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Working Party on Inland Water Transport

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WORKSHOPS ON INLAND NAVIGATION MATTERS

Note by the secretariat

Following the request by the Working Party on Inland Water Transport (TRANS/SC.3/168, para. 55), the secretariat reproduces below a Summary of discussion and conclusions of the Workshop on inland navigation issues organized jointly by the United Nations Economic Commission for Europe (UNECE), European Conference of Ministers of Transport (ECMT), Central Commission for the Navigation of the Rhine (CCNR) and Danube Commission (DC) in Paris on 22 and 23 September 2005.

The Working Party may wish to consider the conclusions made by the Workshop and decide on follow-up actions, where appropriate.

Discussion papers presented at the Workshop by its Rapporteurs may be consulted at the ECMT website: www.cemt.org.

PAN-EUROPEAN CO-OPERATION TOWARDS A STRONG INLAND WATERWAY TRANSPORT: ON THE MOVE

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 organizations, 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 (see document TRANS/SC.3/2001/10) adopted at the end of the Rotterdam Conference. The Declaration also envisages to convene a new Pan-European Conference in Romania 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. Organization 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 harmonization 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 a 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 the harmonization of a legislative framework in Europe, particularly in the field of technical, safety and manning regulations, has also been considerable. 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 which 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. 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. Some participants felt that the present institutional structure in the field of inland waterways was sufficient and that, instead, a closer cooperation 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

▪ 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 tonne-kilometres, 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 realized 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. Whilst the inland navigation traffic maintains at high levels in 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 tons, which is much below the 1988 level of 580 million tons. Recently both markets have, however, shown signs of recovery. 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 tons 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 hauliers 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 tons were carried by mixed sea-river vessels in the Russian Federation. As a result, almost all large shipping companies envisage the 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 Peninsula to Rhine market.

Development of efficient sea-river traffic would be facilitated much more 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 seaports. 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 the 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.

▪ **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 Ewaterway 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 transshipment, 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 always takes 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.

▪ **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 the 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 the deterioration of the 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.

▪ **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, the 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 cooperation of all stakeholders is required. The particular areas of cooperation 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. Cooperating 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.

▪ **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.

▪ **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 organizations.

5. Levelling the Playing Field

▪ Elimination of legal obstacles – “silent revolution”?

The Rotterdam Declaration invited the main European players to intensify efforts aimed at harmonization of technical, safety and manning requirements. It also invited to identify legislative obstacles that hamper the establishment of a harmonized 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 harmonized 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 harmonized 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 harmonizing regulations on technical specifications for vessels. As a result, there will be mutual recognition of ship's 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's certificates. The Danube and Rhine Commissions are also discussing the question of a harmonized regime for the verification of specific knowledge required for certain stretches of the rivers. Within UNECE, the Recommendations on Harmonized 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 ship's certificated by member States and encourage the further development of international transport by inland waterway. Much progress has been achieved also in the harmonization of rules for the carriage of dangerous goods.

There were, however, opinions that the harmonization 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 the 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.

▪ **Harmonization of private law**

There was an opinion that the level of harmonization in the field of international private river law is not sufficient. Better usage of 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 harmonized 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 harmonization tools, it is the task of Governments to ensure that the liability regime applicable on their territories guarantees effective compensation for damages caused.

▪ **Labour law and social protection**

The question of social harmonization 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 harmonizing 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.

▪ **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 the efficiency of international transport operations and, as a consequence, decrease the 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.

- **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, which are taken into consideration.

The topic of infrastructure charging aroused many controversies among participants. It was argued that the 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 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 organizations. 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 that 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 the 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 the 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 to make 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 the strong growth of transport demand in recent years, the growth of the 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 the 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 offer modern services of the highest quality. Taking on more economic responsibility by the industry itself would undoubtedly facilitate the effective promotion and marketing of inland navigation services.
- Since the problems faced by the inland waterway sector are numerous, there is a need from 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 also be 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 the increasing freedom of mutual access.
 - Mutual recognition of ships' certificates and boatmen's licences issued on the basis of internationally harmonized technical and safety standards should be achieved to facilitate international transport by inland waterway. Harmonization 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 harmonization 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 organizations 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 inland navigation.

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