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**INLAND TRANSPORT COMMITTEE**

Working Party on Inland Water Transport

Working Party on the Standardization of Technical  
and Safety Requirements in Inland Navigation

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**WHITE PAPER ON EFFICIENT AND SUSTAINABLE  
INLAND WATER TRANSPORT IN EUROPE**

**Note by the secretariat**

**I. INTRODUCTION**

1. At its fifty-second session, the Working Party on Inland Transport took note of the information provided by the secretariat on the second edition of the White Paper on Trends and Developments of Inland Navigation and its Infrastructure (ECE/TRANS/SC.3/181, para. 53). In preparing for this edition, the secretariat, with the help of a consultant, has drawn up a short overview of the status of inland water transport in several ECE countries that are not members of the European Union, namely the Russian Federation, Ukraine and Kazakhstan. In line with the preliminary draft outline of the White Paper (ECE/TRANS/SC.3/2008/18), the information collected includes the following:

- (a) Status and parameters of the inland waterway network;
- (b) Navigation density and the inland navigation fleet;

- (c) Qualitative trends in the development of the inland water transport market;
- (d) Institutional framework and legal regime;
- (e) Current national and regional transport strategies;
- (f) Strategic recommendations for achieving effective and sustainable inland water transport at the European level.

2. The Working Party may wish to familiarize itself with the information collected and to request the rest of the countries to submit the information required for the preparation of the White Paper.

## **II. INLAND WATER TRANSPORT IN KAZAKHSTAN**

### **A. Status and parameters of the inland waterway network**

3. In 2007 there were 4,052 km of navigable waterways in Kazakhstan. The inland waterways meet the sea basins at maritime ports. In order to develop port and service infrastructure, build up commercial and auxiliary fleets and ensure the safety of navigation, a programme for the development of sea transport from 2006 to 2012 is in progress. Work is continuing on the extension of the port of Aktau to the north, which should double the port's capacity to 23 million tons a year. As for river navigation, there are plans to update and modernize the State technical fleet, to renovate the hydraulic engineering structures and to refurbish vessel repair and construction facilities.

4. Navigation on inland waterways in Kazakhstan is permitted only if the vessel sails under the Kazakh flag. Navigation under the flag of a different country, in transit for example, is governed by international agreements ratified by Kazakhstan.

### **B. Navigation density and the inland navigation fleet**

5. There are 821 river vessels and 152 seagoing vessels on the State shipping registers. In 2007 the country's inland transport fleet comprised 116 vessels (130 in 2006), including 10 self-propelled barges (6 for dry cargoes and 4 tankers), 53 barges (49 for dry cargoes and 4 tankers), 46 tugs and pushers and 7 passenger vessels.

6. In all, the inland fleet in 2007 carried 1,288.8 thousand tons of cargo (1,260.4 thousand tons in 2006), with an overall freight turnover of 52.0 million ton-kilometres (39.9 million ton-kilometres in 2006). In 2007, 53,000 passengers were carried (42,600 in 2006), with a passenger turnover of 0.6 million passenger-kilometres (0.4 million in 2006).

### **C. Qualitative trends in the development of the inland water transport market**

7. The transport network has developed very unevenly, and this has hampered regional economic development. Approximately 2,000 villages in rural areas lack year-round transport connections. Overall, 69.3% of villages are served by transport. The poor technical condition and unreliability of both the inland water transport fleet and the hydraulic engineering structures are major problems.

8. The national transport strategy calls for the following in respect of inland water transport:

- (a) Partial updating and modernizing of the State technical fleet, bringing it up in numbers and standard to the level required to maintain the country's inland waterways properly;
- (b) Rebuilding the hydraulic engineering structures on inland waterways to a technical standard and throughput capacity that precludes risks and delays in inland navigation;
- (c) Upgrading the technical parameters of Kazakhstan's main navigable rivers so as to preclude accidents and delays during navigation;
- (d) Opening through traffic on the Irtysh river, and dredging the Ural-Caspian canal year-round, bringing the depth and other technical parameters throughout the navigable section to a level permitting vessels of the river-sea class to provide passenger and cargo through-service;
- (e) Preparing for the opening on the Irtysh river of a China-Kazakhstan-Russian Federation transit route;
- (f) Integrating inland water transport in the Caspian regions of the country into the North-South international transit route;
- (g) Creating bodies to ensure the safety of inland water transport.

**D. Institutional framework and legal regime**

9. In Kazakhstan, relations between State bodies and physical and legal persons in matters of navigation and passenger, baggage and cargo transport are governed by the Inland Water Transport Act, No. 574, of 6 July 2004, which also sets out the rights, obligations and responsibilities of the parties concerned.

10. Under the law, the basic principles governing inland navigation are the following:

- (a) Priority is given to safety of navigation and the protection of human life and health, nature and the environment;
- (b) Physical and legal persons carrying out work and providing services in inland water transport have equal rights;
- (c) Service users have free choice of carrier;
- (d) Prices for work and services performed are, in accordance with Kazakh legislation, not subject to restriction.

11. In view of the further liberalization of the transport market, the State will back private initiatives to develop the industry and to update and modernize privately owned vessels and infrastructure by creating favourable economic conditions and applying flexible legal, technical and fiscal policies.

12. The ports on inland waterways will be under the responsibility of the private sector. Environmental protection in the inland navigation system will be paid for with budget set-asides for waterway upkeep under a programme to maintain waterways and locks in a navigable state. Consequently, State investment will be crucial for both technical servicing and capital expenditure.

### **E. Current national and regional transport strategies**

13. The main strategic objectives and principles of the national transport strategy, which covers the period until 2015, are the following:

- (a) Integration of Kazakhstan's transport system into the worldwide transport system;
- (b) Establishment of a single, regionally-integrated transport space;
- (c) Creation of a modern, forward-looking transport infrastructure;
- (d) Development and effective exploitation of the potential for transit traffic;
- (e) Harmonization through regional and international organizations of national transport law with international legal requirements and standards.

14. Bearing in mind the increase in the number of vessels operating in the Kazakh sector of the Caspian Sea and in the Irtysh basin, the rolling transport strategy for 2011-2015 calls for a new shipyard to be built and ship repair facilities to be renovated in order to meet forecast demand. For the further development of inland water transport to meet increased passenger and cargo traffic, there are plans to open new navigation routes, some with bordering States. A model for port management will be drawn up and gradually introduced in which commercial functions will be transferred to stevedore companies, with the port authority still in charge of supervisory and regulatory tasks.

### **F. Strategic recommendations for achieving effective and sustainable inland water transport at the European level**

15. The strategic recommendations of an overall plan to achieve effective and sustainable inland water transport at the European level on the basis of the national transport strategy may be summed up as follows:

- (a) Improvement of the State transport regulation system;
- (b) Creation and development of transport infrastructure;

- (c) Development of the transport services market;
- (d) Regional development of the transport system;
- (e) Improved safety in transport;
- (f) More effective exploitation of transit potential;
- (g) Innovative development in the transport field;
- (h) Improved scientific and supervisory potential in the field of transport.

### **III. INLAND WATER TRANSPORT IN THE RUSSIAN FEDERATION**

#### **A. Status and parameters of the inland waterway network**

16. There are 101,600 kilometres of inland waterways in the Russian Federation. In the European part of the country a single, 6,500-kilometre deep-water system has been created.

17. The E 50 waterway in the Russian Federation, along with its branches, is classed as a category-E inland waterway of international importance under annex I to the European Agreement on Main Inland Waterways of International Importance (AGN). The Belomorsko-Baltiyskiy canal, the segment of the Don river from Azov to Kalach and the Volga-Donskoi navigation canal are also Russian inland waterways of international importance as integral parts of the E 60 coastal route from Gibraltar to Sankt-Peterburg and on to Arkhangelsk and the E 90 coastal route from Gibraltar to Azov and Astrakhan. There remains a strategic bottleneck on these waterways at the mouth of the Volga river (E 50), from the Gorkovsky hydroelectric complex to Nizhny Novgorod, owing to the insufficient draught on approach to the Gorodetsky lock.

18. In 2007, the 101,600 km of inland waterways in the country were equipped with navigational facilities as follows: with guaranteed clearance for navigation: 43,619.1 km (10,600 km more than in 2006), of which 22,341.1 km was equipped with lights, 7,648 km with light-reflecting equipment and 13,630.0 km was unequipped.

19. Under article 23 of the Code of Inland Water Transport of the Russian Federation, navigation on inland waterways in the country is permitted only under the flag of the Russian Federation. Individual vessels flying foreign flags may be allowed to sail on inland waterways with the authorization of the Russian Government, including for transit. Under the outline plan for the development of the country's inland water transport approved by the Russian Government by order No. 909-r of 3 July 2003, preparations are gradually being made to open Russian inland waterways to vessels flying foreign flags. There had been plans to complete such preparations on the segments from Azov to Astrakhan in 2007, and from Volgograd to Sankt-Peterburg in 2010. At this point, those plans have not been realized.

## **B. Navigation density and the inland navigation fleet**

20. In 2008, there were 28,200 vessels listed in the Russian River Register (RRR), including 1,066 river-sea vessels and 107 newly constructed vessels. In accordance with the Register's Guidelines for the renewal of registration of inland and mixed river-sea navigation vessels (R.002.2002), 43 vessels were refurbished.

21. River transport serves 68 of the constituent entities of the Russian Federation, including 42 provinces, and is also used for foreign carriage. Every year, inland water transport carries some 130 to 140 million tons of cargo, with a turnover of 80 to 90 billion ton-kilometres, and approximately 20 million passengers, with a passenger turnover of 880 million passenger-kilometres. Inland water transport accounts for about 4% of all transport in the country, but in certain segments of the cargo market its share is quite substantial: over 80% of cargoes delivered to districts in the Far North are carried by inland water transport. There are plans for inland water transport to play a major role in the "North-South" international transport corridor; such transport may reach up to 20 to 25 million tons for transit alone.

22. The volume of cargo carried by inland water transport in 2007 was 152.4 million tons (an increase of 9.5% over 2006), with a turnover of 83.7 billion ton-kilometres (3.5% less than in 2006). Of these, domestic carriage accounted for 131.3 million tons (12.4% more than in 2006) and international navigation 21.1 million tons (5.8% less than in 2006).

23. In 2007, river ports handled 225 million tons of cargo, or 17.6% more than in 2006; this included 17.5 million tons of exports, 1.4 million tons of imports and 206.6 million tons of domestic cargo. Handling of exports increased by 21.7%, of imports by 14.3% and of domestic cargo by 17.3%.

24. The growth in domestic inland water transport in 2007 is explained by a longer navigation season in the river basins and an increase of 12.5% in the absolute volume of dry goods carried (principally cement, metals, timber and building materials), and also by an increase in the transport of timber rafts.

## **C. Qualitative trends in the development of the inland water transport market**

25. The main objective in developing the country's inland water transport is to make it a modern, highly effective and reliable transport sector. The outline plan for the development of inland water transport in the Russian Federation includes the following basic tasks:

- (a) Improving navigation conditions on inland waterways, taking into consideration the prospects for developing the market for inland water transport services and increasing safety demands;
- (b) Developing the fleet to meet the needs of a growing market: under the Guidelines for the renewal of the fleet (R.002.2002), which entered into force on 1 January 2003, there are two levels for the refurbishment of vessels, with separate requirements for hulls, machinery, equipment and electrical fittings. The corresponding elements are

considered to be in the same technical state as on a new vessel with a designed service life of 20 years after 5 years of service in the case of level 1, and after 10 years of service in the case of level 2. Other efforts to renew the inland fleet include the application of the R.003-2003 Guidelines on the construction of inland and mixed river-sea vessels employing elements of vessels currently in use, which entered into force as from 30 June 2003;

- (c) Rebuilding ports and redesigning port activity. In the European part of the country there are plans to set up logistic centres at existing ports. The infrastructure development plan for Russian ports will make it possible by 2015 to bring overall cargo volume up to 325 million tons;
- (d) Establishing and developing economically independent ship-operating companies that are able to attract investment, by stimulating the restructuring and reform of enterprises in the sector, boosting efficiency and fostering the integration and formation of major, competitive companies while ensuring competition in the inland water transport market. In 2007, over 2,000 licence-holders carried out shipping activities;
- (e) Improving State management of the inland water transport market and extending cooperation with related modes of transport by introducing qualitatively different logistics and transport technology, intermodal transport in particular;
- (f) Ensuring the safety, including environmental safety, of inland navigation, and promoting insurance in the sector.

#### **D. Institutional framework and legal regime**

26. Inland water transport is managed on three levels: the Ministry of Transportation and Communications; federal services; and federal agencies. The Ministry has become the centre for strategic planning; it is the body that draws up the law. The federal services have been assigned monitoring and supervisory tasks. Beneath the federal sea and inland transport agency come the local administrative bodies - the State basin administrations for waterways and navigation (GBUVPS). The new structure has been in operation since 2004.

27. The Code of Inland Water Transport is the document that governs relations between and sets out the respective rights of inland water transport organizations, consignors, consignees, passengers and other physical and/or legal persons. It was adopted by the State Duma on 7 February 2001 and approved by the Federation Council on 22 February 2001.

28. The technical requirements for inland navigation vessels and mixed river-sea vessels appear mainly in the RRR Regulations governing the classification and construction of inland and river-sea vessels, which take broad account of the requirements set forth in international agreements, above all the annexes to ECE Resolution No. 61, "Recommendations on Harmonized Europe-Wide Technical Requirements for Inland Navigation Vessels". The Regulations came into force on 31 March 2003, and are currently being revised.

29. Requirements concerning navigation safety are mainly found in the Regulations governing navigation on the inland waterways of the Russian Federation (PPVVP), approved by order of the Minister of Transportation and Communication on 14 October 2002. The general provisions of the Regulations are based on the Code of Inland Water Transport; the wording of many articles is identical. The Regulations stipulate that traffic on inland waterways is to be controlled by the State basin administrations.

30. The Regulations themselves are largely based on the European Code for Inland Waterways (CEVNI), although there are some cardinal differences. These relate in the main to signs and signals for vessels passing under bridges, additional signs and signals used during the carriage of dangerous goods, and signs and signals for pushed convoys. PPVVP is structured quite differently from CEVNI.

31. One significant difference consists in the way the VHF band is used for radio communication on Russian inland waterways; the frequency ranges that are used differ. Specifically, for traffic control and communications between vessels, the 300.025-300.500 MHz and 336.025-335.500 MHz ranges are used instead of the 156.025-162.025 MHz band in use on western European waterways. The question of switching over to the frequencies used by the maritime mobile service is under consideration.

32. Regulations governing the environmental safety of vessels are an integral part of the RRR Regulations. Standards for the treatment of oil- and discharge-laden effluent on inland navigation vessels and river-sea vessels in inland navigation are based on the values set out in the Instructions for the prevention of pollution of inland waterways during operation of vessels (RD 152-011-00); they take ECE recommendations and, in the case of mixed river-sea navigation vessels, the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), into account. Transport safety and the protection of transport infrastructure are addressed by the federal Transport Safety Act adopted by the State Duma on 19 January 2007 and by the Federation Council on 2 February 2007. The protection of hydraulic engineering structures and navigation aids is addressed by the Regulations approved under Government order No. 690 of 21 November 2005.

#### **E. Current national and regional transport strategies**

33. Significant investment in development (about 4.8% of gross domestic product) will be required to bring the Russian transport system to the desired level of quality. A number of investment projects have been drawn up under the federal programme for the modernization of the Russian transport system (2002-2010) and the Transport Strategy of the Russian Federation for the period until 2020; these include the construction of second lock chambers on the Volga-Donskoi canal, an investment project for the Volga-Baltiyskiy waterway and a scheme for radically improving navigation conditions on the Volga river between Nizhny Novgorod and the Nizhegorodsky hydroelectric complex.

**F. Strategic recommendations for achieving effective and sustainable inland water transport at the European level**

34. In principle, ensuring effective, reliable inland water transport at the European level will require the same qualitative improvements in the inland water transport market as those set out in the outline plan for the development of the country's inland water transport, described above.

35. Improving the institutional framework for inland navigation remains a major task. The research done by the high-level group of independent experts commissioned by the Governments of the Netherlands, Germany, Belgium, France and Switzerland in 2004, the communication by the European Commission on the Integrated Programme of Action for the Promotion of Inland Waterway Transport (NAIADES) in 2006, the Declaration issued in 2006 by the Pan-European Conference on Inland Waterway Transport entitled "Inland transport: A key element of the future pan-European transport system", and a series of documents produced by other forums addressing this question have not yet produced any practical steps for the improvement of inland water transport institutional structures in Europe.

36. There are also legislative barriers to be overcome. These include limits on the right of foreign vessels to carry goods and passengers, and restrictions on access to and the use of inland waterways and ports; differences in technical requirements for vessels; differences in the requirements for obtaining the documents to sail a vessel; differences in the required composition of crews, numbers of crew members and work and rest times; and restrictions on the movement of the workforce employed in inland water transport.

37. Very often, infrastructure development plans for inland waterways run up against resistance from public opinion, even though water transport is considered to be environmentally preferable to the alternatives, road and rail transport. This resistance can be explained by the fact that the development of inland waterways can seriously affect the environment, especially if investments are made with no effective consultation or involvement of civil society and non-governmental organizations. Precisely for this reason, environmental questions have been given the utmost attention at the most diverse international forums devoted to transport, such as the Pan-European Conference on Inland Waterway Transport held in Bucharest in 2006, the Integrated Programme of Action for the Promotion of Inland Waterway Transport (NAIADES) of the European Union and the Study on the Development of Infrastructure and Protection of the Environment of the European Conference of Ministers of Transport. Studies recommend that all interested parties should be involved at the earliest stages of a project, so that environmental information can be used when design, location and financing alternatives are considered.

38. Lastly, it is all too clear that the conventions and agreements adopted by ECE have had only a weak influence on the achievement of reliable inland water transport. Leading countries in inland navigation have not become party to certain important agreements, for example, Germany, France and Austria (AGN and CMN) and the United Kingdom of Great Britain and Northern Ireland (AGN, CMN and ADN).

#### **IV. INLAND WATER TRANSPORT IN UKRAINE**

##### **A. Status and parameters of the inland waterway network**

39. Of Ukraine's total of 160,000 km of watercourses, Ordinance No. 640 of 16 June 1996 designates as waterways 2,996.2 km, on 13 rivers and 2 estuaries, in 16 regions. Some 1,900 km of inland waterways in 11 regions are now actually in use. The rest have been temporarily taken out of operation owing to a fall in the volume of local traffic in recent years and a lack of the wherewithal to maintain the necessary depths on various segments of the rivers.

40. Ukraine has 1,417.8 km of waterways in AGN category E, some of which run along the main rivers (the Dnipro, Danube, Pivdenny Buh and Dnestr rivers). The country's inland waterways break down as follows, by class: 62.5 km of class IV, 83.0 km of class Va, 828.0 km of class Vb, 172.3 km of class VII, and 35.0 km of sea-vessel segment. Two segments, on the Desna (198 km) and Dnestr (39 km) rivers, have been assigned to class III, but are ranked in the ECE "Blue Book" as international waterways because there are plans to upgrade them.

41. The country's inland navigation waterways are generally State-controlled. There are exceptions, for example the Romanian-Ukrainian segment of the main Danube channel, with a length of 54.4 km, from the Ukraine-Moldova border to the Ismail Chatal cape; it falls within the scope of the Convention concerning the Regime for Navigation on the Danube, and is a segment with the status of an international river. And 105 km of the Kilia and Old Istanbul arms are classed as border rivers; here the left bank belongs to Ukraine and the right bank to Romania.

42. Questions of navigation on Ukrainian inland waterways by vessels flying foreign flags are governed by a special ordinance of 6 March 1992 on the opening of Ukrainian river ports to calls by non-military foreign vessels. There are eight ports open to foreign vessels - Zaporizhye, Dnipropetrovsk, Kyiv, Kremenchuk, Mykolaiv, Nova Kakhovka, Kherson and Cherkassy. Vessels flying the flag of a country with which Ukraine has concluded international agreements on inland navigation may call at these ports, as may vessels that have obtained single-use, temporary authorizations.

##### **B. Navigation density and the inland navigation fleet**

43. At the end of 2006, there were 924 vessels in the Ukrainian inland navigation fleet, including 54 tankers, 752 dry cargo vessels and 118 passenger vessels with an overall deadweight of 1,067,400 tons, an overall power output of 147,200 kW and a total passenger capacity of 20,100.

44. Inland water transport accounts for only a small share of cargo transport by all modes of transport in Ukraine; just 14 million tons out of 1,873 million tons overall (0.8%), and 6.3 billion ton-kilometres, out of a total of 494.6 billion ton-kilometres (1.3%) in 2006. In 2006 the average journey of one ton of cargo by inland transport was 441 km, which is comparable to the figure for rail transport (503 km). For international carriage by inland water transport, the average journey has usually been significantly higher; in 2006 it was 933 km. In 2007 overall turnover of cargoes in river ports broke down as follows: 19.7% for foreign trade, 80.3% for domestic shipping.

45. Between 1990 and 2000 the volume of cargo transported in Ukraine by inland navigation decreased more rapidly (by 87%) than the corresponding figure for all cargo (which decreased by 75.4%). However, starting in 2000 and for the next six years, inland water transport grew more rapidly (by 69%) than transport on the whole (19%). This bears witness to the care taken in recent years to develop a particularly advantageous (inexpensive, environment-friendly, etc.) mode of transport.

46. These figures still do not represent the full potential of inland navigation ports, which used to accomplish significantly more. This can be seen from the indices for the Ukrainian ports on the Danube, where operations are most closely related to international shipping.

47. Between 1990 and 2006, carriage of passengers by inland water transport fell from 19 million to 2 million persons; for the past seven years it has been stable. The average length of voyage per passenger was 30 km in 2006. However, for international travel it was many times higher, at 1,282 km.

### **C. Qualitative trends in the development of the inland water transport market**

48. In 2006 the length of navigable inland waterways in Ukraine with guaranteed depths came to 1,230 km (56%); 2,200 km (100%) of waterways were equipped with navigation signs; 1,140 km (52%) with lighting and light-reflecting signs, and 1,100 km (50%) with electrified or gas-operated automatic or non-automatic equipment. The number of figures in the 50 to 56% range indicates that there is significant scope to improve operating parameters on inland waterways, the main ones - the Dnipro and the Danube - in particular.

49. To improve safety on the Dnipro, in 2008 the State Central Navigation Safety Inspectorate carried out a comprehensive check of such factors as safety regulations, seaworthiness, the safety of hydraulic engineering structures (such as locks), the condition and organization of communication equipment and the safety of vessels passing under bridges.

50. Efforts to improve safety on the Ukrainian segment of the Danube are based on the plans of the Danube Commission, which take into consideration the Basic Provisions relating to Navigation on the Danube (DFND) and their harmonization with the European Code for Inland Waterways (CEVNI). The same is true of recommended technical requirements for vessels and the introduction of the River Information System and other international safety standards on the Danube.

51. There are currently over 200 companies operating sea and river vessels. It is primarily Ukrainian vessels that carry cargoes on inland waterways. The fleet is being retired as it ages; to expand it, there are plans to offer Ukrainian shipowners benefits related to vessel construction, subsidies, and tax breaks for Ukrainian shipyards filling orders from Ukrainian shipowners. It is noticeable, however, that western lenders are also attracted by this process.

52. The new Shipping Register of Ukraine Rules on the classification and construction of vessels for inland and for mixed navigation, which entered into force on 1 January 2006 and 1 January 2007 respectively, should facilitate the establishment of a modern national inland

transport fleet. In drawing them up, Ukrainian experts consulted international conventions and agreements, including resolutions of the International Maritime Organization, the regulations on the classification and construction of vessels for the Danube basin, the corresponding regulations of the Russian River Register and the Rhine Vessels Inspection Regulations.

53. In recent years, the Ukrrechflot ship operating company has added to its “river-sea” fleet using not only its own resources but also a credit line extended by the European Bank for Reconstruction and Development. There are plans for a vessel in the dry-cargo estuary vessel class, with a capacity of between 5,000 and 6,000 tons and a draught of 5.5 metres, to be used for “river-sea” traffic through the estuary ports on the Dnipro (Kherson), Pivdenny Buh (Mykolaiv) and Danube (Ismail, Reni). Modernized Europe-II type barges will remain the main type of non-self-propelled vessel for container transport on the Danube over the next few years.

54. Despite the increase in the volume of cargo carried by inland water transport since 2000, the latest figure (14 million tons) is still far short of the 1990 level (66 million tons). To increase the volume of cargo and the number of passengers carried on inland waterways in domestic and international (including transit) carriage, besides adding inland and mixed-navigation vessels to the national fleet and encouraging domestic vessel construction, planned measures include reserving cargoes for Ukrainian carriers (quotas), refining the State regulation system to make the domestic fleet more competitive, providing guaranteed grants from local budgets (chiefly for passenger transport other than cruises) and setting economic conditions to stimulate the carriage of goods in transit.

55. The national carrier status for sea and inland ship operating companies was introduced by a special ordinance of 12 June 2001. The established procedure for awarding this status sets out mandatory criteria to be met by a carrier that is a legal entity in Ukraine. These include possession of a licence to engage in specific types of transport services, the use of a fleet sailing under the Ukrainian flag, and compliance with the quality standards of the International Organization for Standardization. Two major Ukrainian companies carrying passengers and cargo on inland waterways and by sea, Ukrainian Danube Line (UDP) and Ukrrechflot, are national carriers.

56. In the longer term, the Dnipro may play a significantly greater role in European inland navigation once the countries concerned establish inter-basin navigation links between it and the Daugava and from the Dnipro to the Vistula and the Oder. These ideas are now being discussed by the ECE SC.3 Working Party.

57. Despite the significant growth in cargo turnover in most Ukrainian inland navigation ports between 2000 and 2007, the development and successful integration of the entire sector into the European transport system depends on solutions being found to some problems with port management. These include:

- (a) State regulation and supervision of the setting and use of port fees;
- (b) Development of the physical facilities at ports (which need to meet international standards);

- (c) Establishment of a clear interface between ports and all modes of transport, cargo owners, shippers, transport operators and other stakeholders in the transport process;
- (d) Establishment of a single transport information, analysis and logistics system.

58. A significant number of the laws relating to the safety of navigation, the operation of domestic waterways, hydraulic engineering structures, the fleet and the ports have already been adapted to meet European standards. Some are at the consultation or drafting stage (for example, the inland water transport bill and the rules on the prevention of pollution of inland waterways by vessels). If Ukraine accedes as planned to AGN, it will have to draw up a number of other laws in line with European standards on subjects including the following:

- (a) Supervision of the safety and reliability of hydraulic engineering structures on waterways and in ports;
- (b) Technical planning standards for inland navigation ports;
- (c) A system of standards by which to determine the extent and cost of the works necessary to maintain hydraulic engineering structures etc. to the requisite technical level.

59. A breakdown of river vessels by age reveals one of the most urgent problems facing Ukraine's inland water transport: 58.5% are over 20 years old, and among tankers, the figure rises to 83.3%. Vessels under 5 years old account for barely 1.7% of the fleet. The Ukrainian fleet needs to be modernized.

#### **D. Institutional framework and legal regime**

60. The way in which inland water transport in Ukraine is institutionally managed is set out by the Regulations governing the Ministry of Transport and Communications of Ukraine. The Ministry is the central executive body enforcing State policy in the transport sector. For sea and inland transport, the Government body is Ukrmorrechflot, the State Department of Sea and River Transport, which operates under and reports to the Ministry.

61. Once adopted, the Inland Water Transport Act will be the main instrument governing relations among those involved in inland water transport; for the time being, as indicated above (para. 58), it is still in the process of adoption.

62. The technical requirements for inland water transport vessels are given in the Regulations on the classification and construction of inland water transport vessels of the Shipping Register of Ukraine, and the technical requirements for mixed-navigation vessels are in the Shipping Register's Regulations on the classification and construction of mixed-navigation vessels. The Regulations on the classification and construction of seagoing vessels govern the classification and construction of other types and designations of vessels, including passenger vessels.

63. Shipping safety requirements are set out in the Regulations on navigation on inland waterways, issued by the Minister of Transport and Communications on 16 February 2004; the main provisions appear in sections 6 (Rules of the road) and 7 (Berthing rules). Ukrainian laws on the safety of navigation are based largely on CEVNI.

64. To supplement these Regulations, the Minister of Transport and Communications on 14 June 2007 issued an order on the navigability of Ukrainian inland waterways. The purpose is to establish a single inland waterway navigation system through a comprehensive programme of works, equipping waterways with onshore and floating navigation aids in accordance with State standard GOST 26600.98, "Signs and signals for inland waterways" (adopted in Belarus, Kazakhstan, Moldova, the Russian Federation and Ukraine), charting inland waterways, dredging and cleaning channel beds, and collecting and circulating information on changes in navigation conditions to vessel owners.

65. Environmental questions in inland navigation are governed by the Regulations on the classification and construction of inland water transport vessels, specifically by part IV, "equipment for the prevention of pollution from vessels", the various sections of which set out the requirements for four types of on-board equipment (equipment for collecting oil-polluted water and oil residues, devices and fittings to prevent pollution by garbage, etc.). The Regulations also set out requirements for vessels' exhaust fumes and noise emissions.

#### **E. Current national and regional transport strategies**

66. Among the most important projects already in progress or to begin in the near future are the following:

- (a) A major overhaul and updating of all locks on the Dnipro that are between 25 and 78 years old;
- (b) Replacement of navigation equipment, additions to the self-propelled and non-self-propelled fleets and development of technical facilities on the Dnipro inland water transport route;
- (c) Development of sea and transport facilities in the Ukrainian Danube region;
- (d) Establishment of a reliable navigation link between the Danube (Kilia arm) and the Black Sea. At various times, there have been four such links in Ukrainian territory. In May 2004 a working project was adopted for a deep-water link between the Danube and the Black Sea through the Bystroe arm; construction began immediately, and continued until May 2005; following some interruption, it resumed in 2006. At the same time as the deep-water channel is being built from the Danube to the Black Sea, the feasibility of yet another project is under consideration: the construction of a 9.1 km locked waterway from the Solomonov branch to Bazarchuk creek and Zhebriyansk bay.

#### **F. Strategic recommendations for achieving effective and sustainable inland water transport at the European level**

67. Major outcome documents (such as the Rotterdam and Bucharest declarations and the plans of action for their implementation, the communication by the European Commission on the Integrated Programme of Action for the Promotion of Inland Waterway Transport (NAIADES), the list drawn up in the SC.3 Working Party of legislative obstacles impeding the establishment

of an internal water transport market, etc.) have been and will remain policy-setting instruments for the foreseeable future as the community of European States undertakes to update inland water transport and take advantage of its full potential.

68. In addition to the priorities set by the above documents, it is necessary in international organizations to reactivate a series of projects, mostly of interest to a limited number of countries, through the efforts of experts from such countries: for example, the partially completed studies done for the SC.3 Working Party on the Dnipro-Daugava (Ukraine, Belarus, Latvia) and Dnipro-Vistula-Oder (Ukraine, Belarus, Poland) links, and the development assessment for a Danube, Dnipro-Volga, Caspian through-route (Russian Federation, Ukraine).

69. It will be impossible for the European countries to conduct a concerted inland water transport policy if the countries concerned do not become active participants in international agreements and organizations. Some means must be found in each organization to prompt States to take an interest in the work and give full effect to decisions.

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