nature conservation and water management.

In order to take these new requirements into account, the federal transport infrastructure planning, designed at the strategic planning level, was revised in terms of an integrated transport policy. A key element of the work was the modernisation of the methodology of the overall economic assessment procedure. That means above all the strengthening of the ecological, regional planning and urban development components.

For the first time, *Environmental Risk Assessments and Habitats Directive Assessments* have been prepared for the road, rail and inland waterway transport modes. This early assessment of the environmental and nature conservation conflicts is an important contribution to minimise the procedural risks. This environmental risk assessment and the Habitats Directive assessment do not replace the far more detailed environmental impact assessment and the Habitats Directive impact assessment during the subsequent planning process.

At the next planning level, extensive legal requirements governing water protection and nature conservation have to be considered for improvement and maintenance measures of federal waterways. As a rule, the abstract legal requirements are regularly operational for practical application in the German Federal Waterways and Shipping Administration sector. Guidance material and instructions

are to facilitate their efficient implementation by the persons responsible on the ground and are easy tools to optimise the procedures to follow.

The most essential guidance material for environmental issues in connection with federal waterways which has met with approval even beyond its actual scope of application is briefly described in the following.

With the entry into force of the Environmental Impact Assessment Act, the Federal Ministry of Transport, Building and Housing has developed a set of rules to handle environmental impact assessment, based on issues in connection with federal waterways. This set of rules also includes the *Guideline for the Performance of Environmental Impact Assessments on Federal Waterways,* issued in 1994 which is currently being revised.

The report "Environmental Impact of Inland Shipping and Waterway Development", initiated by the European Conference of Ministers of Transport and designated as a reference paper for the workshop refers for example to the German guideline.

The Habitats Directive was implemented into German law in 1998. This made it also necessary to define the new requirements with regard to contents and form, especially for projects on federal waterways, which have now led to a *Guideline for the Performance of Habitats Directive Impact Assessments on Federal Waterways.* Up to now, a guideline elaborated for the sector of road construction has also been applied to the performance of Habitats Directive impact assessments for measures on federal waterways.

Further examples of such guidance material are:

- Instructions for Consideration of Nature and Landscape Conservation in Connection with Maintenance Measures.
- Guidelines for Handling of Interactions in the Environmental Impact Assessment.
- Instructions for Handling of Dredged Material in Inland Waterways.
- Instructions for Handling of Dredged Material in Coastal Waterways.

The aim of all this guidance material is to appropriately take environmental concerns into consideration in construction measures to be realised on federal waterways and to facilitate and shorten the procedural mechanisms.

At the moment, our main task is to bring the requirements of navigation into line with the objectives of the European Water Framework Directive. In Germany, the Federal States are responsible for the implementation of this directive. It is, however, also in the interest of the Federal Government to identify conflicts as early as possible and to find consensual solutions.

For all improvement and maintenance measures on the German waterways the significant water management objectives have to be taken into consideration. The requirements of the European Water Framework Directive have to be included in the appraisal when deciding on maintenance and improvement measures. This does not, however, involve the extension of the competencies of the Federal Waterways and Shipping Administration.

Provided that the implementation of the European Water Framework Directive affects any administrative competencies of the Waterways and Shipping Administration of the Federal Government, the water management agencies have to obtain the approval of the waterways and shipping administration for programmes of measures and management plans.

Guidance material providing advice for the consideration of the requirements resulting from the implementation of the European Water Framework Directive, both for improvement and maintenance measures, are being prepared in the sphere of competence of the Federal Ministry of Transport, Building and Housing.

The *Guideline for the Performance of Environmental Impact Assessments on Federal Waterways* which is currently being revised will in the future also include the consideration of the European Waterway Framework Directive for new construction and improvement projects at federal waterways.

The "Principles for the Technical Concept of the Maintenance of the Elbe between the Czech Republic and Geesthacht with Explanations", co-ordinated with the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, using the River Elbe as an example demonstrate how the issues of the European Waterway Framework Directive can be taken into consideration when performing maintenance measures on federal waterways. The intention is to apply this concept to German waterways.

To sum up, we can say that the results achieved in Germany are an important step towards the evaluation and reconciliation of various interests.

The special political challenge for the future is the balanced and sustainable reconciliation of interests between the requirements governing the use of inland navigation on the one hand and the water management and nature conservation interests on the other.

It is, therefore, of particular importance to the Federal Ministry of Transport, Building and Housing to:

- Guarantee the preconditions for an economically efficient and competitive navigation while at the same time taking environmental concerns into consideration.
- Extend the positive environmental effects of inland waterway vessels to communicate them to politicians and the public.
- Support the integration of the shipping interests into the different sectors of environmental policy.
- Promote the dialogue between the representatives of the shipping sector and the representatives of environmental protection at national and at European level.

In that respect, the results achieved in Germany are an important step towards the reconciliation of the various interests.

Part IV

SUMMARY AND CONCLUSIONS OF THE WORKSHOP

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1. Introduction

The Workshop on Inland Waterway Transport was jointly organized by the European Conference of Ministers of Transport (ECMT), the United Nations Economic Commission for Europe (UNECE) and the Rhine and Danube River Commissions. It was held on 22 and 23 September 2005 in Paris. Among about 110 participants, there were officials from Ministries of Transport and agencies in charge of inland waterway transport of 18 countries, as well as representatives of various international organisations, waterway transport industry, researchers and experts.

In September 2001, a Pan-European Conference on Inland Waterway Transport was organized in Rotterdam. Transport Ministers of participating countries attended this Conference and acknowledged the necessity of common efforts to reinforce Pan-European inland waterway transport. To achieve this goal, objectives and actions were established in the Declaration of Rotterdam adopted at the end of the Rotterdam Conference. The Declaration also envisages to convene a new Pan-European Conference in Romania to be held in 2006. This new Conference will consider the status of implementation of the Rotterdam Declaration and decide on necessary actions to complete the achievement of the main goal of the Declaration: the strengthening of Pan-European inland waterway transport.

The aim of this Workshop, which was designed for both public and private decision makers dealing with institutional and professional issues in inland waterway transport, was to prepare for the Bucharest Conference by assessing progress made since the Rotterdam Conference, identifying the remaining problems and envisaging further common actions required from Governments and other stakeholders.

2. Organisation and Programme of the Workshop

The Workshop was opened by Mrs. Jacqueline Tammenoms Bakker (Director General, Civil Aviation and Freight Transport in the Dutch Ministry of Transport, Public Works and Water Management) who summarized the progress in meeting the objectives of the Rotterdam Declarations. The Workshop's general theme was divided into three subtopics, which were discussed during three consecutive sessions. Each session was animated by a panel of recognized experts. Following the presentations from invited rapporteurs, a considerable amount of time was devoted to open discussion, in which all the participants had the opportunity to react to interventions from other participants. The workshop was closed by the final panel discussion. A number of written contributions had been prepared before the Workshop. They were available on the ECMT Website beforehand.

Session 1 – "Inland Waterway Market Development in a Pan-European Context", was chaired by Mrs. Corien Wortmann-Kool (Member of the European Parliament). The session was devoted to specific market development issues and problems, intermodality and sea-river traffic. The participants paid particular attention to the recent changes in various European inland waterway markets, the need of co-operation of various stakeholders in inland waterway transport sector and lack of appropriate promotion of this transport mode. A considerable amount of time was dedicated to missing links in the Pan-European inland waterway network, lack of efficient intermodal connections, as well as the need to set a new labour policy for the inland waterway transport sector.

Session 2 – "Levelling the Playing Field", chaired by Mr. Jean-François Dalaise (President of Port Autonome de Paris), was focused on the existing legal framework in the field of inland waterway transport. Particular attention was paid to progress attained in the field of reducing legal restrictions to market access and the need to decrease administrative burdens for entrepreneurs, as well as harmonisation of labour law and social protection standards. The session examined also the problem of infrastructure charging in inland waterway transport.

Session 3 – "Infrastructure development and the Environment" was chaired by Mr. Leo Grill from the Austrian Ministry of Transport, Innovation and Technology. The aim of the session was to review the environmental impacts of inland waterway development, the requirements of the EC water framework and habitat Directives, the need to consider environmental aspects in the assessment of inland waterway projects and the need for appropriate co-operation with all stakeholders in the process of infrastructure projects development.

Final Session – "Necessary political actions. Elements for a Declaration at the Bucharest Conference" was chaired by Mr. Jack Short, Secretary General of ECMT, and co-chaired by Mr. Jean Marie Woehrling, Secretary General of CCNR, Mr. Danail Nedialkov, Director General of the Danube Commission, and Mr. Viatcheslav Novikov from UNECE. The last session took the form of a panel discussion. Its objective was to clarify the main points to be drawn from the overall discussion of the Workshop, determine further action required and prepare elements for a declaration at the Bucharest Conference, which is to be held in 2006.

3. Progress since the Rotterdam Declaration

One of the most important aims of the Rotterdam Declaration was the development of modern and environmentally friendly waterway network. Progress in this field has been substantial and a number of new projects have been developed. Nonetheless, there are still many missing links and bottlenecks in the Pan-European network that are significantly reducing the effectiveness of inland waterway transport and the development of Pan-European market. The main challenge in developing the new necessary projects would be to take into consideration all the functions of waterways in order to set up an appropriate approach founded on best practices in the development of inland waterways. Another challenge would be to enhance the efficiency of intermodal connections, as well as river information services, which would undoubtedly improve the quality of inland waterway transport services. It would also be very important to introduce more economic rationale to the infrastructural policy and base it on transparent financial and economic arguments.

Progress in harmonisation of legislative framework in Europe, particularly in the field of technical, safety and manning regulations, has been considerable too. Moreover, the accession of new countries to the EU has contributed or is going to contribute even further to the unification of different legislative regimes. Nonetheless, some significant problems still remain. A Group of Volunteers on legislative obstacles, set up under the auspices of the UNECE, has identified a number of problems the inland waterway sector has to challenge. The business community is calling for the introduction of a real level playing field, without legal disparities, in a liberalized market and with fair competition. One of the problems, also mentioned as remaining, is the institutional structure of the inland waterway transport sector in Europe. As regards the appropriate institutional structure for a more dynamic waterway sector, the EFIN report was referred to. While there was strong support for the idea to give inland waterways an additional political impetus, it was not certain that a new institutional structure with a Ministerial forum on the top would meet this objective. Some participants felt that the present institutional structure in the field of inland waterways is sufficient and that, instead, a closer co-operation between the existing institutions should be ensured.

The Rotterdam Declaration called for further development of safety norms and measures against water contamination, air pollution and noise nuisance. Despite the fact that inland waterway transport is the most environmentally friendly of all transport modes, there is still much to improve. Special efforts have to be carried out to improve air and water quality, and the standards of EC legislation in this field should be further elevated. The modernization of the sector has to be much faster in order not to be surpassed by other transport modes. In view of recent terrorist attacks, the sector would have to meet the challenge of improving the security of transport operations along the whole logistic chain.

The Inland Waterway Transport sector has been rapidly changing in recent years. This impetus has to be utilized to promote the sector better and to bring the advantages of inland waterway to the attention of the public, as well as the transport industry.

4. Inland Waterway Market Development in a Pan-European Context

4.1. Specific Market Developments

The whole Pan-European waterway network consists of almost 28 000 km of internationally classified waterways available for inland navigation. The importance of inland waterway transport sector in the various countries and regions shows great diversity. In EU-25, inland waterway transport accounts for more than 210 000 million t-km, with a fleet of about 12 000 vessels. The accession of Bulgaria and Romania would raise these figures by 5%. The centre of gravity undoubtedly lies in the Rhine region, which represent 80% of the transport performance, while only 9% is realised along the Danube and the Rhine-Main-Danube connection. Additionally, there are sizeable inland waterways networks in the Russian Federation and Ukraine, although a large part of them are not connected with other Pan-European networks due to numerous missing links and bottlenecks. The Russian Federation possesses a well-developed inland waterway network of over 101 700 km, out of which 6 500 km of the so-called Unified Deep Water System is in the European part of the Russian Federation.

Development of European inland shipping markets has been moderate in recent years. Their growth depends much on the growth of the global transport volume. However, despite the large increase in transport demand over the past decades, nearly all of extra traffic has been absorbed by roads. As a result of this decoupling, the inland waterways are not losing their traditional markets, but are failing to attract new traffic flows.

The share of inland shipping in the overall European transport market is not sizeable. In 2001, it accounted to no more than 6.5% in total transport performance in all ECMT Member States. Nonetheless, it has to be stressed that the distribution of inland waterway transport is far from being homogenous. In the top-three countries (Germany, the Netherlands and France), the market share of inland navigation represents more than 14%. Inland navigation has managed, on the one hand, to grasp nearly 50% of the market share in market segments on specific network sections. On the other hand, in the Russian Federation, the inland navigation sector has seized only 3-4% of the total transport market despite developed network of inland waterways. Moreover, the modal share of inland shipping in other European countries, particularly these with isolated inland waterway networks, is only marginal.

Despite the moderate development of the inland waterway market, there are market segments and regions where the inland waterway sector seems to be obtaining a more solid position. Between 1995 and 2003 the inland navigation traffic doubled in Germany, although part of the growth has to be contributed to German reunification. In recent years, traffic has grown considerably also between France and the Benelux countries. The paramount example is also the container transport traffic, which is growing rapidly. In 2004, the growth of container traffic in Germany reached the level of 17%. The inland navigation sector in the Rhine market is much more developed than in the other markets. The inland navigation carriers can offer more complex transport services, integrating various intermodal solutions, and thus are better prepared to explore new market segments. It was noted that, in order to develop the container traffic further, there is a need for a new, stackable type of swap body, which would reduce the costs of storage in terminals and allow the storage areas to be smaller.

Performance of inland navigation as well as transport patterns differ greatly across Europe. Transport. Whilst the inland navigation traffic maintains at high levels in the Western Europe, principally in the Rhine region, the congestion in other European regions is much lower. In the case of

the Danube network, the market suffered from the political turmoil in the Balkans in the 1990s. The Danube River is, furthermore, limited by numerous bottlenecks and underdeveloped or destroyed infrastructure. Conversely, the capacity of Russian and Ukrainian networks is much higher than the actual traffic. For example, in 2004 the freight traffic volume in the Russian Federation reached 136 million tonnes, which is much below the 1988 level of 580 million tonnes. Recently both markets have, however, shown signs of recovery. The inland navigation volume in the Russian Federation increased in 2004 to the level of 136 million tonnes. The Danube market grew significantly in 2004. Yet, even the particular markets are showing great divergences. In the Russian market, the traffic is concentrated in the river estuary ports of St. Petersburg and Rostov on Don handling 17.5 and 19 million tonnes respectively. Consequently, the Volga-Baltic and Volga-Don waterways suffer from huge congestion. A further increase in cargo transportation would not be possible without major investment.

Contrary to the Western European markets, the Danube market attracts mainly traditional bulk cargo, and the inland navigation sector is not able to compete with railways and road haulers in this market segment. The same applies to other Eastern-European markets. The carriers are not able to compete with other transport modes and because of lack of appropriate intermodal logistics solutions they are not able to attract new cargo types, like containers. Even in these markets there are, however, positive examples of companies operating successfully in new market segments.

The market segment considered to be the most prospective in the coming years is sea-river transport. The sea-river transport has a large potential both in container traffic and traditional bulk cargo segments. Due to continuing globalization of trade, transport market structures are changing, intermodality is becoming the norm and the combination of inland waterway traffic with other modes of transport is becoming more and more popular. Simultaneously, the transport processes are becoming longer and more complex. Integrating sea transport into the logistic chain by inland waterway carriers enables them to meet the growing demand for such services. To develop inland waterway transport and change the current modal split there is, however, a need for a top-down approach looking individually at different types of traffic.

Sea river transport is also necessitated by harsh climate conditions in Northern and Eastern-European markets. In the Russian Federation, inland waterways are frozen for 3 to 8 months during the winter season, while the sea-river vessels can operate all-year round. Furthermore, the Russian waterways are isolated from other main European networks. The only possible connections impose using the short-sea shipping operations. In 2004, over 30 million tonnes were carried by mixed sea-river vessels in the Russian Federation. As a result, almost all large shipping companies envisage construction of new sea-river vessels. Furthermore, due to the growing significance of inter-basin connections, sea-river traffic will become even more important. The new connections include links between Black and Caspian Sea basins by Volga-Don waterways, as well as Great Britain, the Scandinavian and Iberian Peninsulas to Rhine market.

Development of efficient sea-river traffic would be much more facilitated if the port charges for sea-river vessels were lower. These vessels are much smaller than normal sea vessels and thus require less service from sea ports. This gives the sea-river traffic an unfair disadvantage in comparison to other types of traffic.

Creation of a single Pan-European inland waterway market is far from reality. Instead there are numerous inland navigation markets that are not sufficiently connected to each other. Additionally, neither the transport trends nor the performance of the inland navigation sector in these markets show any signs of convergence.

4.2. Infrastructure Needs

The Rotterdam Declaration stated that the development of a modern, environmentally friendly, efficient network is a must for the promotion of inland waterway transport, as well as for the improvement of sea and river transport. The infrastructure on the main European markets, particularly on the Rhine River, is very well developed and provides excellent links to seaports, logistics centres and intermodal nodes. The lower-scale connections in the Netherlands, Belgium, Germany and France also enable smooth navigation. Since the Declaration, much progress has been made in the field of infrastructure. A number of new projects have been developed, including, among others, the Seine-Nord project in France, and many are envisaged (like the Vienna-East project in Austria, elimination of bottlenecks on the Rostov-on-Don-Astrakhan or St. Petersburg–Volgograd sections). Nonetheless, a number of bottlenecks have remained, hindering the development of efficient inland waterway transport services. It was noted that UNECE member Governments have prepared an Inventory of the most important bottlenecks and missing links in the E waterway network in the context of the European Agreement on Main Inland waterways of International Importance (AGN).

The problem of insufficient infrastructure is particularly acute on the upper and middle Danube River and in Eastern-European markets, due to the lack of appropriate maintenance and investment. Lack of dredging works, obsolete or insufficient port facilities, low water level, which necessitate utilization of smaller vessels, significantly restrict the competitiveness of inland navigation in these regions. Furthermore, inland navigation on the Danube River has hitherto been severely hindered by military conflicts in the Balkan region in the 1990s. The delegates welcomed, therefore, with great satisfaction the announcement by the Danube Commission that the freedom of navigation in Novi Sad would be restored later this year, but hoped that transit taxation in certain countries would disappear or be significantly decreased. Problems with congestion in the maritime ports of St. Petersburg and Rostov-on-Don have to be solved, as they hinder development of sea-river traffic.

There are numerous local and large-scale missing links and bottlenecks both on the TEN-T and Pan-European network. Various waterways or sections are not connected with each other and the boat owners are reluctant to lock their vessels in an isolated area. In some cases, the problem concerns only small sections, as in France. However, there are even large-scale sections that exist, as between Dnepr, Vistula and Oder rivers. Also, on some sections of the Volga River, there are bottlenecks preventing the creation of an efficient link between the Black and Caspian Seas unless major reconstruction works are carried out. The European Commission informed of the works carried out by the High-Level Group, dealing with the extension of the present TEN-T network to neighbouring countries, including the extension of the inland waterway network to the Don, Volga and further to the Caspian Sea. There was a general feeling that in order to develop traffic with Asia, there is a need to guarantee efficient connections between Danube and the Caspian Sea in the first place. Especially, the sea river traffic along the Danube River and in the Black Sea has to be promoted.

It was argued that, although elimination of missing links and bottlenecks on the Pan-European level is a pre-condition for the development of Pan-European inland waterway markets, it is not enough to guarantee the efficiency and financial sustainability of the sector. In the world of today, more and more importance has to be attached to efficient intermodal connections. The length of the transport process is increasing and the transport processes are becoming more complex. In order to utilize the potential of inland waterways to the maximum extent, large investments in intermodal infrastructure, creation of intermodal nodes and modernization of interfaces (preferably trimodal), enabling fast, efficient transhipment, and bigger storage facilities, are needed.

The share of inland waterway investment in all TEN-T investment amounts to 1.5%, compared to 66% railway share. These proportions should be changed in order to restore the balance between

various transport modes. Furthermore, there are many actions that do not require many resources but would bring many benefits for the sector. The principal example is facilitation of on-board access to information and communication systems. Development of river information services would make a significant contribution to the competitive strength of inland navigation. It would improve efficiency and safety of transport operations. Lack of sufficient information systems, enabling tracking of shipped goods, has a very negative impact on the development of the most prospective markets – containers, sea-river traffic, as on Russian waterways.

The low competitiveness of the inland navigation sectors precludes reaching for private investment. The cost of inland waterway infrastructure is always born by Governments. Therefore, allocation of public funds takes always place under the public eye. It was argued that, whatever the purposes of new infrastructural projects in inland waterways are, they have to be based on solid and transparent financial foundations. To this end, the increased utilization of cost-benefit analyses, assessing various aspects of infrastructural projects – environmental, financial and technical, as well as various applications of waterways is encouraged. The transparent process of public funding would facilitate obtaining sufficient financial resources to be released for new projects, as well as managing and maintaining waterways, removing bottlenecks and achieving a high-quality network of waterways.

4.3. Fleet modernization and entering the market

The cost of entering the inland navigation market is relatively high. Acquiring new vessels requires large investment and freezing capital for many years. It also slows down the technological progress in the sector, as the process of fleet renewal is longer than in other transport sectors. Taking into account the low profitability of inland navigation, the entrepreneurs are not able to acquire sufficient financial resources for investment in a new fleet. It was suggested that new financing mechanisms with public guarantees should be introduced, facilitating obtaining of new credits, especially for the first investment of young entrepreneurs entering the market. It is increasingly important as boatmen are becoming older and there is a growing need to attract young people to the profession. Currently, the credit conditions are so inappropriate that the only solution for new-entrants is to buy old and worn vessels, which are neither efficient nor environmentally friendly.

The problem is of special importance for Danube and other Central and Eastern European carriers. Undercapitalization of private companies in the region, combined with years of insufficient investment and neglected maintenance has contributed to deterioration of inland navigation fleet in these markets. In the Russian Federation, the average age of vessels has exceeded 25 years, and so has the average age of mixed sea-river vessels. These markets need special attention from Governments and special financing solutions. There is a need to establish capital-raising structures at the European level in order to facilitate investment, mainly for young people. It was argued, however, that it is the industry that needs to bear the costs of fleet renewal, not the society through government funding.

Fleet modernization is even more hampered with changing vessels' standards. It was noted that vessels on Rhine River, as well as on Belgian, French, and Dutch networks, are becoming increasingly large. The problem concerns mainly small rivers and canals, where the new large ships require new infrastructure and lower the safety of inland navigation. This process cannot be neglected, as smaller vessels have an important role to play in the market. Therefore, there is a need to consider whether it would be possible to revitalize this type of transport. It was also stated that modernization of the fleet is restricted by lack of uniform technical standards for shipbuilding. In the process of fleet renewal and modernization, co-operation between ship-owners and shippers is of particular importance. Inland navigation firms need a clear vision of the future market in order to adjust to their customers' needs. It is necessary to have adequate vessels in order to satisfy the demand and this could only be decided through a strong co-operation between shippers and boatmen.

4.4. Lack of Appropriate Promotion of the Inland Waterway Transport Sector

The advantages of inland navigation are not spread enough among the public and the transport industry. Even the EU White Paper did not pay as much attention to the role of inland waterway transport as to other modes. The EC's Communication on the promotion of Inland Waterway Transport, to be published by the end of 2005, will formulate a more strategic policy for the development of inland navigation. It was suggested that a negative image hinders development of inland navigation. The sector is perceived as outdated, unable neither to meet the modern standards nor to cope with the newest technologies in transport. Unless forwarders are persuaded of this transport mode prospect, they will not utilize it. The shippers themselves will not get involved in any specific actions aimed at increasing traffic in this particular transport mode.

There is also a common conviction that the knowledge of the strengths and the comparative advantages of inland navigation sector is not spread well enough. These specific advantages of the sector are mainly lower transport costs, increasingly high reliability of agreed deliveries, the possibility to save on storage facilities, and the ability to deliver cargo to otherwise inaccessible areas. Moreover, with the improvement of quality of inland navigation services, they are becoming much faster and are able to cope with the growing volume of traffic and with denser and more complex networks. These facts are neither known to large logistics companies, whose services are more and more important to sufficiently integrate various transport processes into the overall logistics system, nor do shippers realize all the opportunities created by the inland waterway sector. Therefore, there is a need to enrich the training programmes in transport and logistics by a topic devoted to inland waterway transport, which is frequently overlooked by such courses. Inland navigation should not be regarded only as a substitute to road or rail but as a real partner in the transport business. The sector has to show its advantages rather than appear as a second choice mode.

There are various measures to bring the advantages of the sector to the attention of the public and of the branch. However, the best way to promote the business is to do it in an organized way. It was noted that the structure of such a body would not be important. There simply should be a unit that would take the responsibility for bringing together various ideas. Promotion of inland waterways requires hardly any costs and even limited expenses pay off very much. One of the examples is the measures taken by EC for the promotion of Short Sea Shipping which gave the sector a substantial boost.

In order to raise the awareness of inland navigation, the co-operation of all stakeholders is required. The particular areas of co-operation are between governmental bodies and the transport industry, as well as between the different players along logistics chains. For example, it would be in the interest of ports to encourage the greater usage of inland waterways. Co-operating partners can learn from best practices, can offer better services and added value for customers of the transport sector, and are more competitive. The Forum established in Germany, uniting all the important stakeholders of the inland navigation sector and other transport modes is a paramount example of a good practice in the field of inland navigation promotion. Creation of such a forum at European level would be a very positive development.

4.5. Training and Labour Policy

Another growing concern for the inland waterways sector is workforce availability. In the face of a decreasing number of inland navigation labour force, inland waterways have to find answers to the question of how to attract new, young professionals. The professions within the sector are linked with numerous disadvantages, including social dislocation or long absences, which discourage people from taking on positions in inland navigation.

At present, the lack of sufficient number of workforce is mitigated by an inflow of educated, skilled labour from Central and Eastern European countries. In these cases, the salary level in Western Europe, being significantly higher than in Central or Eastern Europe, provides for some compensation. However, one has to bear in mind, that as the gaps in income between various markets in Europe are diminished, the salary level will be less and less attractive. Therefore, Europe is facing an important dilemma – whether to seek skilled but cheap labour in other markets or to make the profession more appealing to European workers, with appropriate training programmes that would be attractive for young people. One of the means might be to improve the quality of training by the creation of a European network of training institutions.

4.6. Need of Full-Fledged Programmes

Numerous problems affecting the inland waterways were identified at the Workshop. These problems concern different areas and different players. In order to overcome them, there is a need to introduce full-fledged programmes, combining various policy areas and bringing together all interested stakeholders.

Only a whole combination of measures can make a positive impact on the sector and contribute to its further development. The programmes aimed at reviving inland navigation have to comprise a new approach to infrastructure and charging, assuming equal treatment of all transport modes and internalization of all external costs, a new approach to regional policy, including planning of regional infrastructure and intermodal connections to existing inland waterways. Appropriate promotion mechanisms, exchange of information and best practices have to be incorporated into this scheme. Appropriate competition policy has to be adopted, including appropriate aid policy in some cases.

Particular attention has to be paid by the Governments, which have the most responsibility for the economic and transport policies that constitute the framework for inland navigation sector. There is, however, an important role to play by transport and logistics industries, inland ports and seaports, as well as relevant international and supranational organisations.

5. Levelling the Playing Field

5.1. Elimination of legal obstacles – "silent revolution"?

The Rotterdam Declaration invited main European players to intensify efforts aimed at harmonisation of technical, safety and manning requirements. It also invited to identify legislative obstacles that hamper the establishment of a harmonised and competitive Pan-European inland waterway transport market, and to formulate solutions to overcome them.

As a follow-up to the Rotterdam Declaration, a "Plan of Action for the Implementation of Decisions taken by the Pan-European Conference on Inland Waterway Transport" was adopted by UNECE member Governments, envisaging a wide range of measures aimed at meeting the objectives put forward by the Conference. Of particular importance is the "Inventory of existing legislative obstacles that hamper the establishment of a harmonised and competitive pan-European inland navigation market, and proposals for solutions to overcome them" established by a Group of Volunteers consisting of representatives of EC, UNECE, ECMT, CCNR, DC and a few key countries.

The discussion on the progress achieved in this area was very lively at the Workshop. Despite a rapprochement of certain standpoints, participants differed much on the actual progress in this field. Numerous problems that still need to be resolved were identified.

The progress since the Rotterdam Declaration has been considerable, especially in the area of technical requirements and certificates. It was suggested that the legislative framework was no longer an obstacle to the creation of a harmonised and competitive Pan-European market. In comparison to other modes, integration in the inland navigation sector has been much more advanced. It was, however, suggested that existing instruments should be brought up to date and completed in order to ensure a real level playing field.

The European Commission and the Central Commission for the Navigation of the Rhine (CCNR) are in a process of harmonising regulations on technical specifications for vessels. As a result, there will be mutual recognition of certificates for Rhine vessels and of Community certificates, which means that it will be possible to operate throughout the whole EU with a single certificate. A similar process is envisaged regarding boatmaster certificates. The Danube and Rhine Commissions are also discussing the question of a harmonised regime for the verification of specific knowledge required for certain stretches of the rivers. Within UNECE, the Recommendations on Harmonised Europe-Wide Technical Requirements for Inland Navigation Vessels have been elaborated and put in line with relevant EC provisions, taking also into account particularities of different river basins Europe wide including the River Danube. After their adoption, the Recommendations will facilitate considerably the reciprocal recognition of the ships certificated by member States and encourage the further development of international transport by inland waterway. Much progress has been achieved also in the harmonisation of rules for the carriage of dangerous goods.

There were, however, opinions that harmonisation of legislation in inland waterways is still far from being satisfactory. Following the Rotterdam Declaration, the Group of Volunteers identified a number of legal obstacles that still hamper further development of inland navigation on the Continent. It was noted that, although the integration in the domain of market access is much advanced within the EU, there are still different legal systems governing freedom of navigation and access to the market – namely the Rhine regime (Mannheim Convention), Danube regime (Belgrade Convention) and the Community one. The Community principles of freedom of access apply now to the whole Community network, as well as to a large part of the Danube River. With the accession of Romania and Bulgaria, the freedom of navigation will be extended even further. All existing regimes introduce certain restrictions to the freedom of navigation with regard to nationality of vessels. Of particular concern is the restriction introduced by the Second Additional Protocol to the Act of Mannheim, of 1979, reserving the right to carry out transport operations between points situated on the Rhine and its tributaries exclusively to vessels "belonging to Rhine navigation", which was found by the Group of Volunteers as being clearly incompatible with the idea of an integrated Pan-European inland water transport market as postulated by the Rotterdam Declaration. On the other hand, the definition in article 1 of the Belgrade Convention of the freedom of navigation on the Danube is rather vague and may need to be clarified with a view to ensuring freedom of rendering transport services on this international river for vessels of all nations. Furthermore, according to the Belgrade Convention, the cabotage market is not entirely open for third countries' vessels either. The access to Russian, Ukrainian and some other national markets is still limited for foreign carriers; the Group of Volunteers identified some restrictions to the access to and use of inland waterways and ports, different regimes for technical requirements for vessels, still existing different regimes for boatmasters' licences, restrictions on the freedom of movement of workers and on the right of establishment, as well as different social, safety and working standards.

5.2. Harmonisation of private law

There was an opinion that the level of harmonisation in the field of international private river law is not sufficient. Better usage of an internationally agreed private law provisions Europe-wide would give the sector an additional boost. According to some participants, it would be very useful to develop

a standard contract for inland navigation services since, in the view of the inland waterway industry, the developments in this field are too slow. Public authorities were invited to set up an adequate negotiating framework to develop such a model contract.

It was noted that the Budapest Convention on the Contract for the Carriage of Goods by Inland Waterway (CMNI) had finally entered into force, thus creating a common European regime for the contractual liability in inland navigation, that would undoubtedly contribute to the facilitation of transactions and avoiding unnecessary litigations. All the countries that had not ratified the Convention yet were invited to do so.

The harmonised liability regime (CLNI), as well as the liability during the carriage of dangerous goods by inland waterway, are also an important condition for a competitive Pan-European market. In order to avoid unfair competition, the same liability rules would have to be applied for the same services and guarantees to be provided by market players. Unfortunately, the results obtained in this area so far are far from being satisfactory and the discussions in this field should be relaunched. Due to the lack of satisfactory harmonisation tools, it is the task of Governments to ensure that the liability regime applicable on their territories guarantees effective compensation for damages caused.

5.3. Labour law and social protection

The question of social harmonisation in the area of inland waterway transport is very divisive. What is considered by some as unfair competition is seen by others simply as a legitimate competitive edge. Although the social legislation in the area of inland waterway transport is much less developed at the international level by ILO than, for example, in the field of maritime transport, this sector does not have to start from scratch.

It was noted that there are a number of existing legal instruments harmonising social conditions, like crew working hours or employment contracts. However, a large difference between theory and practice was observed. According to the trade unions' point of view, social legislation in inland navigation is often disobeyed. The participants suggested revising the existing treaties, bringing them up to date and eliminating numerous loopholes. The severe problems are caused by the so-called vessels flying "flags of convenience", which do not respect the fundamental rules. Furthermore, a problem with so-called "occasional workers" should be solved.

It was argued that the control of social requirements is not sufficient and should be strengthened. The opening of the markets, an increasing degree of integration of inland navigation in Europe and globalization opens up the possibility for activities for inland navigation waterways across Europe. However, in order to verify that transporters do not violate applicable rules, there is a need to create an efficient regulatory framework which will guarantee that order is respected without involving bureaucratic constraints on economic players. Controllers entering the boats sometimes have problems with choosing the right legal system to apply on a controlled boat. Therefore, there is a need to clarify the applicability of different legal systems in order not to have different legal systems on a single boat. On the other hand, controls have to be strengthened in a way that guarantees avoiding any unnecessary duplication of inspection of the same vessels.

5.4. Alleviating administrative burden

The question of possible deregulation and simplification of present administrative regulations should be studied. It was argued that the industry does not need more regulations as it considers the present legislative framework interfering and hampering development of the sector. By reducing the regulatory constraints and making them more transparent, it would be possible for the sector to gain

more momentum and reinforce the sense of responsibility of economic players. In this respect, of particular importance is simplification of administrative and customs rules on border crossings, as overlong procedures negatively impact efficiency of international transport operations and, as a consequence, decrease market competitiveness of international inland waterway carriers.

It was noted that the European Commission intends to establish an inventory of administrative bottlenecks causing the overlong delays in inland navigation, just as it has been in the case of maritime transport (104 bottlenecks were identified and it was possible to reduce their number to less than 50). The current administrative bottlenecks are among others: the regime of temporary staff, registration of ships transporting waste or hazardous materials, etc.

On the other hand, it was argued that the high level of safety of inland navigation enforced by the existing legal framework is widely perceived as one of the most important assets of inland navigation mode. Therefore, it is very important to find a balanced approach to deregulation and simplification of the existing legislative and administrative framework in the area of inland waterway transport.

5.5. Charging and pricing

The attitudes towards inland waterway transport have been changing in Europe in recent years along with the changes in overall transport policy. According to the White Paper on pricing, charging for infrastructure could be one of the measures that might solve the problem with increasing congestion and rising pollution. In this context, charging for infrastructure would increase efficiency and sustainability of the transport system and promote fair competition across different transport modes. According to the White Paper, the most effective approach towards charging are based on marginal costs, i.e. cost incurred by users (both internal and external) at the point of use. Transport undertakings that face the real costs would have incentives to adjust transport choices, including switching to transport mode with less environmental impact.

In default of practicable, transparent and applicable methods for cost registration and allocation in inland waterway transport, the EC has commissioned a study on charging and pricing in this sector. According to the results obtained, the best methodology for calculating marginal costs is the cost allocation approach. The approach consists of cost registration in the first place, then allocating the appropriate percentage of real costs to inland shipping (depending on the real waterway usage for various purposes). Next, the assessment of variable costs, i.e. varying with the number of ships, is made and appropriate shares are allocated to freight and other vessels. On this basis, user-dependent infrastructure costs per vessel-km can be calculated. In order to get the prices right, the study needs to be further refined. However, answers to several questions must be found before introducing such a system. A pre-condition is to introduce a uniform method of cost-registration that would imply a real level playing field. In the future, a common approach to infrastructure charging has to be adopted, as current regimes differ very much. On different rivers there are different levels of charges, as well as different types of costs are taken into consideration.

The topic of infrastructure charging aroused many controversies among participants. It was argued that introduction of charging for inland waterway infrastructure might decrease the already low competitiveness of this transport mode and divert the inland navigation traffic to roads and rails. Infrastructure charging could also lower the profitability ratio of inland navigation companies and thus hamper the further development of the sector. Moreover, the transport price already constitutes a large part of the final price of various commodities, like steel products. It was suggested that the transport share in various commodities prices in Europe is much higher than e.g. in the US, which affects whole branches of European economy. Furthermore, it was noted that waterways are used for many purposes, as inland navigation, water supply or electricity generation. Therefore, a real share of costs

incurred by inland shipping has to be calculated. For example, although dredging works are very important and quite costly, it must be stressed that inland navigation is not the main reason for such works.

It was also noted that the introduction of charging systems would imply changing of legal framework in some cases, e.g. introduction of charging on the Rhine River would have to be preceded by changes in the Mannheim Convention. It was also suggested, on the one hand, not to give this topic a high-profile at the Pan-European conference on inland waterways to be held next year in Bucharest, as it may potentially be threatening to the development of the inland waterway sector in the near future.

On the other hand, it was suggested that the introduction of charging for inland waterway infrastructures should be perceived rather as an opportunity for the sector than a threat. Introduction of charging for infrastructure is an inevitable process and concerns all the transport modes, including inland waterways. Taking into account the low environmental impact of inland waterways and much lower infrastructure costs than in the case of other modes, the introduction of infrastructure charging in the whole transport system would put inland navigation in a favourable position in comparison to other modes. It was seen as essential, in any case, that the industry take a position on the way infrastructure charges should be calculated in order to feed into the development of a charging model for the sector.

Another important aspect of introducing infrastructure charges in inland waterways would be to reinforce the economic responsibility of key players. There is a widespread opinion that inland waterways should put much more emphasis on economics. At present, the share of inland waterway transport investment in total transport investment is very low. Without the appropriate level of investment inland waterways would not be able to adapt to the constantly changing requirements of the modern transport system. One should not forget that modernization of infrastructure and better integration along the transport chain implies large investment, which cannot be covered in total by public expenditures. Infrastructure charges would constitute a significant source of funds. Furthermore, bearing in mind economic constraints, it would add more economic rationale to the development of inland navigation.

6. Environmental aspects of inland waterways development

The inland waterway transport sector faces an important challenge of meeting the elevated standards of environmental protection. Both shipping and development of waterways can have adverse environmental impacts on water quality, biodiversity, landscape and recreational values. Therefore, environmental responsibility is not limited to emissions but covers, to a great extent, aspects of nature conservation and water management. The approaches towards environmental protection in inland waterway transport development vary across Europe.

The session was introduced by the presentation of German experiences in consideration of environmental aspects in inland waterway projects. The following conclusions could be drawn from these experiences:

- It is of special importance to guarantee the preconditions for an economically efficient and competitive navigation while, at the same time, taking environmental concerns into consideration.

- The positive environmental effects of inland navigation must be communicated to the public and the politicians.

- Governments should support the integration of shipping interests in environmental policies.

- Dialogue between the shipping sector and the environmental stakeholders should be promoted at national and European level.

The results of a study, initiated by the Dutch Government and the ECMT, on the environmental impact of inland shipping and waterway development were presented at the Workshop. The study aimed at providing practical guidance to Ministers on the appropriate approach to environmental protection in the development of inland waterways, exchanging good practices and identification of outstanding issues in this field. It was observed that the inland waterway projects are often perceived as environmentally damaging, and often blocked by public opposition at a late stage in project development. The problem is particularly acute with regard to canalization of free flowing rivers, as well as some maintenance works, such as dredging and disposal of dredged material. Relatively less importance is attached to air, water and noise pollution from vessels. Nonetheless, new norms have to be developed in order to reduce emissions of nitrogen oxides from engines, as air quality norms are currently exceeded in several urban and industrial regions in Europe.

The case studies indicate that there is a variety of potential sources of conflict in the development of inland waterway projects. These are often exacerbated by a lack of integrated vision and strategy both for the inland waterways and for the whole transport system. It also reflects a lack of integrated transport and environmental policy, which could tackle the issue of environmental protection at the very early stage of project planning. Effective consultation among all stakeholders (including both the inland navigation representatives and the environmentalists) over infrastructure projects in their infancy is essential to avoid or resolve conflicts that otherwise surface later in the development process. In parallel, rigorous adherence to properly scoped environmental assessment procedures would facilitate dialogue with the public and environmental organisations. The public authorities should highlight the official character of these consultations and try to ensure that all stakeholders participate in the process on equal conditions.

It was further noted that simply following existing rules and regulations does not guarantee a project is successful. There were many examples of controversial projects that had been delayed because of public consultations starting too late in the process. Participation of the public and the environmental stakeholders from the very beginning to the end is crucial for project success.

It was regretted that it was very hard to persuade the environmental lobby of the advantages of IWT. There was an opinion that some environmentalists have a tendency to judge the environmental consequences of inland waterway projects more severely than in the case of other transport modes. There was a widespread opinion that the positive environmental effects of inland navigation should be communicated better to the public, and that Governments have to respect in this field the obligations of the Aarhus International Convention.

Since conflicts are inevitable, there is a need to provide all the stakeholders with all necessary information, and involve them in defining the problem and finding the alternative solutions. It was further argued that the consultation process should be as open and comprehensive as possible. Ministries and other public authorities responsible for inland waterway project development were invited to consider lessons learned from successful projects in Europe in recent years. The examples of good practices in this area are the Seine-Nord project in France, and to some extent, the Vienna East project in Austria, where consultative structures have been established. Experience and practice in these projects show that the progress of the environmental assessment procedures and the probability that a workable solution can be agreed upon in a reasonable time span greatly benefit by the early involvement of beneficiaries and stakeholders.

Most of the outstanding environmental/IWT issues arise in the Danube river basin. It was, therefore, proposed that an international development strategy for the whole Danube River corridor be developed, encompassing the intermodal dimension as well as strategic environmental concerns. Development of such a strategy should involve government agencies and all the major international stakeholders. The key players in this process might be the Danube Commission, the International Commission for the Protection of the Danube River, DGTREN and DGENV. The upcoming presidency on the EU might provide Austria with a unique opportunity to launch preparation of such a strategy for the Danube. This proposition was endorsed by the Chairman, who nevertheless stated that while Austria would look carefully at the idea he would prefer to limit the strategy to inland waterway transport and environmental aspects rather than including other modes of transport.

Bearing in mind the need to develop integrated environmental and transport strategies, as well as the need to find appropriate solutions reconciling interests of environmental and transport groups at the highest political level, the participants agreed on the need to invite both Ministers of Transport and Environment to the Bucharest Pan-European Conference to be held next year. The environmental NGOs, already assisting with the ECMT work on waterways, should also participate.

7. Main conclusions of the Workshop

The 2001 Rotterdam Declaration called for a strong inland waterway transport sector, for the creation of an integrated and transparent Pan-European market and for making this transport mode more environmentally, socially and economically sustainable. The Workshop felt that indeed some progress had been made in meeting the above objectives and that it would be useful to prepare an inventory of the developments achieved since the Rotterdam Conference. However, significant obstacles to the development of the sector remain such as lack of appropriate and reliable infrastructure, acute need in modernization of fleet and ports facilities, lack of attractiveness of on-board jobs for the youth and, as a result, insufficient personnel (in Western Europe), poor general image, etc. The Workshop came to a number of conclusions, which can be summarized as follows:

- Despite strong growth of transport demand in recent years, the growth of inland waterway transport sector has been modest, with the exception of some regions and market segments, such as container transport on the Rhine River or in the Hinterland of seaports in Belgium and France. Moreover, the creation of an integrated Pan-European inland waterway transport market is still far from being accomplished. Particular attention should be paid to the development of efficient and financially sound inland waterway sector in the Danube River region and other Central and Eastern-European markets. To remedy the situation and to give the sector a new boost, the following priority actions by Governments or, when specified, by other stakeholders were singled out by the Workshop:

  - The inland waterway transport policy should be better integrated into overall transport and economic policies both at national and international levels. Inland navigation policy should incorporate the perspective of logistics and be more business-oriented, encouraging entrepreneurship and persuading the players on the market to take on more economic responsibility.

  - Governmental agencies and other stakeholders should endorse initiatives aimed at promotion of inland waterway transport with the participation of all interested parties, such as regions, ports, shippers and different modes of transport. These initiatives should be particularly aimed at convincing shippers and forwarders of inland waterway transport advantages. In this connection, the lessons learned from other sectors, like short-sea

shipping, could be of use for inland navigation. Establishment of a special "Inland Navigation and Logistics" forum on a model like the one developed in Germany, gathering all players, could contribute to promotion of the sector. Inland navigation should elaborate a new image of the industry, be prepared to adopt new challenges, new cargo types and offering modern services of the highest quality. Taking on more economic responsibility by the industry would undoubtedly facilitate effective promotion and marketing of inland navigation services.

- Since the problems faced by the inland waterway sector are numerous, there is a need from the Governments to set up a consistent framework, identifying challenges and solutions to overcome them. Particular attention should be paid to renewal and modernization of the fleets, investment in new technologies, as well as new information and communication tools, allowing carriers to improve the quality of their services, to better integrate them along the transport chain and explore new market segments.

- The maintenance and development of an integral, coherent and modern European network of inland waterways for the definition of which AGN is an invaluable contribution, is of primary importance for the promotion of transport by inland waterway. Unfortunately, there are still a number of important missing links and numerous bottlenecks in the E waterway network that prevent the development of an integrated Pan-European market and diminish the reliability of inland navigation services. A strong commitment from the public authorities is also needed to ensure a proper maintenance of the inland waterways infrastructure. Special attention should be also paid to the development of transshipment facilities and the creation of a coherent network of intermodal nodes, including sea-river nodes. Development of the inland waterway infrastructure should be based on multimodal strategies, encompassing all financial and social implications of the project. For all investments, an "economic" approach is necessary and an appropriate methodology for project assessment, based on cost-benefit analyses, has to be set up.

- Governments and all other stakeholders should take initiatives aimed at training of new skilled staff, encouraging youth to enter the inland navigation market and facilitate the international movement of labour within the industry.

- A level playing field within the inland navigation mode has not yet been achieved. The existing legislative framework is, nevertheless, now less of a noticeable obstacle to the development of a coherent European market, mainly through the EU enlargement process under way. However, numerous areas, where the progress in overcoming the remaining legislative obstacles is desired, were identified at the Workshop:

  - Despite some progress achieved since the Rotterdam Declaration in building a uniform Pan-European inland navigation market, this market continues to be too fragmented. Ways should be found, in particular, for the integration of Russian, Ukrainian and other non-EU member countries' markets and for increasing freedom of mutual access.

  - Mutual recognition of ships' certificates and boatmen's licences issued on the basis of internationally harmonised technical and safety standards should be achieved to facilitate international transport by inland waterway. Harmonisation of regimes for verification of specific knowledge required for certain stretches of the rivers and of employment profiles have also to be achieved. With a view to encouraging and facilitating the use of

sea-river vessels, it is also necessary to consider the need for the development of common technical specifications for that sort of vessels.

- The harmonisation in the field of international private river law concerning the limitation of liability for damage is not sufficient and should be extended, with, for instance, a revision of the CLNI Convention. The Governments are invited to ratify the existing international instruments in the field of inland navigation, in particular the Budapest Convention on the Contract for the Carriage of Goods by Inland Waterway (CMNI).

- Supervision and control of social protection regulations should be strengthened, and Governments must not reduce personnel responsible for controls of these (technical and social) regulations. In this context, the lessons learned from control schemes in maritime transport, especially in sea ports, may also be of help for inland navigation. The need to establish new international instruments in this area should, however, be thoroughly reconsidered in order not to create more administrative regulations hampering the development of inland navigation.

- There is a widespread conviction that the present administrative burden on inland navigation entrepreneurs should be alleviated. It would be useful to establish an inventory of administrative bottlenecks causing the overlong delays in inland navigation.

- Considering the forthcoming charging for infrastructure use in all modes of transport including inland waterways, further studies should be undertaken that would identify the best practices in setting the proper pricing level in order to internalize appropriate costs connected with inland navigation, to set the fair prices for all inland waterways users without hampering financial sustainability of the sector. Due regard has to be given to the environmental aspects of inland navigation, together with the fact that it is not the only user of inland waterways. At the same time, charging for the use of infrastructure could become a useful tool. It could, in particular, facilitate finding alternatives to government financing schemes for infrastructure development.

- Consideration of environmental aspects of inland waterway infrastructure projects is crucial for their development. It is believed that environmental organisations often perceive inland waterway projects as overly damaging to the environment. In order to ensure workable solutions in this field the following recommendations were suggested:

  - Integrated transport and environmental strategies need to be elaborated, which would take into consideration all economic, technical and environmental aspects of inland waterways development. This would allow for the resolution of conflicting interests at a very early stage of project development. Principles for such a strategy could be elaborated at the Pan-European Conference in Bucharest.

  - All interested parties should be involved throughout the whole project development process, with a view to the identification of possible problems and alternative solutions. All the participants in the consultation process should be provided with all necessary information to ensure the transparency of the project.

  - The lessons should be drawn from existing successful consultation structures, such as in case of the French “Seine-Nord” or the Austrian “Vienna East” projects.

- Particular attention should be paid to the development of an integrated, multimodal strategy for the Danube River corridor. The key players in this process might be the Danube Commission, the International Commission for the Protection of the Danube River and the EC.

- It was felt that both transport and environment Ministers, as well as environmental NGOs, could be invited to the Pan-European Conference on inland waterway transport in Bucharest next year.

- With regard to the appropriate institutional structure for a more dynamic waterway sector, the EFIN report was referred to. While there was strong support for the idea to give inland waterways an additional political impetus, it was not certain that a new institutional structure with a Ministerial forum on the top would meet this objective as well as the aims set out above for an integrated approach to waterway policy. Some participants felt that the present institutional structure in the field of inland waterways is sufficient and that, instead, a closer co-operation between the existing institutions should be ensured. However, beside the existing legislative bodies, it could be useful to set up an international forum with all stakeholders, including the shippers and all actors of the logistic chain, which would help to promote the inland navigation.

ANNEXES

ANNEX A

ROTTERDAM DECLARATION

1. Preamble

Representatives of governments of European countries and of international organisations and observers from other countries having an interest in inland waterway transport, meeting at the Pan-European Conference on Inland Waterway Transport in Rotterdam on 5 and 6 September 2001.

Recognising the impetus the Ministerial Conference on Timely Issues of European Inland Waterway Transportation (Budapest, September 1991) has given to discussions and actions aimed at the promotion of inland waterway transport and the removal of obstacles to the development of this mode of transport.

Recognising the increasing attention given to inland waterway transport in recent years by the European Union, for instance through:

- The establishment of the TEN framework.
- The completion of the internal transport market, harmonisation of technical prescriptions and conditions for obtaining boatmasters' certificates.
- The liberalisation of inland waterway transport.
- And measures taken to overcome and prevent overcapacity, carried out in co-operation with the Central Commission for the Navigation of the Rhine (CCNR).

Recalling the permanent activities of the CCNR and the Danube Commission to improve the safety, effectiveness, efficiency and environmental sustainability of inland waterway transport and to contribute to a larger share of this transport mode in the total flow of transported goods.

Taking into account the legal and technical work carried out in the framework of the United Nations Economic Commission for Europe (UN/ECE) to harmonise the technical, professional, safety and infrastructure-related regulations for inland waterway transport at a Pan-European level.

Taking also into account the Resolutions and Round Tables of the European Conference of Ministers of Transport (ECMT) on in-depth analyses of the scope for and obstacles to the expansion of inland waterway transport.

Recalling the Declaration of the Third Pan-European Transport Conference (Helsinki, June 1997) and the Declaration of the UN/ECE Regional Conference on Transport and the Environment (Vienna, November 1997), and in particular their focus on sustainable transport.

Taking into account the conclusions of the Gothenburg European Council (June 2001) on a strategy for sustainable development, in particular with regard to the improvement of the transport system.

Taking note of the European Commission's Policy Guidelines of the White Paper on a Common Transport Policy (July 2001).

Recognising the important safety and environmental advantages of inland waterway transport and convinced of a common interest in fostering its growth and its integration into the multi-modal transport system, so that it can contribute to the reduction of congestion - especially in road transport - and ultimately make the transport sector compatible with sustainable development.

Noting that, although progress has been made, there are still obstacles to the development of inland waterway transport which are related to inadequate infrastructure, legal procedures and lack of harmonisation of fiscal, social and economic conditions for fair competition as well as of technical regulations, professional requirements and administrative procedures.

Noting further that, partly because of these obstacles, inland waterway markets at Pan-European level are today still fragmented and partly closed to third country operators.

Convinced that the removal of those obstacles and the opening of the markets are essential factors to achieve a free, competitive and sustainable inland waterway transport system, on condition that the existing high level of safety and quality standards is maintained or improved, and favourable social conditions, at least the existing ones, are safeguarded.

Convinced also that the EU enlargement process can contribute substantially to the further opening of the markets and the removal of the above-mentioned obstacles.

Recognising that many of the above-mentioned opportunities and obstacles concern sea-river transport and ports as well.

Hereby endorse the following objectives and actions to accelerate through concerted action the development of inland waterway transport towards a safer, cleaner and more competitive Pan-European transport mode.

2. Main objectives and actions

The main objectives are:

- To foster the growth of inland waterway transport and increase its share in the transport of goods.
- To further improve the sustainability, safety and efficiency of inland waterway transport.
- To create a transparent and integrated Pan-European inland waterway transport market based on the principles of reciprocity, freedom of navigation, fair competition and equal treatment of the users of inland waterways.

To achieve these objectives, Pan-European co-operation between governments and international organisations must be intensified with a view to carrying out the following actions.

Infrastructure

To develop a modern, environmentally respectful and efficient waterway infrastructure network as a prerequisite for the promotion of inland waterway transport, as well as for the improvement of sea-river transport.

To consider, whenever decisions on infrastructure are taken, whether better utilisation of the existing inland waterway infrastructure or the construction or improvement of waterway infrastructure might be an alternative to the construction or improvement of infrastructure for other modes of transport.

To improve the navigational conditions and infrastructure on the TEN waterway network, and on other main Pan-European waterways (the so-called E-waterways) and to remove bottlenecks, taking into account the development of the inland navigation fleet as well as the economical and ecological aspects.

To include as a standard element in the development of existing, as well as the planning of new, logistical centres and industrial areas for the manufacture, transhipment and storage of goods, the possibility of connecting them to the inland waterway network.

To further develop combined transport terminals in order to enlarge the scope of inland waterway transport and to better integrate it into the combined transport chain.

To develop alternative financing schemes, including co-financing, public-private partnership etc., to finance the improvement of the inland waterway transport infrastructure, involving to the largest possible extent the beneficiaries of such improvement.

To encourage governments of European states having an interest in inland navigation, if they have not yet done so, to become Parties to the European Agreement on Main Inland Waterways of International Importance (AGN), as well as to the Protocol on Combined Transport on Inland Waterways to the European Agreement on Important International Combined Transport Lines and Related Installations (AGTC), and implement them as soon as possible.

To promote the improvement of the navigational conditions along the Danube, relating mainly to the existing draught limitations of this crucial waterway, which has been identified as Pan-European transport corridor VII.

To support the efforts of the governments concerned to develop the connections between the Danube, the Oder and the Elbe.

To invite governments concerned to establish a Pan-European River Information Service (RIS) by the year 2005, based on standards to be drawn up in the framework of the European Union, UN/ECE and the two River Commissions, since river information services contribute to safer and more efficient inland waterway transport.

To consider whether the contribution by inland shipping to the infrastructural and external costs can be limited in case all transport modes are to contribute to covering these costs.

Legislative harmonisation and access to the market

To invite the European Commission, the UN/ECE and the two River Commissions to intensify their co-operation on Pan-European harmonisation of technical, safety and manning requirements, and to encourage them to co-operate on the improvement of professional education and training.

To invite the UN/ECE, the European Commission, the two River Commissions and the ECMT to identify in close co-operation before the end of 2002 the legislative obstacles that hamper the establishment of a harmonised and competitive Pan-European inland waterway transport market, and to formulate solutions to overcome them.

To facilitate the exchange of qualified personnel between European countries, as a means, for example, to overcome the imbalances in the employment markets, provided that adequate professional and social standards are maintained.

To encourage governments of European states having an interest in inland waterway transport to consider ratifying or acceding to, if they have not yet done so, the Budapest Convention on the Contract for the Carriage of Goods by Inland Waterways (CMNI), the Strasbourg Convention on the Limitation of Liability of Owners of Inland Navigation Vessels (CLNI), and the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN).

Safety and sustainability

To encourage governments and international organisations concerned to maintain and develop further the safety standards, especially in the field of carriage of dangerous goods, as well as the measures in order to prevent water pollution, and reduce air pollution and noise emissions.

To encourage governments of European states having an interest in inland waterway transport to ratify or accede to the 1996 Convention on Collection, Discharge and Reception of Waste arising from Rhine and Inland Navigation.

To request the international organisations involved to complete and harmonise standards for the reduction of emissions from vessel engines.

Promotion

To take measures to raise the awareness of the public and the transport industry of the advantages of inland waterway transport as a safe and environmentally respectful mode of transport.

To promote co-operation between inland waterway transport companies on the one hand and short-sea, rail and road transport companies on the other, as a means of improving intermodal transport.

To invite the inland waterway transport industry to consider creating the necessary organisational frameworks, including at Pan-European level, to improve the representation of its interests in international fora.

3. Monitoring and review procedures

To invite the European Commission, the UN/ECE, the CCNR, the Danube Commission and the ECMT to actively promote and monitor the implementation of the various actions of this Declaration.

To convene a new Pan-European inland waterway conference in Romania to be held within 5 years from now.

On behalf of all participants,
on 6 September 2001,
Rotterdam, the Netherlands

The co-chairpersons of the Ministerial Conference.

Ms. T. Netelenbos
Minister of Transport, Public
Works and Water Management,
The Netherlands

Mr. M.T. Mitrea
Minister of Public Works,
Transport and Housing,
Romania

ANNEX B

FOLLOW-UP TO THE ROTTERDAM DECLARATION: ECMT MINISTERIAL DOCUMENT POSSIBLE ACTIONS TO STRENGTHEN THE ROLE OF INLAND WATERWAYS

A Pan-European conference on inland shipping was held in Rotterdam on the 5th and 6th of September 2001. The conference closed with the adoption of the Rotterdam Declaration. This calls on the ECMT to work for the implementation of the measures set out in the Declaration and to examine legal obstacles to the development of a harmonised and competitive paneuropean inland waterways market.

In response, ECMT organised a seminar on 30 January 2002 entitled *The Inland Waterways of Tomorrow on the European Continent*. Its aim was to define the policy approach to reinforcing the role of inland waterways among the different modes of transport and inform debate in the discussion of modal shift and sustainable development programmed for the Bucharest Council of Ministers.

The seminar concluded that Ministers should give more attention to inland navigation at a time of increasing concern with congestion on the roads and the environmental impacts resulting from road traffic growth. To this end the following policy initiatives were considered desirable and submitted for approval by the Council of Ministers at its session in Bucharest on 29th-30th May 2002.

Facilitate the integration of inland water transport in a multi-modal transport system by:

- Providing aid for projects and initiatives aiming at promotion of inter-modal transport involving inland water transport.
- Furthering the development of a coherent network of multi-modal transhipment points with terminals connecting the waterway network with the road and rail networks.
- Encouraging the development of a stackable type of swap body, the dimensions of which are compatible with those of ISO containers.
- Ensuring the development of framework conditions for competition between railways and inland shipping that promotes complementary development of the two modes and avoids economic distortions.
- Furthering the development of a uniform method of charging the use of infrastructure for all transport modes.

Improve the conditions for fluvio-maritime transport by:

- Resolving incompatibilities in the legal frameworks applicable to maritime and inland shipping that undermine the development of fluvio-maritime transport.
- Moving customs clearance formalities from seaports to inland ports and simplifying customs procedures for fluvio-maritime shipping, which should be treated as inland transport.
- Ensuring non-discriminatory access to the sea and the inland waterways for fluvio-maritime transport and to this end, furthering the development and the adoption at the international level of specific technical regulations for fluvio-maritime vessels.
- Furthering the development of shipping technologies increasing the geographical scope of fluvio-maritime transport on the inland waterway network.
- Avoiding the development of intermodal transport units with dimensions that are incompatible with infrastructure for inland transport.
- Extending the "sea motorways" to the inland ports.

Overcome barriers to the development of the inland waterway transport by:

- Fostering work to establish a unified civil law system for the European waterway network.
- Providing training and information for the future of the profession in order to support development of inland shipping.
- Supporting promotional activities to convince shippers and forwarders that waterway transport is a mode with a future.

Improve the quality of the European inland waterway network by:

- Promoting the drawing up of a unique list of bottlenecks and missing links, in co-operation between the international organisations concerned.
- Supporting investment, above all for better maintenance of the infrastructure and dredging, and modernisation to meet the requirements of modern shipping, providing sufficient headroom for the stacking of containers, since the development of existing infrastructure shows far greater returns than major new projects.
- Providing investment for missing links in order to build-up an efficient international network, subject to a positive socio-economic assessment of the benefits expected.
- Guaranteeing the completion of projects once they are underway to avoid the exposure of transport enterprises to avoidable risks of stranded investment.
- Ensuring uninterrupted access to waterways and uninterrupted operation of the related infrastructure.

- Encouraging a better integration of environmental and ecological concerns into the design of inland waterway investment projects, and improving the relations between the environmental movement and the inland water transport industry.

- Furthering the adaptation of the relevant parts of the inland waterway network to the needs of fluvio-maritime transport.

- Ensuring a treatment of inland waterway investment projects equal to those for the other modes, e.g. in the application of aid schemes.

Facilitate the opening of the market by the elimination of currently existing restrictions on market access and the creation of a 'level playing field' by:

- Removing from national and international legislation restrictions on market access for "foreign" vessels.

- Promoting the convergence of technical, safety and environmental standards for inland navigation vessels, harmonised traffic regulations and harmonised procedures for certification of licences.

- Encouraging the international harmonisation of labour and social security conditions including rules governing crews.

- Supporting initiatives to bring the international Danube regime more into line with the international Rhine regime in order to harmonise the legal framework for inland shipping; this requires co-ordinated preparatory work, in the Rhine and Danube Commissions.

ANNEX C

FOLLOW-UP TO THE ROTTERDAM DECLARATION: REPORT FROM THE VOLUNTEER GROUP

At its forty-fourth session, the Working Party on Inland Waterway Transport of the UNECE set up a Group of Volunteers with a view to preparing, as a follow-up to the Rotterdam Conference on Inland Waterway Transportation, an "Inventory of existing legislative obstacles that hamper the establishment of a harmonised and competitive Pan-European inland navigation market together with recommendations as to how to overcome those obstacles" (TRANS/SC.3/155, para. 14(iv)). The following delegations took part in the work of the Group: Hungary, the Netherlands, Romania, Russian Federation, Ukraine, European Commission (EC), United Nations Economic Commission for Europe (UNECE), European Conference of Ministers of Transport (ECMT), Central Commission for the Navigation of the Rhine (CCNR) and the Danube Commission (DC).

Reproduced below is the Inventory containing a succinct analysis of existing legislative obstacles that hamper the establishment of a harmonised and competitive Pan-European inland navigation market (approved by the Working Party as TRANS/SC.3/2005/1) and proposals on possible solutions to the problems identified, finalized by the Chairman of the Group of Volunteers, Mr. C. Hofhuizen (Netherlands) as a result of six meetings of the Group.

Inventory of existing legislative obstacles that hamper the establishment of a harmonised and competitive pan-European inland navigation market, and proposals for solutions to overcome them (Rotterdam declaration, item 13).

1. Generalities

Definition of "legislative obstacles"

Normally, an economic system that is based on market principles and that is fully integrated will be characterized by a defined geographical area and, for those who legally belong to the system, by a state of the law which ensures:

- Equality of treatment of economic actors, irrespective of their nationality or their place of residence.
- Equal access conditions for all those who wish to enter the market (including equal access to infrastructures and services).
- Equality of rules governing production processes throughout the geographical area covered by the market in question.

- Sanctioning of unfair competition practices (including control of private cartels and of state aid).

- Freedom of contracts and pricing.

- Freedom of movement of goods, persons, services and capital throughout the geographical area covered by the market system.

Wherever in the case of inland water transport operations on the pan-European inland waterway network these conditions are not or not completely met, one may speak of 'legislative obstacles' as referred to in the Rotterdam Declaration.

Secondary aspects of an open transport market

The functioning of the transport market and the IWT market, in particular, is embedded in the global framework of rules, mechanisms and to a certain extent also traditions of the geographically defined political entity taken into consideration. This can be a single country or a number of countries, governed by common or comparable rules and principles which all have their own so-called "level playing field". The question of the harmonisation and opening of the markets can, therefore, not be seen separately from the global functioning of the specific market concerned. In particular, the mobile character of the transport and the services provided by its operators oblige, in this context, to take also into consideration the indirect effects on the existing situation of an opening to third parties. More precisely, due to the absence of an external competition on a specific market, the application of many of the measures in this respect has been limited to the authorized players. As third parties were not entitled to operate in this market, these measures do not apply to these parties and therefore contain real loopholes once the access is granted. Without supplementary arrangements, this would possibly give way to unfair competition between the original players and the newcomers.

The most obvious examples can be found in the area of the working conditions, the social security and the wage levels, including the mechanisms and instruments for their application. These are in most cases of a national nature, i.e. they apply to the nationals of a country (private persons or legally established enterprises) and can only be enforced by the authorities of that country.

In the case that the transport services are carried out in a third country, the authorities of the flag State lack the possibility of a repressive intervention. In addition, the authorities of the country or countries where the services are carried out lack the power to intervene, either on the basis of their own regulations, which might not be fit for application to foreign operators, or on those of the country of origin. As long as the respective national regimes concerned do not deviate much, this evident loophole in the legal regimes does not necessarily lead to unfair competition. All depends on the degree of the differences between the regimes and their effects on the commercial exploitation.

The question of how far integration of markets presupposes the harmonisation of conditions of employment, remuneration levels, social security regimes, fiscal regimes and tax levels will not be further explored here. Suffice to note that, within economies like those of the European Union and the United States of America, which are generally considered as integrated common markets, differences in social security and fiscal regimes, labour costs and tax levels continue to exist. Still, it would be realistic to recognize that differences of this kind may play a role in discussions on the mutual opening of markets.

Geographical scope

For the moment, it is proposed to examine in this report the situation of inland water transport on the interconnected waterways of the Member States of the Danube Commission (DC), of the Member States of the Central Commission for the Navigation of the Rhine (CCNR), and of Poland and the Czech Republic. The inland waterways of those countries form a more or less coherent whole; at present only maritime routes connect them to the waterways of other countries. The exceptions are, of course, the Russian Federation and Ukraine mainland: member States of the DC, but not connected by inland waterways to the other countries just mentioned. The development of transport by sea-river vessels would encourage the integration of these last two countries into a single European transport system.

This choice is made here only for practical reasons and must not be understood to imply that other countries could not, in future, become participants in the establishment of an integrated pan-European inland navigation market. In view of the growing awareness of policymakers that the potentialities of fluvio-maritime transport and of multimodal transport have to be more fully developed, the number of countries having an interest in inland waterways policy will most probably grow. If the notion "inland navigation market" is broadened to include sea-river transport, all 39 countries connected by inland waterways and/or short-sea routes to the E waterway network as defined in the AGN Agreement have, at least potentially, an interest in the pan-European harmonisation of legislation governing this market.

Types of legislative obstacles

Experience suggests that legislative obstacles in European inland waterway transport are, or may be, of a number of kinds:

- Restrictions on transport rights of 'foreign' vessels.
- Restrictions on access to and use of inland waterways and ports.
- Existence of different regimes for technical regulations for vessels (ship's certificates).
- Existence of different regimes for boatmaster's licences, the size and composition of crews, and working and rest hours.
- Restrictions on the freedom of pricing and contracting.
- Restrictions on the freedom of movement of inland water transport workers.
- Restrictions on the right of establishment.

Many legal obstacles have their origin in international legal instruments, but in some cases national law is also a source of such obstacles.

Point of departure of the search for solutions

As will be seen, the legislative obstacles identified below are, to a certain extent, the consequence of the coexistence in Europe of different international regimes governing inland water transport (the Treaty establishing the European Community, the Belgrade Convention, the Act of Mannheim) and of a corresponding variety of rule-making institutions: the European Community lawmaking machinery,

the Danube Commission and the CCNR, to which could be added the UNECE. It would, therefore, not be illogical to try to eliminate the legislative obstacles by replacing the current variety of regimes and rule-makers with one single regime, covering the whole of the European inland waterway network, and providing for one single rule-making institution, to which the functions of the existing rule-makers would be transferred. One possible way to do this could be the creation of a new Pan-European governmental organisation, in which all countries connected to the European inland waterway network would be invited to participate. A variant of this, formally different but similar in its effects, would be the setting up of a system of multilateral Pan-European agreements, dealing with the various aspects of inland water transport, and each having its procedures and institutional arrangements for adopting and amending the regulations falling within its scope. A possible third approach would be to make the European Community the pivot of international rule-making for inland waterway transport. It is true that this would be a less than perfect solution, since it is probable that not all European inland navigation countries will eventually become Community Member States; but that could be solved by means of agreements between these non-EU countries and the Community on matters as mutual market access, harmonisation of regulations and reciprocal recognition of board documents.

But such sweeping reorganisations of the institutional landscape do not stand a large chance of being realized. It will be very difficult, if not impossible, to achieve the consensus needed for such institutional shifts. It is highly improbable that the European Community will waive its legislative competence in the field of inland water transport in favour of a new independent international organisation, or will allow its Member States to become Contracting Parties to Pan-European Conventions dealing with subjects that fall within its competence. On the other hand, giving the leading part in rule-making for inland water transport to the European Community might well seem a less attractive proposition to the inland navigation countries; in the European Community inland water transport represents a minority interest, which receives and will continue to receive relatively little attention within the framework of its common transport policy.

It is, therefore, proposed here that the search for solutions be based on the assumption that the institutional landscape should remain as it is, without changes or shifts in formal competences. This may not be the most audacious approach, but it may have the merit of being realistic. It means that the solutions proposed here will be in terms of co-operation and co-ordination between the existing institutions.

2. Restrictions on transport rights of "foreign" vessels

Description

By "transport right" is meant here the right for vessels flying certain flags to carry out transport operations within or through a given territory or between certain territories, rights such as "cabotage", "transit" and "third country traffic" (*Drittlandverkehr*). A number of international legal instruments contain restrictions on these rights.

The **Act of Mannheim** (article 4) reserves the right to carry out transport operations between two points situated on the Rhine and its tributaries to vessels belonging to Rhine navigation, i.e. having a so-called "genuine link" with one of the CCNR Member States or with a Member State of the European Union. Vessels not belonging to Rhine navigation may carry out such transport only under conditions laid down by the CCNR. So far, the CCNR has never specified such conditions in general terms. As a result, vessels from countries other than the EU-countries and Switzerland can only transport goods and persons between ports situated on the Rhine, the Moselle, the Main or the Neckar, if the CCNR authorizes them to do so on a case-by-case basis. Article 4 of the Act of Mannheim further specifies that the conditions for the transport of freight and persons by vessels not belonging to

Rhine navigation, between a point situated on the Rhine and its tributaries and a point situated in the territory of a third state shall be laid down in agreements between this third state and the Rhine riparian state concerned. A number of such bilateral agreements exist; for further details, see below. However, not all non-EU countries that are linked by inland waterways to the Rhine have concluded such agreements with all Rhine riparian countries. In cases where no agreement exists, it is up to the Rhine riparian state concerned to decide whether it will authorize such transports to and from its Rhine ports or not.

In the **Belgrade Convention (1948)**, the principle of freedom of navigation for vessels of all states applies only to frontier-crossing traffic (article 1). Vessels flying foreign flags may thus be excluded from national transport ("cabotage") within Danube countries; this seems to be the general practice.

The legal situation on the Danube with respect to transport rights, however, is subject to different interpretations and needs clarification. The differences notably concern the interpretation of the principle of freedom of navigation. Some Parties to the Belgrade Convention hold the view that this principle only grants the right to sail on the river, not the right to carry out transport operations; others contend that it also implies this latter right.

EU legislation: Regulations (EEC) 3921/91 and (EC) 1356/96 explicitly authorize EU inland water transport operators, who can prove a "genuine link" with a member State, to carry out national transport operations *within* EU countries other than their country of establishment ("cabotage"), and to carry out transport operations *between* EU countries. Whether individual EU Member States are entitled to admit non-EU carriers to their national and intra-Community transport markets (e.g. by issuing permits) remains a moot point. From the standpoint of EU law, it could be argued that this does not belong to the competence of individual Member States, but to that of the Community.

It must be noted, however, that on the Rhine and on the Danube these two regulations do not adversely affect the transport rights of vessels from non-EU countries that are Contracting Parties to the Act of Mannheim, respectively the Belgrade Convention. Article 3 of Regulation 1356/96 (on access to transport between EU Member States) says: "This Regulation shall not affect the rights of third-country operators under the Revised Convention for the Navigation of the Rhine (Mannheim Convention), the Convention on Navigation on the Danube (Belgrade Convention) or the rights arising from the European Community's international obligations". This means that non-EU vessels are not excluded from transport operations between Danube riparian states belonging to the EU to the extent that the Belgrade Convention grants them the right to carry these out; and that, on the Rhine, Swiss vessels remain entitled under the Act of Mannheim to carry out transport operations between the Netherlands, Germany and France, as well as between the Rhine and Belgium.

Regulation 3921/91 (on national cabotage within EU Member States) does not contain such a safeguard clause with respect to the Belgrade Convention, but it has, by its nature, no consequences for the market access situation on the Danube for non-EU vessels: everywhere on that river they remain excluded from national cabotage as, under the Danube Convention, they were before the adoption of the regulation. On the EU section of the Danube, however, vessels belonging to EU Member States have under this regulation access to national cabotage, notwithstanding the Belgrade Convention. Thus, the situation with respect to national cabotage on the Danube is doubly incompatible with the notion of an integrated pan-European transport market: there is a difference in regime between the EU and the non-EU part of the river, and on the EU part there is inequality of rights between EU and non-EU vessels.

Regulation 3921/91 has no consequences for the right of Swiss vessels to participate in national cabotage on the Rhine, as it contains a safeguard clause in favour of rights existing under the Act of Mannheim.

Bilateral inland water transport agreements. There exist bilateral agreements on inland water transport between Germany on the one hand and Poland, the Czech Republic, Slovakia, Hungary, Bulgaria, Romania and Ukraine on the other. Poland, the Czech Republic, Slovakia, Hungary and Romania also have such agreements with the Netherlands. There are similar agreements between Luxembourg and the Czech Republic, and between Romania and France.

These bilateral agreements generally contain provisions on transport rights, some of which restrict market access.

- Cabotage as a rule is only allowed in exceptional cases, or is not allowed at all.

- Bilateral traffic between both countries concerned is in some cases freely accessible for vessels of both parties, but in other cases subject to a system of cargo sharing on a 50/50 basis; it may also be subject to tariff regulations laying down minimum freight rates. Participation by vessels of third countries in bilateral traffic is generally discouraged.

- Third country traffic (*Drittlandverkehr*) generally is only possible if the authorities of the Contracting Party where the goods are loaded or unloaded grant a permit; a permit of the third country where the goods are to be loaded or unloaded may also be required.

Nearly all bilateral inland water transport agreements are with countries that are candidates for membership of the European Union. As soon as these countries accede to the EU many provisions in the bilateral agreements concerned will automatically cease to be applicable, since application of the restrictions they contain to EU vessels would be contrary to EU law. In the interest of legal certainty these bilateral agreements should then either be revised or denounced.

Possible solutions

The Act of Mannheim: The restriction contained in article 4 paragraph 1 (in the version of Additional Protocol No. 2) of the Act of Mannheim – which reserves the right to carry out transport operations between points situated on the Rhine and its tributaries to vessels belonging to Rhine navigation, i.e. having a so-called "genuine link" with one of the CCNR or EU Member States – is clearly incompatible with the idea of an integrated Pan-European inland water transport market as postulated by the Rotterdam Declaration. It is true that this restriction will lose much of its meaning by the EU enlargement, as it will become inapplicable to the vessels belonging to the new EU Member States; but it will remain in force with respect to the vessels of European countries remaining, for the time being or permanently, outside the EU.

In principle, only the CCNR Member States can remove this obstacle or make it less restrictive. The most radical solution would be the repeal of article 4, paragraph 1, a change in the Act of Mannheim which would require formal ratification by each of the CCNR's five Member States. The effect of this change would be the opening up of Rhine cabotage to the vessels of all nations.

A less liberal solution, but one probably politically more acceptable and therefore recommended here, would be to let Additional Protocol No. 2 stand as it is, but nevertheless to open up Rhine cabotage to European vessels. Additional Protocol No. 2 entitles the CCNR to specify in general terms the conditions under which vessels not belonging to Rhine navigation may participate in Rhine

cabotage. The CCNR could, for instance, lay down as a general rule that European vessels not belonging to Rhine navigation (in practical terms the vessels of those Danube riparian states which are not EU Members) may carry out Rhine cabotage operations provided that a) they can prove a "genuine link" with their country of origin, and b) that this country of origin in its turn grants the right of cabotage on its territory to vessels belonging to Rhine navigation.

If looked at from the point of view of EU law, it might be questioned to what extent the CCNR Member States belonging to the EU are entitled to take part in a CCNR decision to open up Rhine cabotage. However that may be, it would certainly be advisable for the CCNR to act in close concert with the European Community on this issue.

Belgrade Convention: Currently preparations are being made for a diplomatic conference for the revision of the Belgrade Convention. This revision may provide an opportunity to clarify the situation as to the nature of "freedom of navigation". It should be made clear, on the one hand, that the only meaning of this notion which is consistent with a free market system is the one that allows inland water transport operators to conclude transport contracts (and to carry them out) with any firm or natural person who wants to use their services, irrespective of the nationality or the place of establishment of the former and the latter, and irrespective of the places of loading and unloading.

On the other hand, given the text proposals now on the table, it seems unlikely that this revision will change the existing right of riparian states to reserve transport within their territories for the vessels of their own fleet; so national cabotage will probably remain closed, as far as the revised Convention is concerned.

EU legislation: The problems concerning national cabotage rights on the Danube that were noted above could be solved within the framework of negotiations on accession of the European Community as a Contracting Party to the (revised) Belgrade Convention. The European Commission already has formally recommended to the EU Council to give it a mandate for negotiations to that effect with the Member States of the Danube Commission. Moreover, the text proposals for the revision of the Belgrade Convention elaborated so far contain a provision allowing "regional economic integration organisations" (read "the European Community") to become Contracting Parties to the revised Convention. So it is not unlikely that this is eventually going to happen. The European Community and the Danube countries could use the negotiations on the Community's accession to grant market access to national cabotage on the Danube to each other's vessels, thus establishing the unity of the regime in this respect on the whole length of the river. Further, it is assumed here that the revised Belgrade Convention will grant the right to carry out international transport operations on the Danube to at least all Contracting Parties' vessels. If so, the Community's accession to the revised Convention will entail opening up transport between the EU Contracting Parties to the vessels of the non-EU Contracting Parties.

This would solve the problem of the EU restrictions on transport rights only as far as the Danube is concerned. Elsewhere on the navigable network of the European Community, the two above-mentioned regulations would fully remain in force. The EU could eliminate this problem by a renewed use of a mandate for negotiations between the EU and third countries on mutual inland navigation market access, given by the Council to the European Commission in 1992. At the time, the Commission negotiated a draft for a multilateral agreement with Poland, the Czech Republic and Slovakia. In 1997, however, the EU Council would not accept this draft, as it contained some provisions which could be read as infringements of the Act of Mannheim, in particular the Additional Protocol No. 2 to that Act. As the European Commission refused to reopen negotiations, the matter ended there. But the negotiating mandate was never formally withdrawn or abandoned, so presumably it could be used again – if so desired after a re-examination of its scope - to negotiate arrangements for

mutual market access between the EU as such and non-EU inland navigation countries connected to the E waterway network. If the CCNR is prepared to admit the vessels of these non-EU countries to Rhine cabotage, a repetition of the 1997 stalemate could be avoided. Preferably the CCNR and the European Commission should act in parallel with respect to market opening.

Bilateral agreements: The negotiation mandate referred to above could also be used to remove existing limitations on transport rights contained in bilateral inland water transport agreements between EU Member States and non-EU European countries, as agreements concluded by the EU itself would overrule the agreements concluded by its Member States. The 1997 draft multilateral agreement just mentioned would already have had this effect if it had been adopted by the Council. The Contracting Parties to existing bilateral agreements could also agree themselves to remove restrictions on market access contained in them, but this might be considered as contrary to European Community law, since external competence on inland navigation market access no longer belongs to individual Member States.

3. Restrictions on access to and use of inland waterways and ports.

Description

Restrictions of this type (to be distinguished from restrictions on market access) occur, as far as known, only in Germany and the Russian Federation. Foreign vessels, whether loaded or unloaded, are not allowed to enter the inland waterways of the Russian Federation without special governmental authorization. Navigation on the federal inland waterways of Germany by foreign vessels also is subject to a navigation authorization ("*Erlaubnis zur Fahrt*"). The obligation to have such an authorization does not apply to EU vessels. The authorization is granted to vessels of States, with which Germany has concluded bilateral inland navigation agreements, within the terms of those agreements.

Possible solutions

The Agreement on partnership and co-operation, concluded in 1994 between the European Communities and their Member States on one side and the Russian Federation on the other, could serve as a framework for at least partially eliminating these obstacles. Article 39, paragraph 3 lays down that the two parties "not later than 31 December 1996, will conduct negotiations on the stage-by-stage opening of the inland waterways of each Party to the nationals and shipping companies of the other Party, in respect of the freedom to provide international sea-river services". Apparently these negotiations have had positive results; the Russian Federation has announced that it envisages to open its inland waterways for international traffic: (i) by 2007 – from the port of Azov (at the estuary of the river Don) to Astrakhan (at the estuary of the river Wolga); and (ii) by 2010 – from Volgograd on the river Volga to St Petersburg. In view of the reciprocity foreseen in the article just quoted, it may be assumed that Russian sea-river vessels in turn will gain access to the German inland waterways, if they do not already have it. On the basis of a similar Agreement on partnership and co-operation between the European Communities and their Member States and Ukraine, Ukrainian and Community sea-river vessels already have access to each other's inland waterways for international transport; the same goes for the Republic of Moldova.

4. The existence of different regimes for technical requirements for vessels (ship's certificates)

Description

With regard to technical requirements for inland navigation vessels, three main regimes can be distinguished at the pan-European level.

On the **Rhine**, vessels currently are only admitted when they carry a Rhine ship's certificate, based on the CCNR Regulation on the Survey of Rhine Vessels (French acronym: RVBR) and issued by the competent authorities of one of the member States of the CCNR. This CCNR certificate is recognized by the EU as valid for navigation on all Community waterways (with the exception of some large waterways, mostly river estuaries, where vessels must meet additional technical requirements).

The technical regime on the **EU waterways** outside the Rhine is based on EU Directive 82/714/EEC, which establishes a Community ship's certificate. This Directive is currently under revision to bring its technical rules into line with those of the RVBR. The Community ship's certificate is not recognized as valid for Rhine navigation, as the wording of the Act of Mannheim until recently made such a recognition impossible; but the CCNR Member States have adopted a 7th Additional Protocol to the Act of Mannheim which gives the CCNR the competence to recognize the ship's certificates of the EU and of third countries, if the regulations on the basis of which they are issued are equivalent to those established by the CCNR and in accordance with procedures ensuring their effective implementation. This Additional Protocol has entered into force on 1 December 2004.

Danube: The DC has issued Recommendations on Technical Requirements for Inland Navigation Vessels, based on resolution No. 17 of the UNECE, but it is as yet not known to what extent the DC Member States have actually copied these Recommendations in their national legislation. So, strictly legally, each riparian State has its own technical rules and ship's certificate. However, as the riparian States recognize each other's ship's certificates, this situation poses no problems to shipping on this river. Certain Danube States also recognize the Rhine ship's certificate, as do Poland and the Czech Republic (who, of course, also have their own national technical regimes and certificates).

The **UNECE** resolution No. 17 just referred to, which lays down Recommendations on Technical Requirements for Inland Navigation Vessels, is a result of efforts of its member Governments regarding the approximation of their national and international (CCNR) requirements in this field with a view to possible reciprocal recognition of ship's certificates issued on the basis of the Recommendations or their recognition through a simplified inspection procedure. The Recommendations are currently under revision and are supposed to be in line generally with both the draft EU legislation on the matter and CCNR regulations in force, as far as the waterways of navigational zone 3 are concerned. The recommendatory character of this set of requirements makes it necessary for Governments seeking the recognition of their ship's certificates to reflect in them that the vessel has been inspected and found in compliance with the UNECE provisions in question. Otherwise, the Governments will have to prove that their national legislation is in full accordance with the provisions of the UNECE Recommendations.

Possible solutions

The difficulties connected to the coexistence of various technical regimes can largely be solved by a combination of three elements: 1) the application of the Additional Protocol No. 7 to the Act of

Mannheim, 2) the current revision of EU Directive 82/714/EEC laying down technical requirements for inland navigation vessels, and 3) the EU enlargement process. The Additional Protocol No.7, as noted above, offers a basis for the CCNR to recognize Community ship's certificates and ship's certificates issued by non-EU States (and boatmaster's licenses as well) as valid for navigation on the Rhine, provided their underlying regulations are equivalent to those in force on the Rhine. The current revision of EU Directive 82/714/EEC is intended to provide the EU with technical rules equivalent to those in force on the Rhine, and with a simple and rapid procedure for amending those technical rules to keep them in line with the Rhine technical regime through future changes. Moreover, the European Commission and the CCNR in March 2003 concluded a co-operation agreement providing for regular consultations between both institutions with a view to harmonising EU and CCNR legislation and ensure their parallel development. If all goes well, the CCNR will be able to recognize the Community ship's certificate as valid for the Rhine. The EU enlargement process will increase the number of states entitled to issue Community certificates to their vessels so as to include eventually most European countries with inland navigation interests; so, if the CCNR recognizes the Community certificate, these countries' vessels will be able to obtain ship's certificates giving access to the Rhine from their own national authorities. As noted earlier, the Rhine ship's certificate is already recognized under Directive 82/714/EEC as valid for navigation on all Community waterways (with the exception of some large waterways, where additional technical requirements must be met); the revision of the Directive will not affect this. In this scenario, the differences between the Community and the Rhine ship's certificates would practically cease to exist; both would give admittance to the same waterways.

A remaining problem in this situation would be the relationship between the Rhine/Community area and those European inland navigation countries (apart from Switzerland) which would stay, for an indeterminate period or forever, outside the EU. This could be solved by using article 18 of Directive 82/714/EEC (unchanged by the revision proposal), which offers EU Member States the possibility of recognizing (presumably on a reciprocal basis) ship's certificates of non-EU countries, so long as the Community itself has not entered into agreements with those countries providing for mutual recognition of these documents; or, alternatively, by the conclusion of such agreements by the Community itself.

It could be added that mutual recognition of ship's certificates between the Danube and the Rhine will become easier if the planned revision of the Belgrade Convention will provide the Danube Commission with the power to prescribe binding regulations on, among other things, technical requirements for vessels, in lieu of the mere authority to issue recommendations to its Member States it now has. The Danube Commission "new style" will then be in a position to establish a unique Danube ship's certificate and to decide on the recognition of the Community and Rhine ship's certificates on the non-EU part of the Danube – as the CCNR could decide on the recognition of this Danube certificate as valid for the Rhine.

To ensure a common, non-discriminatory approach to the consideration of applications for recognition of ship's certificates, a harmonised procedure for such consideration could be elaborated and agreed upon by UNECE, EU and River Commissions. This same procedure could also be used for the assessment of applications for the recognition of boatmaster's licenses (see next paragraph). But whether the reciprocal recognition results from the application of such a harmonised procedure or from agreements between the Community and third countries, it would be important to avoid (1) a reduction of safety standards on Community waterways or (2) a discrimination of vessels from EU Member States which cannot receive a Community certificate for technical reasons but would be eligible for recognition if they came from a third country.

5. The existence of different regimes for boatmaster's licences

Description

The situation with respect to boatmaster's licences is comparable to that with respect to vessel's certificates. On the **Rhine**, boatmasters must have a licence based on the Rhine Patent Regulation of the CCNR, which is issued by the competent authorities of one of its member States. This "Rhine Patent" is recognized by the EU as valid for the navigation on all Community waterways (with the exception of some rivers, where the member State concerned may require special knowledge of local navigational conditions and/or special experience in navigating the river in question). It is also recognized by most Danube countries, be it that in many of them the patent holder must meet some additional requirements as to knowledge of local navigational conditions.

The **EU** has its own legislation on this subject. Directive 91/672/EEC provides for the mutual recognition by the member States of each other's boatmen's licences. Directive 96/50/EC lays down harmonised minimum conditions for the issuing of national licences (essentially an examination programme). An EU boatmaster's licence in the proper sense of the word does not exist to date, but the European Commission is considering further harmonisation in this field. Boatmaster's licences based on Directive 96/50/EC currently are not valid for Rhine navigation, but the 7th Additional Protocol to the Act of Mannheim mentioned before will it make possible for the CCNR to recognize them, as well as the licenses of non-EU countries.

The Rhine Patent Regulation (article 3.05) allows the CCNR to recognize boatmaster's licences of other countries than its member States as "equivalent"; to date it has done so with Austrian, Czech, Hungarian and Polish licences. Holders of such recognized licences can obtain the Rhine Patent through a simplified examination, the only subjects of which are knowledge of the Regulations in force on the Rhine and of the navigational conditions on that river.

On the **Danube**, the regime concerning boatmaster's licences is similar to that with respect to ship's certificates. The DC has adopted Recommendations on the Establishment of Boatmaster's Licences on the Danube. It is uncertain to what extent the DC Member States actually follow those Recommendations, but they recognize each other's national licences.

Within **UNECE** were elaborated and adopted in 1992 the Recommendations on Minimum Requirements for the Issuance of Boatmasters' Licenses in Inland Navigation with a view to their Reciprocal Recognition for International Traffic.

Possible solutions

As in the case of ship's certificates, the enlargement of the EU will reduce the problems resulting from the existence of three different regimes for boatmaster's licenses: the Rhine Patent Regulation for the Rhine, EU Directive 96/50/EC for the Community waterways outside the Rhine, and the regime prevailing on the non-EU sector of the Danube; but it will not solve them. In the absence of the possibility of unification of the regime by means of a Pan-European Agreement, the solution will have to be found in a mutual recognition of licenses between these three regimes. This, in turn, presupposes harmonisation between the underlying regulations, and some form of co-operation to keep them equivalent in case of amendment.

Co-operation with a view to harmonising regulations already exists between the European Commission and the CCNR, as noted above; and the Danube Commission and the CCNR have, in principle, agreed to set up a common working group to harmonise their legislation on boatmaster's

licenses, with a view to future reciprocal recognition of these documents between the Rhine and the Danube. The functioning of these two "interfaces" could, in principle, result in harmonisation of the EU, Danube and Rhine regulations on this subject, and could serve to keep them harmonised through future modifications. But it might be laborious work to keep them co-ordinated. So an alternative solution could be to invite UNECE to update its resolution No. 31 on Minimum Requirements for the Issuance of Boatmaster's Licenses, in collaboration with the European Commission and the two River Commissions, to make it serve as a common standard on which all three Community, Danube and Rhine legislations could be based. On the basis of Additional Protocol No. 7 to the Act of Mannheim mentioned before, the CCNR will be able to recognize boatmaster's licenses issued by both EU and non-EU states as valid for the Rhine. The recognition of Rhine patents and Community boatmaster's licenses as valid for the non-EU sector of the Danube will formally have to be decided upon by the individual Danube riparian states concerned, except in the case that the planned revision of the Belgrade Convention gives the Danube Commission "new style" the power to issue binding regulations also on this subject; the recognition could then be decided upon by the Danube Commission itself. The recognition of Danube boatmaster's licenses as valid for Community waterways outside the Rhine would have to be decided upon, as Community legislation on this subject now stands, by the individual EU Member States concerned.

For those waterways where special knowledge of local navigational conditions (*Streckenkenntnis*) is required, methods must be agreed upon for candidates for boatmaster's licenses to acquire and to prove the possession of that knowledge in a simple way and at low cost.

6. Differences in regulations on the size and composition of crews, and on working and rest hours

Description

For the **Rhine**, Chapter 23 of the RVBR lays down rules on the size and composition of crews. The size and composition of the crews vary with the length of the vessel, its mode of exploitation (14, 18 or 24 hours/day) and the quality of its technical equipment.

On the **Danube**, there is no uniform regime regarding the size and composition of crews; this falls within the competence of the individual Danube States. Everywhere else, this is also a matter of national legislation, so the rules may vary from country to country.

The **EU** so far has no rules on the size and composition of crews, but they are under discussion. As to working and rest hours, the EU has adopted a directive (2000/34/EC) laying down minimum requirements for working and rest hours for mobile workers in the transport sector, which is applicable to inland navigation, and which has become effective in 2003.

UNECE has recently adopted a Recommendation containing a pan-European standard for minimum manning requirements and working and rest hours of crews in inland navigation.

Possible solutions

Differences in rules on working and rest hours from country to country will not be an important obstacle for inland water transport. Crews of vessels entering a country generally will be able to conform to the working hours or navigation hours prevalent in that country, if these are regulated by law.

Differences in legal rules on the size and composition of crews can present obstacles in cases where vessels crossing a border are confronted with regulations prescribing larger or more highly qualified crews than prescribed in their country of origin. Inversely, it is also conceivable that differences in legal manning requirements between countries may affect competition between national inland fleets, as they may cause lower overall cost levels for inland water transport firms operating in and from countries where manning requirements are less onerous (or even absent). But, in actual practice, these types of situations give rise to few complaints, which may be partly due to the relative lack of binding regulations on this subject.

If it is, nevertheless, felt that harmonisation in this field is required, the Recommendation on minimum manning requirements and working and rest hours of the UNECE could provide a Pan-European standard. Within the Danube Commission, harmonisation of rules on this subject is being considered.

7. Restrictions on the freedom of pricing and contracting

Description

Legally prescribed minimum prices for inland water transport services and restrictions on the freedom of contracting such services formerly existed in some countries, notably in Germany, the Netherlands, Belgium and France. In Germany, national transport was subject to a system of fixed minimum freight rates (*Festfrachten*). In the Netherlands, Belgium and France shippers were legally obliged to make their contracts for national transport through the intermediary of a state-run system of chartering by rotation (*tour de rôle*), which assigned cargoes to bargemen on a "first come, first served" basis; for this transport, too, shippers had to pay minimum freight rates fixed by law.

These *tour de rôle* systems and price controls no longer exist. They have been abolished, partly by measures on the national level, as in Germany, partly as a consequence of an EU liberalization directive, so pricing and contracting are now entirely free practically everywhere. The only legal texts where price controls can still be found are some bilateral inland water transport agreements, which prescribe minimum freight rates for bilateral transport.

Restrictions on the freedom of pricing and contracting clearly are not a serious problem nowadays. But given the frequent occurrence of periods in which inland water transport freight rates sink to very low levels, demands for the reintroduction of minimum freight rates tend to crop up from time to time.

Possible solutions

Within the EU, Directive 96/75/EC stipulates that contracts in national and international inland waterway transport "shall be freely concluded between the parties concerned and prices freely negotiated".

A number of price controls and cargo sharing clauses occurring in bilateral inland water transport agreements between EU and non-EU countries have already become void on the entry into the EU of the formerly non-EU countries involved, and more are to follow with further EU enlargement. From the few remaining bilateral agreements which will ultimately remain in existence, price controls and cargo sharing arrangements can only be removed by mutual consent of their Contracting Parties.

8. Lack of rules on competition

Description

Legal obstacles may not only be caused by existing legal arrangements, but also by the absence or insufficient development of laws which are indispensable for the good functioning of a market system. A case in point may be the lack of legislation which aims at ensuring a workable degree of competition throughout the economy (anti-cartel legislation) in European countries outside the EU. The Treaty establishing the European Community expressly prohibits all agreements between business firms, which have as their object or effect the prevention or restriction of competition. EU member States have supplemented these treaty provisions by national legislation on competition. Application of these Community and national rules has led to the elimination of some cartels of small ship-owners, which formerly existed in Dutch and Belgian inland navigation. On the Danube, there still exist agreements between the formerly state-controlled national shipping companies, collectively known as the "Bratislava Agreements". To the extent that these Agreements aim at sharing the Danube shipping market and at fixing transport prices, they would probably have been considered as illegal if they had been practised within the EU.

Possible solutions

The Agreements on partnership and co-operation between the European Community and its Member States, on the one hand, and several non-EU countries, on the other, may serve as frameworks for the development of competition law in those non-EU countries where this type of law is either nonexistent or insufficiently developed. The parties to these agreements have engaged themselves 1) to ensure that they have and enforce laws addressing restrictions on competition by enterprises, 2) to refrain from granting state aids favouring certain undertakings or productions or the provision of certain services, by which competition is or might be distorted, and 3) to endeavour to ensure that the legislation of the non-EU countries concerned on (among other things) rules on competition will gradually be made compatible with that of the European Community.

The Bratislava Agreements are currently in a process of change making them lose the cartel-like elements they formerly contained.

9. Insufficient harmonisation of the civil and public law framework

Description

The civil law applicable to inland water transport operations (contract law, liability rules) is still mostly national in character and is not harmonised at the international level. This gives rise to legal uncertainty, may cause undue litigation and may raise the insurance costs of transport operations.

Steps to remedy this situation have already been taken or are currently under consideration. The CLNI Convention on the limitation of liability in inland navigation has entered into force, but covers only a limited number of countries and still awaits transformation into, or replacement by, a pan-European legal instrument. The CMNI Convention on the contract of carriage in inland water transport has been signed by a number of countries and is in the process of being ratified. Currently, the possibilities are being examined to create a pan-European regime concerning the liability for damages caused during the transport of dangerous goods on inland waterways.

In the field of public (administrative) law, subjects like the registration and the measurement of inland navigation vessels are covered by multilateral treaties, but these treaties have been ratified or

acceded to by only a limited number of States and cannot be said to represent truly pan-European regimes.

In the Annex, a list is given of multilateral treaties concerning inland navigation currently in force.

Possible solutions

The CLNI (Strasbourg) Convention on the limitation of liability in inland navigation (in force) still only has four Contracting Parties: Germany, Luxembourg, the Netherlands and Switzerland. Despite the fact that these Contracting Parties in 1997 formally invited the Member States of the Danube Commission, Poland, the Czech Republic, Bosnia-Herzegovina and Slovenia to accede to CLNI (according to Article 16 of CLNI such an invitation is a prerequisite for accession), none of the latter countries so far has become a Contracting Party. It has been suggested to convene a conference of the Contracting Parties with the countries who have been invited to accede, in order to elaborate a protocol modifying CLNI so as to take away the objections to the text currently preventing the latter countries from accession. This may well be the course of action to be undertaken.

The CMNI (Budapest) Convention on the contract for carriage of goods in inland water transport currently has 16 signatories, three of whom have ratified it to date. It may be expected to enter into force in the foreseeable future. Because of its relatively large number of signatories (a large majority of Danube countries, all CCNR countries plus Poland and the Czech Republic) and because future accessions are perfectly possible, this convention stands a real chance of becoming a contract law regime covering most of the Pan-European inland waterway network.

There still is no harmonised Pan-European regime concerning the civil liability for damage caused during transport of dangerous goods by inland waterway vessels. But it seems to be generally doubted whether Pan-European harmonisation in this field really is necessary; it is also feared that an international regime on this subject only for inland navigation might weaken the competitiveness of this transport mode vis-à-vis the other modes. The current diversity of national liability rules in this field apparently is not felt to be an urgent problem.

10. Restrictions on the freedom of movement of inland water transport workers

Description

The movement of workers is governed by general legislation on employment. Within the EU citizens may freely take jobs in any country they like; nationals of non-EU countries generally have only limited access to the labour markets of EU countries. So far there are no common rules at Community level for the admission of workers from outside the EU; each member State still has its own policy and legislation. In most EU States, the policy applied is based on the criterion of a proven shortage on the national employment market of the personnel requested. There are no arrangements known today that apply to the specific market of inland waterway transport. Hence, non-EU nationals who seek a job in the EU inland navigation industry may only obtain work permits if it is clearly demonstrated that, on the labour market of the EU, no suitable candidates for the vacancies concerned can be found. In spite of the fairly widespread complaints in the EU inland water transport industry about the difficulty of filling vacancies, it is not to be expected, in view of the still rather high level of unemployment in the EU, and of the fact that unemployed youngsters can be relatively quickly trained as sailors, that such permits will be distributed frequently.

For the sake of simplicity, the question of access to the employment market in the CEEC outside the EU will be left aside.

Possible solutions

In the EU, after the enlargement of May 2004, the 15 "old" Member States are temporarily entitled to continue to restrict access to their labour markets for nationals of the 10 "new" Member States. But this transitional arrangement is to end definitively in 2011, and Member States may lower their entrance thresholds earlier, as some have already done (the Netherlands, for instance, recently dropped the requirement that it be demonstrated that within the "old" EU no suitable candidates can be found, in respect of "new" Member States' nationals wanting to be employed in the Dutch inland water transport industry).

Currently under discussion within the EU, is a draft directive on the conditions of entry and residence of third-country nationals for the purpose of paid employment and self-employed economic activities. This draft directive maintains the principle now generally applicable in EU Member States: to get a job in a Member State a third-country worker must obtain a work permit, which is issued only if it is demonstrated that the vacancy in question cannot be filled by a worker from within the EU. However, the draft directive allows Member States to adopt, for a limited but renewable period, provisions according to which this last requirement is deemed to be fulfilled, without the need for an individual assessment, for a specific sector confronted with a labour shortage. Member States could use this rule to alleviate labour shortages in the inland water transport sector. Furthermore, the draft directive proposes to drop the requirement to provide evidence that recruitment within the EU is not possible, in the case of third-country nationals applying for a renewal of their work permit, who have been working legally in the EU for more that three years. But these rules, if adopted, obviously would still be a far cry from complete freedom of movement of workers throughout the Pan-European inland water transport market.

The free movement of workers may also be hampered by visa obligations, which could make it difficult for sailors to join or leave their vessels in countries other than their own. It has been suggested to solve this problem by means of a Pan-European agreement after the example of the Seafarers' Identity Documents Convention. This might be an idea but, in view of the relatively limited number of countries involved (most European countries nowadays admit each others' nationals without imposing visa obligations, at least for stays of limited duration), it might be more efficient to solve the problem by means of an agreement or agreements between the Governments concerned, aiming at facilitating the entry of each other's sailors into their territories. If such agreements cannot be realized, it seems unlikely that the unwilling countries would become parties to a Pan-European instrument to the same effect. It might also be considered whether the scope of the Seafarers' Identity Documents Convention can be extended so as to include inland navigation.

11. Restrictions on the right of establishment

Description

Within the EU, freedom of establishment, at least in the inland navigation sector, exists: any EU citizen may establish an inland water transport business in any EU Member State he likes. For nationals of third countries there normally will be restrictions, laid down by the national laws of Member States. Authorization for the establishment of such businesses is generally granted only if this will favourably influence employment and/or the economic development of the Member State concerned. The Europe Agreements, concluded between the EU and a number of Central and Eastern

European countries, do not change this situation, since these Agreements do not apply to the inland water transport sector.

Possible solutions

In the Agreements on partnership and co-operation between the European Community (and its Member States) and several non-EU European countries referred to above, the Contracting Parties grant each other's companies the right (on the basis of most favoured nation treatment or of national treatment, whichever is the better) to set up subsidiaries and branches on the territory of the other party. Unfortunately, inland water transport has been excluded from the application of this provision; it should be considered whether the Agreements can be modified on this point.

The draft EU directive mentioned in paragraph 76 contains also provisions concerning entry and residence of third-country nationals who want to set up a business as a self-employed person in a EU Member State. Such persons must, according to the draft, obtain a "residence permit – self-employed person" from the competent authorities of the EU Member State concerned, valid for a period up to three years, and renewable for such periods. To obtain the permit, it must be demonstrated that the envisaged activities as a self-employed person will create an employment opportunity for the applicant and will have a beneficial effect on employment in the Member State concerned or on the economic development of that State. This requirement is waived for third-country self-employed persons who have legally exercised their activities in that Member State for more that three years and ask for a renewal of their permit.

List of multilateral treaties in the field of inland water transport currently in force

1. **Convention relating to the Unification of Certain Rules concerning Collisions in Inland Navigation, of 15 March 1960**

   Contracting Parties: Austria, France, Germany, Hungary, Netherlands, Poland, Romania, Russian Federation, Switzerland, and Yugoslavia[1].

2. **Convention on the Registration of Inland Navigation Vessels, of 25 January 1965**

   Contracting Parties: Austria, France, Luxembourg, Netherlands, Switzerland, and Yugoslavia[1].

3. **Convention on the Measurement of Inland Navigation Vessels, of 15 February 1966**

   Contracting Parties: Belgium, Bulgaria, Czech Republic, France, Germany, Hungary, Luxembourg, Netherlands, Republic of Moldova, Romania, Russian Federation, Slovakia, and Switzerland.

4. **Strasbourg Convention on the Limitation of Liability in Inland Navigation (CLNI), of 4 November 1988**

   Contracting Parties: Germany, Luxembourg, Netherlands, and Switzerland.

5. **European Agreement on Main Inland Waterways of International Importance (AGN), of 19 January 1996**

   Contracting Parties: Bulgaria, Croatia, Czech Republic, Hungary, Italy, Lithuania, Luxembourg, Netherlands, Republic of Moldova, Romania, Russian Federation, Slovakia, and Switzerland.

NOTE

1. As of 4 February 2003, the Federal Republic of Yugoslavia changed its name to Serbia and Montenegro.

ANNEX D

STATISTICAL APPROACH TO INLAND WATERWAY TRANSPORT

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1. Significance of Inland Waterway Transport

The whole European waterway network consists of almost **30 000 km** of internationally-classified canals and rivers available for inland navigation. It links together the most important urban and industrial areas in Europe. The network is especially dense in the most developed and the most highly populated areas in the EU– Netherlands, Belgium, Luxembourg, Germany and Austria. The backbone of the European waterway network is the Rhine and the Danube rivers providing an efficient connection between the North Sea and the Black Sea.

In the EU inland navigation carries over 440 million tonnes – i.e. 3.5% market share in volume. It accounts for 6.5% of total EU inland transport (125 billion t-km). In the whole Pan-European market it accounts for 3.9% of total inland transport (240 billion t-km)[1].

The fleet of inland navigation in the EU consists of around **11 500 vessels**, with a **loading capacity of 11 million tonnes**. There are nearly 8 000 enterprises in the inland waterway transport market, employing over **35 000** people. In 2000 the IWT sector in the EU generated over **€ 4.15 billion** total turnover[2].

2. Advantages of Inland Navigation

Flexibility, reliability and low cost:

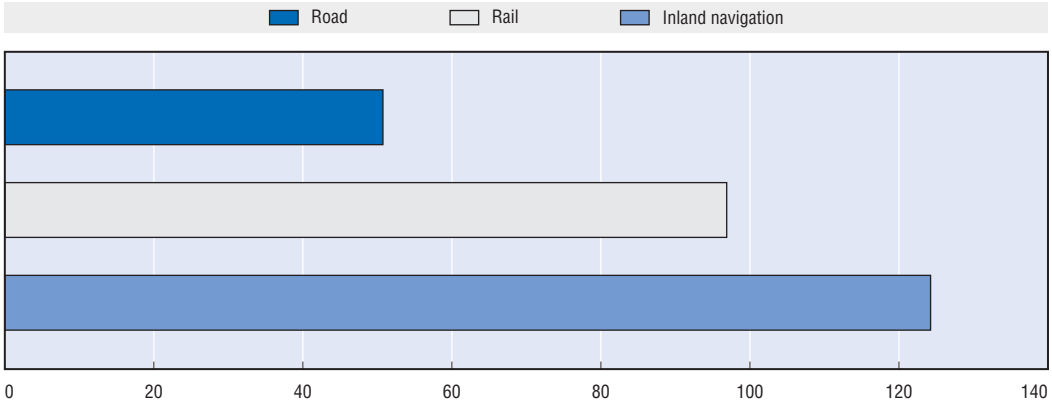
Inland navigation can carry any type of cargo, including liquid cargos, bulk goods, general cargo, and containers. Inland navigation is also ideal for transporting uncommon cargo – particularly large and/or heavy items, waste flows, hazardous materials, etc. The limitations in size and weight do not apply to inland waterways as much as to other transport modes. For example, Airbus utilise inland waterways to transport various parts of the largest passenger aircraft in the world – the new 555-seat A380 – to the final assembly facility in Toulouse, France. The huge elements arrive at the seaport of Pauillac and are then transported via the 95-km long inland waterway route to the river port of Langon.

The well-developed network of hinterland ports, acting like intermodal hubs offer a variety of logistics solutions and allows for easy transhipment of cargo to haulage trains or trucks. Inland navigation can take place **24 hours a day, seven days a week**, offering flexible and punctual services that are so important in planning just-in-time operations. Inland waterway transport is also very reliable, as river vessels do not suffer from the congestion problems that currently plague other

transport modes. According to the EC White Paper "European transport policy to 2010" congestion affects 10% of the road network (7 500 km), 20% of the rail network (16 000) and 30% of flights at major airports. Inland waterways do not have physical restrictions that seriously limit the capacity of roads and rails. The only physical restriction is the size of the locks, which may affect the largest convoys consisting of numerous barges. In some cases smaller locks necessitate double-locking, which may provoke small congestion-related delays.

Inland navigation offers specific economies of scale. One inland navigation vessel (Jowi-class) can carry up to **470 TEU**, one push convoy with 4 barges is an equivalent of **440 trucks or 275 40-tonnes rail wagons**. This makes inland navigation a particularly cheap and efficient mode of transport. IWT usually has the lowest line haul cost (per t-km) between ports, especially for bulk products. One of the most important features of inland navigation is low energy consumption, which is much lower than railways. European Commission studies indicate that with only one litre of fuel most **vessels can transport one tonne of cargo over 127 km,** in comparison to **97 for rail** and **50 for road**[3].

Figure D.1. **Energy use for moving tonnes per km, Ademe**



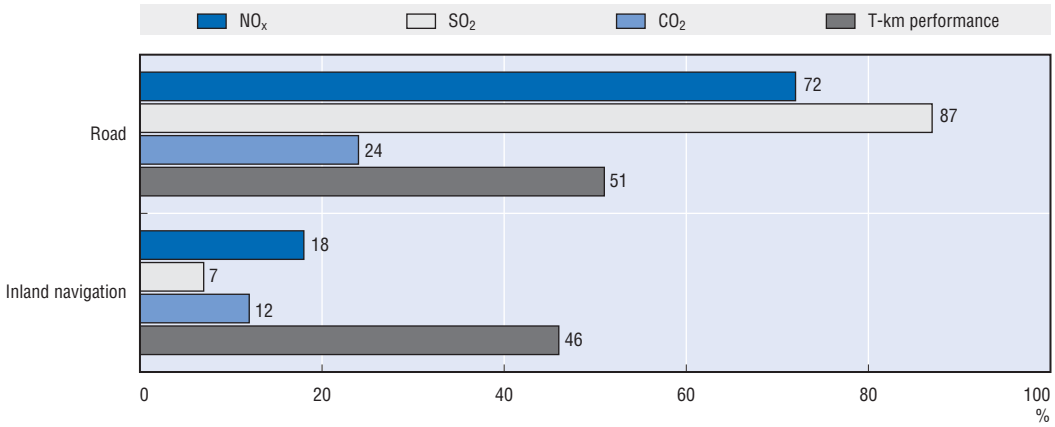
Source: www.inlandnavigation.org

Safety and environmental sustainability

One of the most important assets of inland navigation is the high level of safety. Regulations and regular inspections necessitate elevated technical standards. Vessels transporting hazardous, flammable or poisonous materials are specially designed and often equipped with a **double hull, special fume extraction equipment, stainless steel tanks, innovating pipeline systems** etc. Strict safety standards, combined with regular controls, investment in river information systems and low congestion on inland waterways, greatly diminish the risk of accidents. The number of accidents in inland shipping is very low, as well as cost of eventual damage. Such a level of safety cannot be provided by other transport modes.

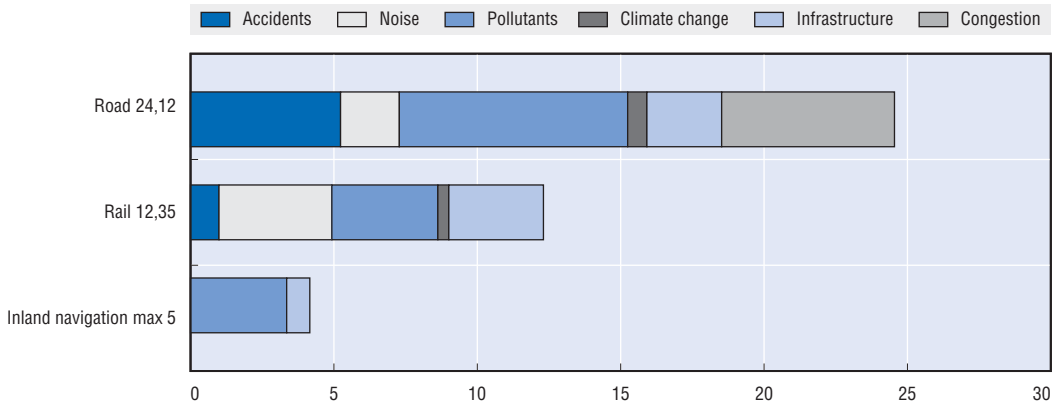
Due to low energy consumption, low noise nuisance and low emissions inland navigation is the most environmentally sustainable transport mode. European Commission studies have demonstrated that inland waterway transport accounts for only **0.5% of all socio-economic costs of transport**, such as accidents, air pollution, climate change etc (roads – 91.5%, air transport – 6%, rail transport – 2%)[3].

Figure D.2. **Clean transport and t-km performance**



Source: *http://www.inlandnavigation.org/*

Figure D.3. **Marginal average external costs of transport by mode in €/1 000 t-km, European Commission**



Source: *http://www.inlandnavigation.org/*

3. Weaknesses of inland waterways

Geographical limitation and vulnerability to weather conditions in some regions

A major disadvantage of inland waterway transport is its geographic limitations and resulting inability to offer door-to-door transport solutions. Not every European country has a developed inland waterway network. Even in the "major" inland waterway countries IWT is a realistic alternative primarily for those shippers who are located near waterways. In most cases cargo has to be transhipped at least twice during a transport operation, which substantially decreases the flexibility of inland waterway transport.

Waterways are also relatively more vulnerable to harsh weather conditions than roads or rail. Water levels can influence the operating costs, speed and carrying capacity. The IWT on rivers with poor infrastructure conditions constitute a serious hindrance to the transport of most goods. Changing water depths during the course of the year and small but hard-to-predict variations in allowable

draughts not only increase costs and reduce the efficiency of IWT, but also reduce the willingness of shippers to shift certain goods to transport by inland navigation. The problem is especially acute on the Danube River and other Eastern European markets due to years of neglected maintenance and appropriate investment. The low water level seriously affects the inland navigation on the Danube. According to the PINE study the yearly utilisation ratio of the Rhine River is around 94%, while on the Danube River it is only 70%[4].

Moreover, in northern European countries (Finland, Russia) many inland waterways are practically frozen for 3-8 months during the winter.

Slow speed

A disadvantage of water transportation is its relatively slow speed. The speed of inland navigation vessels lies in the range of 10 to 12 km/h which is essentially lower than the speed of railway trains (20-30 km/h) or road vehicles (30-40 km/h). Thus, inland navigation is practically excluded from the transport of urgent goods, e.g. perishables. Barges are slower than trucks or trains and, because waterways rarely flow in a straight line, the distance travelled by inland waterway vessels is higher than the other modes. Water transport is slowed further by the need to make and break tows and by delays at locks.

The comparison of "commercial speed" of various modes gives, to some extent, better results for inland waterways. Taking into account that it is a virtually congestion-free mode its commercial speed is similar to its cruising speed, whilst due to congestion the average speed of rail freight trains in EU has fallen to only 18 km/h. On some sections, e.g. on the Danube River flowing through six Central European countries, inland waterway vessels can be faster than trucks, which are often delayed at border crossing terminals. Moreover, reliability is valued by the shippers and forwarders much more than speed of delivery. IWT in most cases can guarantee the estimated time of arrival, contrary to roads or rails, which may miss its ETA due to traffic congestion or due to time restrictions on the use of trucks.

4. Market Developments

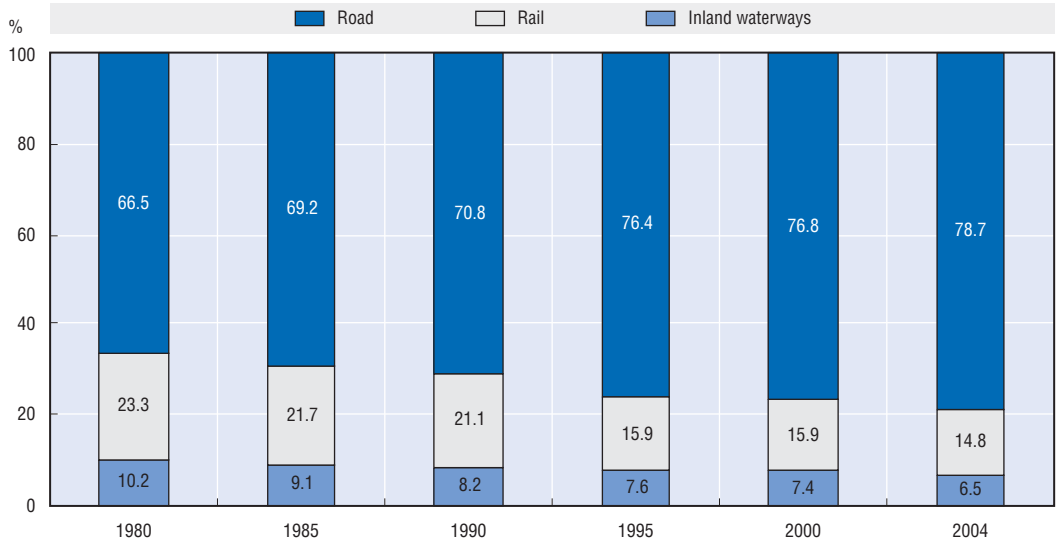
Growing market, declining market share

In the EU Inland navigation carries over 440 million tonnes, which gives it a 3.5% market share in volume. IWT is ranked third in inland freight transport with **6.5% market share** (total performance **125 billion t-km)**, after road and rail (74% and 14% respectively).

- In absolute figures the industry is constantly growing. It has grown by 23 billion t-km (i.e. by over 20%) since 1970.

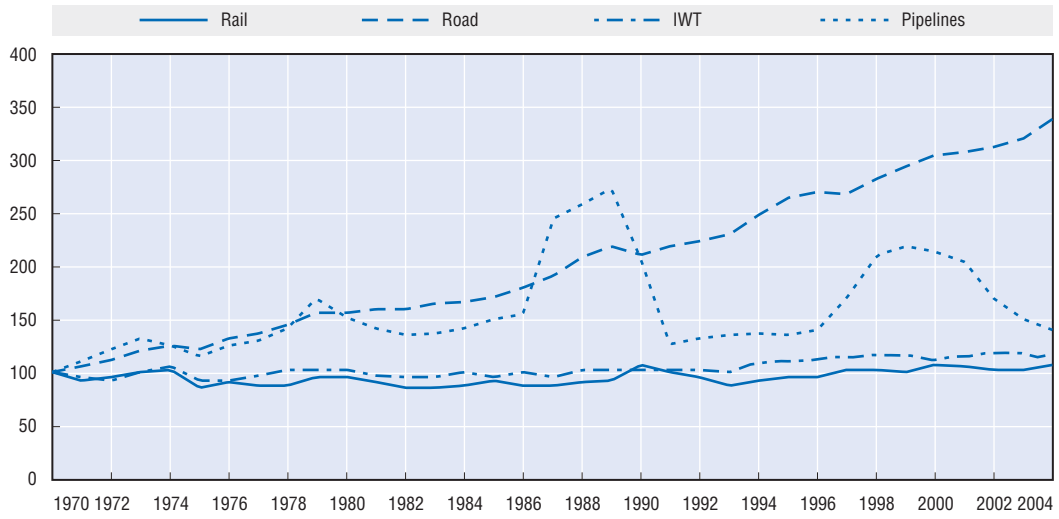
- IWT is unable to keep pace with other transport modes. Despite the large increase in transport demand over the past decades nearly all extra traffic has been absorbed by roads.

Figure D.4. **Trends in the market share of different modes in Western Europe**



Source: ECMT.

Figure D.5. **Freight transport trends in Western Europe, 1970 = 100**



Source: ECMT.

Modal split in the EU in 2004 (freight t-km)

Countries	Rail	Road	Inland Navigation	Pipelines
Austria	40.2%	38.9%	**3.9%**	17.0%
Belgium	10.9%	75.4%	**12.1%**	1.5%
Czech Rep.	23.8%	72.6%	**0.6%**	3.0%
Denmark	11.3%	63.4%	**0.0%**	25.3%
Estonia	60.9%	39.1%	**0.0%**	0.0%
Finland	26.8%	72.4%	**0.9%**	0.0%
France	16.6%	72.7%	**3.1%**	7.6%
Germany	18.4%	64.6%	**13.5%**	3.5%
Greece	2.9%	97.1%	**0.0%**	0.0%
Hungary	32.9%	41.3%	**5.4%**	20.4%
Ireland	2.3%	97.7%	**0.0%**	0.0%
Italy	10.7%	84.2%	**0.0%**	5.1%
Latvia	63.8%	25.0%	**0.0%**	11.1%
Lithuania	41.3%	43.5%	**0.0%**	15.2%
Luxembourg	41.5%	33.3%	**25.2%**	0.0%
Netherlands	6.5%	38.9%	**47.1%**	7.5%
Poland	27.7%	58.6%	**0.6%**	13.1%
Portugal	21.1%	78.9%	**0.0%**	0.0%
Slovakia	33.5%	64.0%	**2.5%**	0.0%
Slovenia	60.5%	39.5%	**0.0%**	0.0%
Spain	5.1%	91.4%	**0.0%**	3.5%
Sweden	35.8%	64.2%	**0.0%**	0.0%
UK	11.3%	83.8%	**0.1%**	4.8%

Source: ECMT.

- Importance of IWT in particular countries is far from homogenous. Top three countries (Netherlands, Belgium, Germany) provide 90% of EU IWT.

- In the top-three countries - **the Netherlands, Belgium and Germany** market share of inland navigation represents **47%, 13.5% and 12%** respectively. However, even in these countries IWT is losing its significance. Over the last 15 years transport demand rose by 41% whereas IWT grew by only 16%.

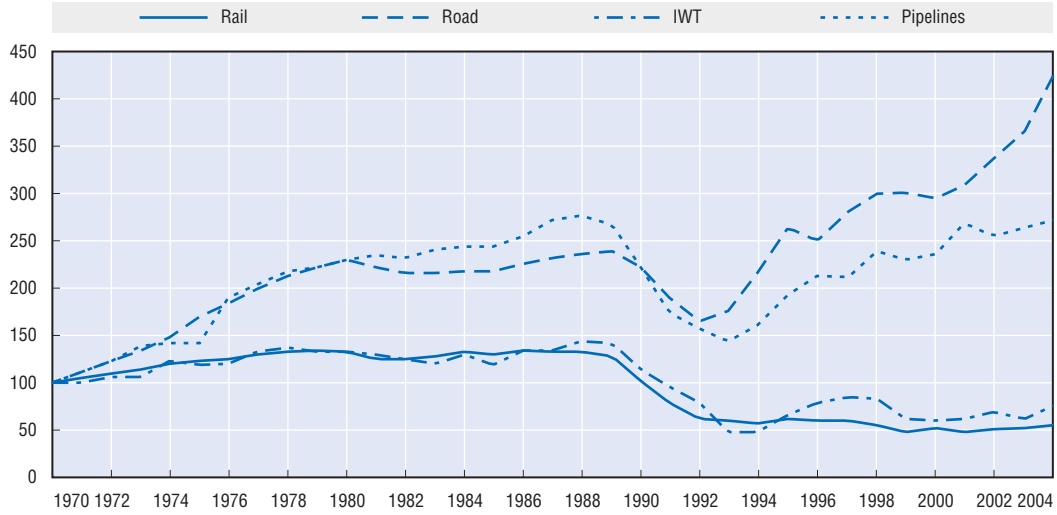
- In Central and Eastern European countries share of IWT is significantly lower. IWT has declined dramatically after the collapse of command economy. For example since 1988 in **the Russian Federation** inland navigation has diminished from 580 million tonnes to 136 million tonnes in 2004. Market share of inland navigation has dropped to only **3%**.

Modal split in other European countries in 2004 (freight t-km)

Countries	Rail	Road	Inland Navigation	Pipelines
Albania	1.1%	98.6%	**0.0%**	0.3%
Azerbaijan	46.7%	43.2%	**0.0%**	10.1%
Belarus	83.1%	16.6%	**0.4%**	0.0%
Bosnia	31.4%	68.6%	**0.0%**	0.0%
Bulgaria	45.6%	40.4%	**11.6%**	2.4%
Croatia	18.7%	66.1%	**1.5%**	13.8%
Georgia	41.5%	4.9%	**0.0%**	53.7%
Macedonia	9.6%	90.4%	**0.0%**	0.0%
Moldova	59.9%	40.1%	**0.0%**	0.0%
Norway	9.9%	73.4%	**0.0%**	16.7%
Romania	46.9%	37.3%	**10.9%**	4.8%
Russia	56.4%	5.7%	**2.9%**	35.0%
Serbia & Montenegro	30.2%	55.0%	**10.6%**	4.2%
Switzerland	27.3%	71.6%	**0.4%**	0.7%
Turkey	5.6%	93.0%	**0.0%**	1.4%
Ukraine	48.9%	3.1%	**3.1%**	44.8%

Source: ECMT.

Figure D.6. **Freight transport trends in PECOs**
1970 = 100

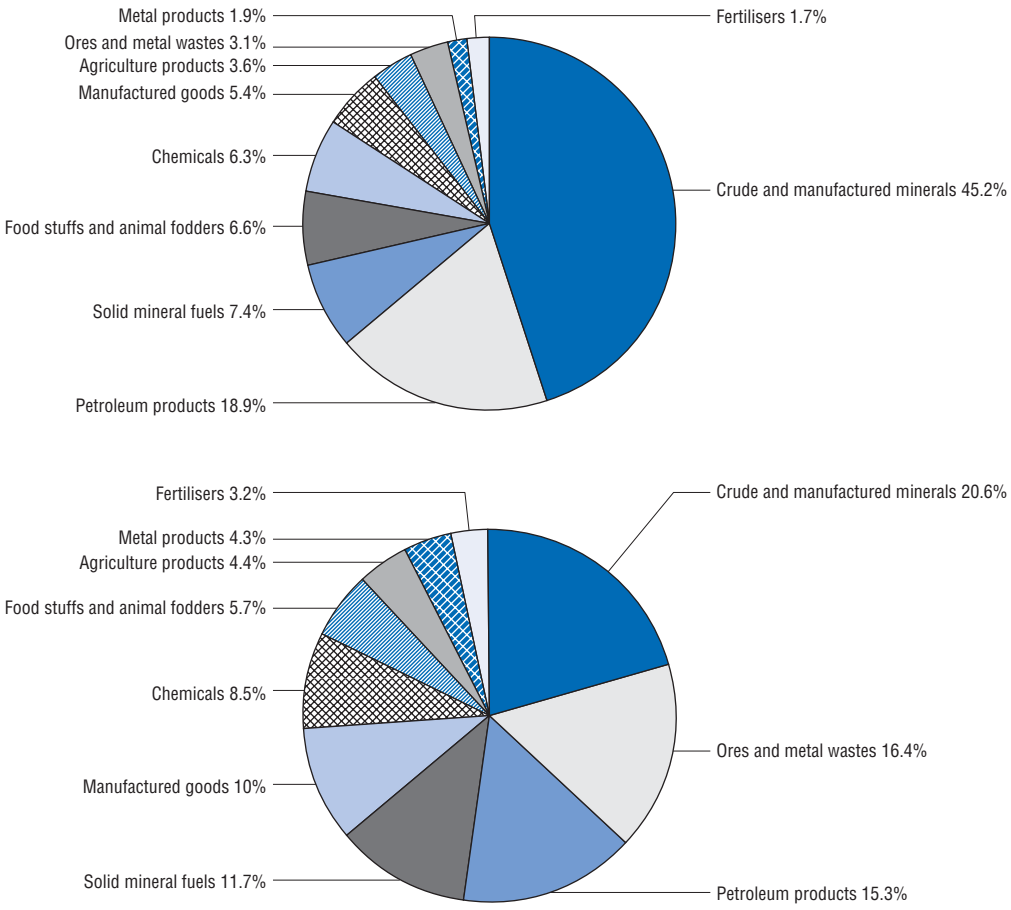


Source: ECMT.

Moving away from the "coal-barge" image

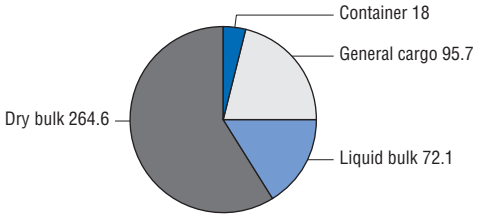
- At present inland waterway transport in the European Union is dominated by traditional dry bulk cargo. In the 6 largest inland navigation markets in the EU (NL, DE, FR, BE, LU, AT) crude and manufactured minerals and building materials account for over 45% of total cargo in national transport and over 20% in international hauls. Ores account for more than 16%, and solid mineral fuels for approx. 11% of international transport, 7.4 and 3.1% of national IWT transport respectively. Other important commodities are petroleum products – over 16% of total cargo. A significant amount of IWT concerns chemical goods - over 8% in international transport and 6.5% in national markets.

Figure D.7. **IWT – National and international transport by group of goods, 2002 (reporting countries: NL, DE, FR, BE, AT, LU)**



Source: Eurostat[5].

Figure D.8. **Volumes per commodity group in million-t in 2001, European Commission**

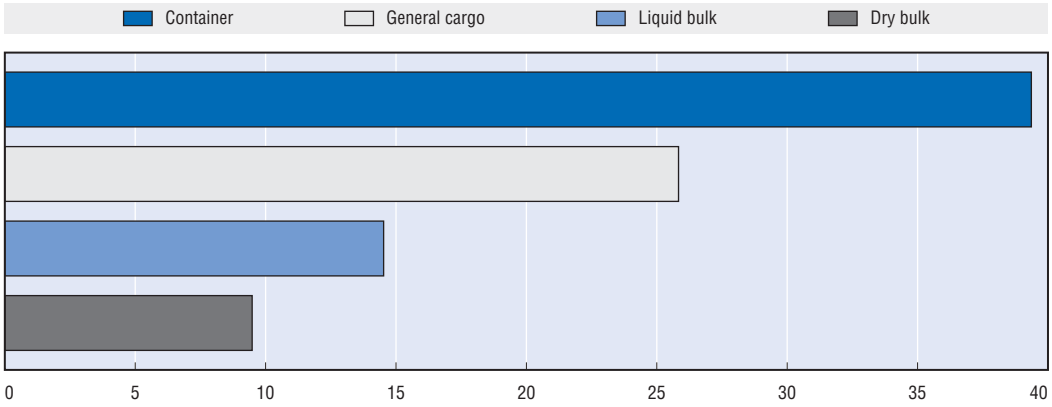


Source: *www.inlandnavigation.org*

- However, inland waterway fleet is becoming more and more flexible and is now designed to carry a variety of cargo. Use of new type of vessels, innovative transshipment methods, and investment in IT systems has led to emergence of new markets, such as transport of containers, dangerous materials, chemicals, and high-value goods (e.g. cars).

- The most promising markets in inland navigation are containers. Growth of container transport between 2002-2010 is estimated at 40%, while growth of general cargo at 26%, liquid bulk at 15% and dry bulk at almost 10%.

Figure D.9. **Growth per commodity in percentage 2002-2010, European Commission**

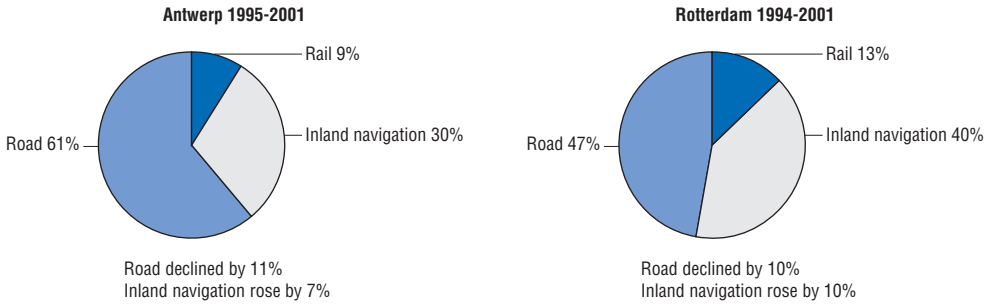


Source: *www.inlandnavigation.org*

- Growth in container transport is of utmost importance and is one of the sectors with the biggest growth rates. On the Rhine, since 1995 there has been a growth from **700 000 to around 1 200 000 TEU**[4]. In 2004, in Germany alone the volume of containers rose by **17%**[6]**.**

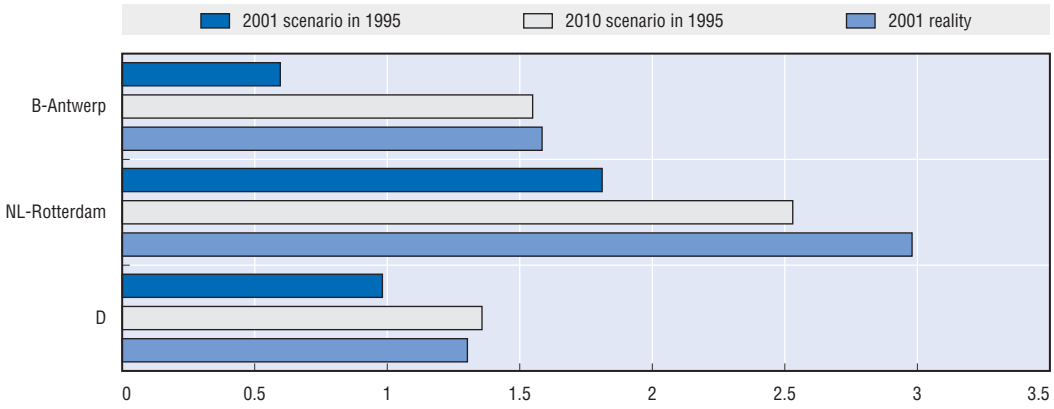
- IWT sector is very effective in exploring the container market and in some regions it has managed to seize a market share of **50%**. Growth in some ports reached the level of **40%** in 2004[6].

Figure D.10. **Modal split container traffic**



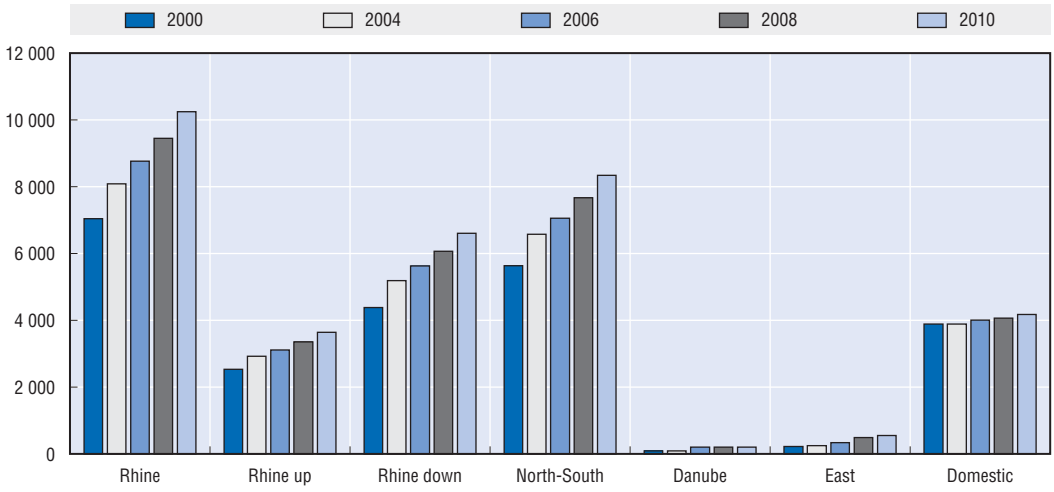
Source: http://www.inlandnavigation.org/

Figure D.11. **Container traffic in million TEU - forecast and reality**



Source: http://www.inlandnavigation.org/

Figure D.12. **Container volumes, in 1 000 tonnes**

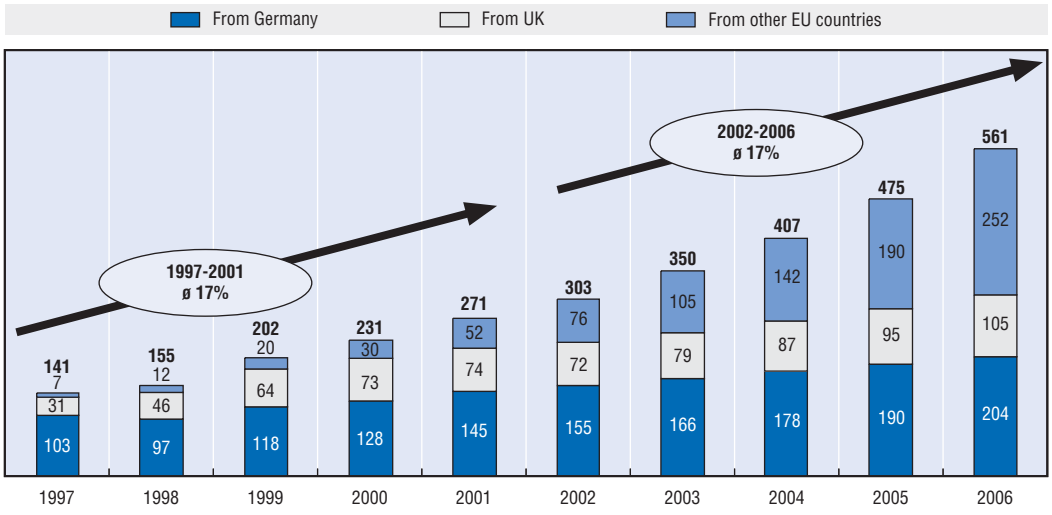


Source: Ecorys 2003.

- Additionally, according to the PINE study[4] IWT has significant potential in its traditional market segments like: building materials and minerals, chemicals, petroleum products.

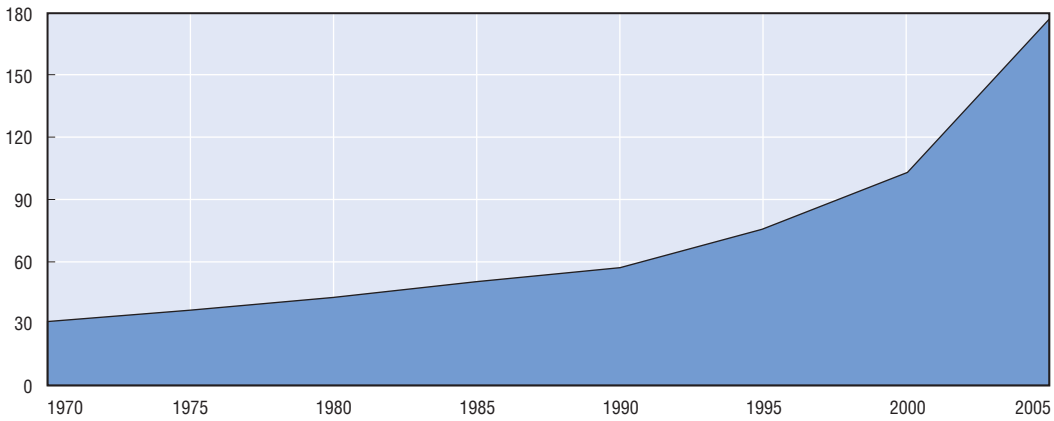
- IWT is also exploring new market niches – e.g. passenger transport (river cruises). Since 1990 the number of river cruise ships has been tripled. Between 1997 and 2001 the market has grown by 17% and between 2002 and 2006 it is estimated to grow by another 17%.

Figure D.13. **Passenger traffic**



Source: IVR Colloquium 2005[7].

Figure D.14. **Ships and Beds Development**



Source: IVR Colloquium 2005[7].

5. Challenges

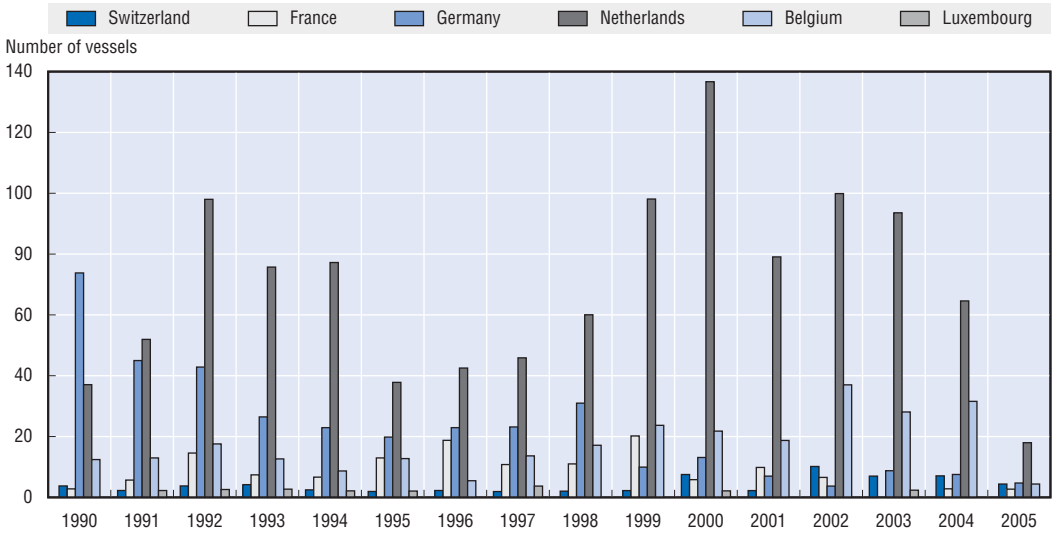
Logistics and intermodality

Due to continuing globalisation of trade transport market structures are changing. Intermodality is becoming a norm and combinations of various transport modes becoming more and more popular.

Inland Waterway Transport is slowly adapting to new market requirements, however, there are a lot of challenges that will be extremely difficult to cope with.

- There is virtually no data on the financial situation of the inland navigation industry in recent years. Therefore it is very hard to assess how the IWT sector is adapting to new market requirements and how it is affected by the changing market. There are however some indirect hints that the inland navigation industry manage quite well in a liberalized market. Following a 1996 European Directive, inland navigation has been liberalized. Before the liberalization, inland navigation was a rather closed mode of transport, and cargo was assigned by rotation on a so-called shipping-exchange (tour de role system). This system guaranteed a regular job and minimum transport prices, but in the final analysis it slowed down the development of inland navigation. "*Tour de rôle*" was abolished as from 1 December 1998 in the Netherlands and Belgium and in all States by 1 January 2000. The graph below clearly shows that the liberalization of the market has provoked a significant increase in investment in new vessels. The biggest growth can be observed in Belgium and in the Netherlands.

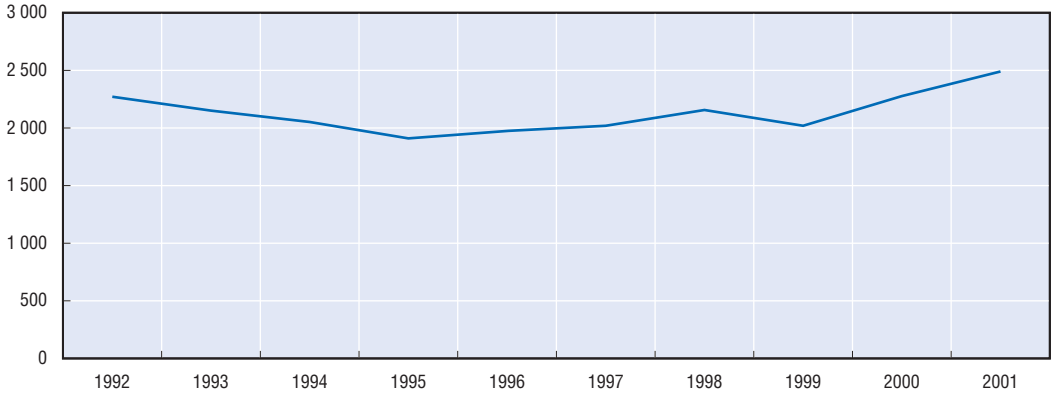
Figure D.15. **Newly built vessels inland shipping – Total Fleet**



Source: IVR statistics.

- Another example is the total turnover of the German IWT companies. Between 1999 and 2001 the total turnover increased from 2 bn DM to 2.5 bn DM.

Figure D.16. **Turnover of German IWT enterprises in million DM**



Source: PINE Study.

- On the other hand, the number of companies in the IWT is constantly decreasing, as is the employment. During the eight-year period 1990 and 1998, the number of enterprises declined by one quarter in Belgium, by one third in Germany and by almost half in France.[3]

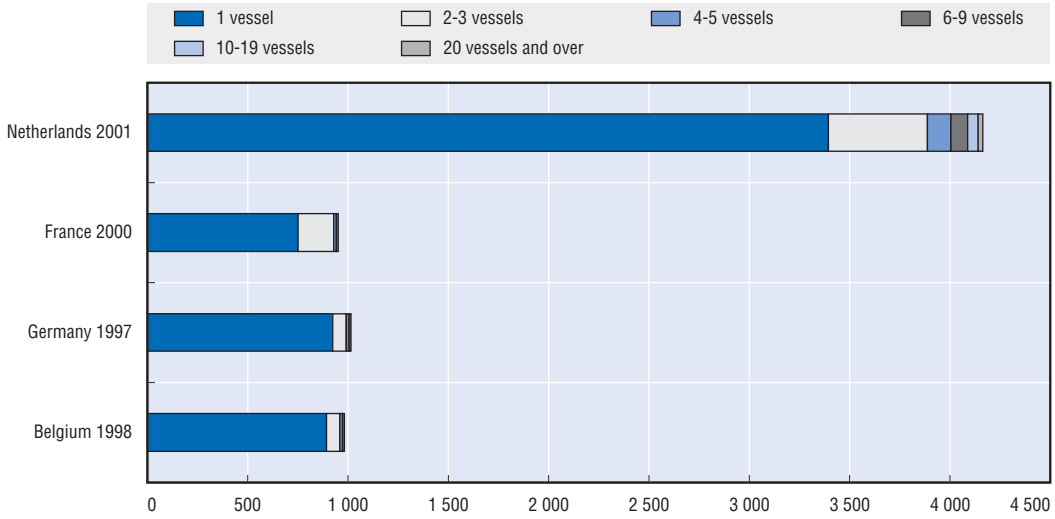
- The logistic chain is becoming more and more complex and the combination of inland waterways, rail, road and maritime modes is no longer unusual. Dedicated, door-to door concepts call for quicker, just-in-time deliveries, making particular flows more fragmented, shorter and timetables denser. At the same time transport operations are becoming more and more customised and specialised to suit the demand of various types of business.

- Consequently the integration of the transport process into the overall logistics system and industrial production process is becoming increasingly important. Since the individual transport companies are not able to deal with integration of every transport operation into the overall logistic chain, there is a growing need for specialised logistics integrators. These logistics firms are not always aware of the advantages of IWT.

- A large part of the European IWT sector is characterised by vertical disintegration: the IWT supply chain is formed by a series of separate functions performed by different companies. Large forwarding companies are responsible at the logistics level, whereas many small and medium-sized broker companies act as intermediaries between shippers and skippers. The actual haul is, for the most part, carried out by single-vessel operators. These operators have sometimes poor direct contact to shippers and hence cannot benefit from their advantages.

- Small family enterprises have seldom developed an active marketing approach, which would allow them to explore new markets and seek new customers.

Figure D.17. **Number of IWT enterprises by number of vessels**



Source: PINE study, 2004.

Infrastructure charging and investment

The policy towards infrastructure charging has been changing in Europe in recent years. The White Paper of 22 July 1997 on pricing showed a great diversity of infrastructure charging systems among EU member states. Some of the systems do not reflect transport sector costs, and results in:

- Distortion of competition between Member States.
- Distortion of competition between different transport modes.
- The failure to consider environmental and social aspects of transport.
- Difficulties in funding infrastructure investment.

All these findings concern IWT. According to the White Paper charging for infrastructure might solve the problem of increasing congestion and pollution, increase efficiency and sustainability of the transport sector and promote fair competition between different modes.

Introduction of charging for inland waterway infrastructure is very controversial among IWT entrepreneurs:

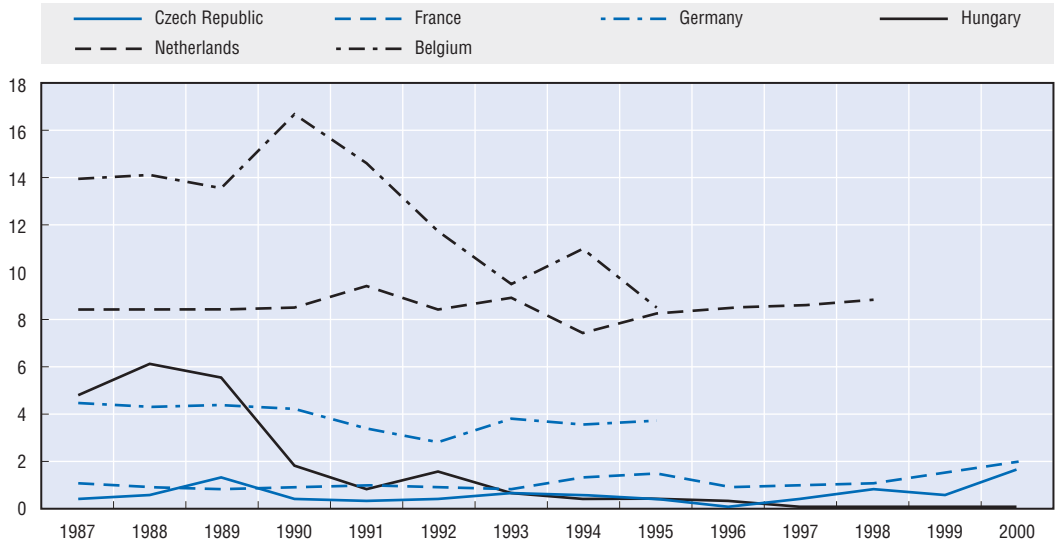
- It might decrease the already low competitiveness of IWT sector.
- Divert traffic from IW to roads and rail.
- Diminish the profitability ratio of IWT companies.
- Not all costs of IWT infrastructure are incurred by IWT, but also by water supply services, hydroelectric power, etc. According to the recent case studies,[1] approx. 70-80% of total infrastructure spending can be attributed to inland shipping.

The introduction of charging for infrastructure seems inevitable in all transport modes in Europe. It should be treated rather as an opportunity than a threat:

- The marginal costs of inland navigation are very low. Transportation is only one of the several uses of inland waterways, and both the financial and the environmental costs of inland waterway traffic are amongst the lowest of all modes. The introduction of harmonised charging systems in all transport modes would not undermine the position of IWT.

- The problem is also that waterways obtain a relatively small share of total infrastructure investment. Even in the Netherlands, or in Belgium – the countries with relatively high share of IWT in total freight traffic, waterways account for only about 8% of total transport investment. In Germany, the biggest IWT market in Europe, in the mid 1990s this was only 4%. In France, waterways obtain only around 1.9% of total investments. This is a serious investment gap and without an appropriate level of investment inland waterways it would not be able adapt to the requirements of a modern transport system.

Figure D.18. **Share of IWT Investment in total infrastructure investment 1987 - 2000**



Source: ECMT.

- There is also a "payment gap" problem – the problem with payments for maintenance, the upkeep or the rehabilitation. There are no reliable statistics, but it is unlikely that user payments could even cover the upkeep and maintenance of the system. Infrastructure charges would constitute a significant source of funds for maintenance of waterways.

Environmental aspects

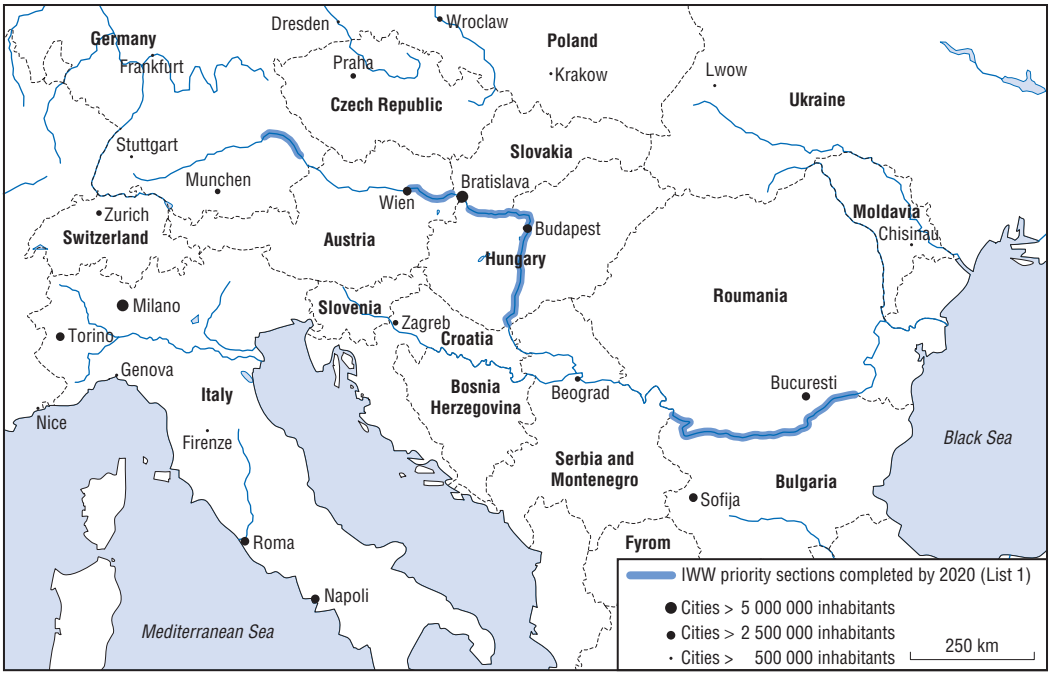
- Though IWT is the most environmentally-sustainable mode of transport it may also have adverse impact on environment. A key problem is the canalisation of free flowing rivers, but waste disposal, air pollution and noise nuisance are also significant problems. In the past the rivers were adjusted to the needs of IWT without considering the environmental aspects of project development.

- At present, development of waterway projects is strictly regulated at the EU level, in a very detailed way – by the Birds and Habitats Directives, as well as the Water Framework Directive. The former two identify special areas that are known as Natura 2000 sites. The latter one aims at preventing further deterioration of aquatic ecosystems and achieving the so-called Good Ecological Status of all surface water bodies by 2015. The EU legislation is clearly the result of a change of attitude of public towards waterways.

- On the other hand, IWT infrastructure has its needs – especially on the Danube River. For example the inland shipping industry wants Austria to deepen the Danube east of Vienna to the depth of 3.2 m. This depth has been identified by shipping companies to be necessary for fully-loaded cargo ships to pass even when water levels are low. The major environmental issue was the original plan to change the free-flowing river section into a section being canalised by a weir and lock system. Moreover, the continuing degradation of the Danube river bed, caused by the river canalisation works (weirs and locks) carried out in the upstream sections, essentially influences the ecological balance of the National Park Donau-Auen. For these reasons the Austrian Ministry of Transport has initiated an integrated engineering project to improve nautical and ecological conditions of this section of the Danube. The objective of the project is finding a balance between the interests of inland navigation and the environmental needs of the National Park Donau-Auen.

- The map below shows the sections that need to be modernised or constructed (red sections) and the ecologically outstanding stretches. It shows how it is difficult to reconcile the conflicting interests of the IWT industry and environmentalists.

Figure D.19. **IWT priority sections**



Source: Danube Carpathian Programme Office, World Wide Fund for Nature (WWF), Austria.

- The transport policies and environmental policies are not integrated. There are strategic visions, e.g. the water quality (Water Framework directive), but a strategic international IWT vision is missing. This handicaps balanced decision-making. Simply following the rules is not a guarantee for a successful project, because the present rules are incomplete (due to lack of strategic vision). The examples of good practice in this area are the Seine-Nord project in France and to some extent the Vienna East project in Austria, where consultative structures have been established. Experience and practice in these projects show that the progress of the environmental assessment procedures and the probability that a workable solution can be agreed upon in a reasonable time span greatly benefit by early involvement of beneficiaries and stakeholders.

- Many IWT projects may fail because public participation is often too late. Ideally the public participates in all stages of project development, especially in the definition phase and the process of working out realistic alternative solutions for a project. At present, environmental information is poorly disseminated by governments.

NOTES

1. Charging and pricing in the area of infrastructure. ECORYS, 2005.

2. Prospects of Inland Navigation within the Enlarged Europe (PINE Study), Buck Consultants Intl. ProgTrans, VBD, via Donau, 2004.

3. Inland Waterway Freight Transport – a transport solution that works, EC, 2003.

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STRENGTHENING INLAND WATERWAY TRANSPORT

PAN-EUROPEAN CO-OPERATION FOR PROGRESS

This publication is a complete collection of the papers presented at the workshop on *Pan-European Co-operation towards Strong Inland Waterway Transport: On the Move* held in Paris on 22 and 23 September 2005. The purpose of the workshop was to establish what progress had been made since the Pan-European Conference on Inland Waterways in Rotterdam in 2001 in preparation for the Bucharest Ministerial Conference, scheduled for September 2006. The papers focus essentially on the development of the inland waterway market in a pan-European context, conditions of competition, infrastructure development and the environment. A summary of the discussions at the workshop and its conclusions are also given.

The workshop was jointly organised by the ECMT, UNECE, the Central Commission for Navigation on the Rhine and the Danube Commission.

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