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Economic Commission for Europe**Inland Transport Committee****Working Party on Inland Water Transport****Working Party on the Standardization of Technical
and Safety Requirements in Inland Navigation****Thirty-eighth session**

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Item 4 (a) of the provisional agenda

**Special editorial session on the White Paper on efficient
and sustainable inland water transport in Europe****Chapter 1: Importance and performance of inland water
transport in the ECE region****Note by the secretariat****I. Mandate**

1. At its fifty-fourth session, the Working Party on Inland Water Transport (SC.3) approved, in principle, the draft White Paper on efficient and sustainable inland water transport in Europe of the United Nations Economic Commission for Europe (UNECE), but noted that some additional comments from the delegations would be forwarded to the secretariat by 15 November 2010. SC.3, therefore, requested the Working Party on the Standardization of Technical and Safety Requirements in Inland Navigation (SC.3/WP.3) to hold a special editorial segment during its thirty-eighth session to finalize the paper in time for the seventy-third session of the UNECE Inland Transport Committee to be held from 1 to 3 March 2011 (ECE/TRANS/SC.3/187, para. 12).

2. In accordance with the request of SC.3, the Working Party may wish to consider any last editorial corrections, to the text of introduction and Chapter 1 on importance and performance of inland water transport in the ECE region.

II. Introduction

3. In 1996, the then Principal Working Party on Inland Water Transport of the UNECE published a “White Paper on trends in and development of inland navigation and its

infrastructure” (TRANS/SC.3/138) to reflect its discussions on the development of a coherent navigable waterway network in Europe.

4. The White Paper analyzed the situation of inland water transport (IWT) in Europe and presented the existing regimes of navigation on European inland waterways. The paper also identified the factors having an impact on the perspectives for inland navigation and described the first steps in the development of the network of European inland waterways through the establishment of the European Agreement on Main Inland Waterways of International Importance (AGN). The paper highlighted the general trend towards the declining use of IWT, in the context of the rapid expansion of the road transport, and put forward policy recommendations aimed at stopping and reversing this trend.

5. The 1996 White Paper became a reference publication on IWT development in Europe. In 2006, the Transport Ministers at the third pan-European Conference on Inland Water Transport in Bucharest considered that regular publication of such a policy document would help overcome market fragmentation of inland water transport in Europe and establish the principle of free navigation on inland waterways at the pan-European level. They called on the UNECE to proceed to preparing the new White Paper in close cooperation with the European Commission, River Commissions and other major stakeholders. This decision was endorsed by the UNECE Inland Transport Committee in February 2006 as part of the Action Plan for implementation of the decisions of the Bucharest Conference (ITC Resolution No. 258).

6. The second edition of the White Paper was initiated in 2007 by the UNECE Working Party on Inland Water Transport (SC.3) with the goal to assess the situation of inland water transport in the ECE region, using the first White Paper as a benchmark for tracing the progress or lack of thereof in the IWT development. The overall objective of the new White Paper was identifying the key areas of pan-European cooperation which could further promote this largely under-used mode of transport. To reflect the increasing efficiency and sustainability concerns the Working Party modified the title of the publication to “White Paper on Efficient and Sustainable Inland Water Transport in Europe”.

7. The paper was prepared under the guidance of SC.3 and benefited from supervision and inputs from a special Peer Review Board, composed of representatives of the European Commission, River Commissions and other competent organizations. The final draft was adopted, in principle, by the SC.3 fifty-fourth session of 13 to 15 October 2010 and finalized at the special editorial meeting of 16 to 18 February 2011. The final paper was submitted for the endorsement of the seventy-third session of the UNECE Inland Transport Committee of 1 to 3 March 2011.

8. In accordance with its scope and purpose, the present White Paper is structured as follows: Chapter 1 provides a brief introduction on the importance and performance of IWT in the UNECE region, comparing it with the situation described in the 1996 White Paper. Chapter 2 presents the current state of the European network of inland waterways of international importance, highlighting the changes in the extent and the quality of the network since its formalisation in the 1996 AGN agreement. Chapter 3 analyses the institutional and regulatory aspects of inland navigation, identifying the main progress in this areas and the remaining challenges. Building on the analysis provided in the first three chapters, the concluding chapter 4 gives a general appreciation of the results of more than a decade of IWT policies, sets out key elements of a pan-European vision for efficient and sustainable inland water transport and suggests possible follow up actions by SC.3.

III. Chapter 1: Importance and Performance of Inland Water Transport in the ECE region

9. Twenty-seven out of fifty-six current UNECE member States possess inland waterways of international importance which play or could play an important role in international freight and passenger traffic. The current chapter gives a brief overview of the importance of IWT in the freight transport in the region and highlights the overall trend in its development since the publication of the 1996 White Paper.

A. The place of inland water transport in international freight transport

10. The place of IWT in overall freight transport operations in ECE member countries varies greatly both between the countries and within their borders. As shown in the table below, the amount of goods transported by IWT is usually fairly modest when compared with other modes of inland transport, such as rail and road.

Table 1
Freight transport in the selected UNECE countries (2007)
(million t-km)

	<i>Inland waterways freight</i>	<i>Road freight</i>	<i>Rail freight</i>	<i>Total inland freight transport</i>
Austria	2 597	18 648	21 371	49 842
Belarus	93	19 200	47 933	67 226
Belgium	9 006	42 085	8 148	60 733
Bulgaria	1 711	5 890	5 241	13 262
Croatia	109	10 502	3 574	15 966
Czech Republic	898	48 141	16 304	67 422
Finland	102	25 963	10 434	36 499
France	8 830	207 025	40 502	277 498
Germany	64 716	343 439	114 615	538 594
Hungary	2 212	13 174	10 137	31 246
Lithuania	11	20 278	14 373	35 694
Luxembourg	345	587	287	1 219
Netherlands	41 868	32 867	7 216	87 534
Poland	1 338	159 527	54 253	238 631
Romania	5 325	23 927	15 757	46 858
Russian Federation	86 027	205 849	2 090 337	3 523 108
Serbia	1 584	1 161	4 551	7 748
Slovakia	1 004	27 050	9 647	37 701
United Kingdom	140	175 851	21 300	207 520

Source: OECD

11. The IWT in the European Union (EU) carried 143 billion t-km in 2008. Belgium (9 billion t-km), Germany (64 billion t-km) and the Netherlands (46 billion t-km) together accounted for more than 83 per cent of this traffic. According to a recent study by the

UNECE secretariat on the status of inland water transport in the selected UNECE countries, which are not members of the EU,¹ in the Russian Federation the volume of cargo carried by inland water transport in 2007 was 152.4 million tons (an increase of 9.5 per cent over 2006), with a turnover of 83.7 million t-km (3.5 per cent less than in 2006). Of these, domestic carriage accounted for 131.3 million tons (12.4 per cent more than in 2006) and international navigation 21.1 million tons (5.8 per cent less than in 2006). In Kazakhstan, 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 t-km (39.9 million t-km in 2006). In Ukraine in 2006 just 14 million tons out of 1,873 million tons overall were transported by IWT, and 6.3 million t-km, out of a total of 494.6 million t-km (1.3 per cent) in 2006.

12. The IWT share in the total amount of transport operations (modal split) usually represents of the importance of this mode of transport. Around 5.8 per cent of all goods transported in the 27 EU countries were carried on inland water vessels in 2007 (rail and road transport carry 76 per cent and 18 per cent respectively). However, countries with all year open and efficient navigable waterways have considerably higher shares of freight transport by inland waterways (Belgium (15 per cent), Germany (12 per cent) and the Netherlands (36 per cent)). In the Russian Federation, under difficult meteorological conditions, inland waterways account for around 2 per cent of total goods transport. But in certain segments of the cargo market its share is quite substantial: over 80 per cent of cargoes delivered to districts in the Far North are carried by inland water transport. In Ukraine this share is only 1.3 per cent with the concentration of the heaviest use of IWT in the Kiev and Odessa regions. In the United States of America, approximately 12 per cent of all intercity freight (excluding coastwise transportation) moves by shallow-draft barge. Another 4 per cent of intercity freight is moved on the Great Lakes, putting the total domestic waterborne transportation total at about 16 per cent. This freight is moved at only 2 per cent of the total cost of freight movements in the country.

Table 2
Modal split in the selected UNECE countries (2007)
(percentage in total inland freight t-km)

	<i>Inland Waterways</i>	<i>Road</i>	<i>Rail</i>
EU-27	5.8	76.2	18.0
Austria	4.2	60.9	34.8
Belgium	14.9	69.7	15.3
Bulgaria	4.8	70.0	25.1
Croatia	0.8	74.0	25.2
Czech Republic	0.1	74.7	25.3
Finland	0.3	73.9	25.9
France	3.4	80.9	15.7
Germany	12.4	65.7	21.9
Hungary	4.6	74.5	20.9
Lithuania	0	58.5	41.5
Luxemburg	3.4	93.8	2.8
Netherlands	35.1	59.4	5.5
Poland	0.1	73.5	26.4

¹ ECE/TRANS/SC.3/WP.3/2009/13, 3 December 2008.

Romania	9.8	71.3	18.9
Slovakia	2.7	71.8	25.5
United Kingdom	0.1	86.6	13.3

Source: Eurostat

13. In 2008–2009, transport performance on European inland waterways declined in the order of 15 to 25 per cent due to the economic and financial crisis that hit particularly the steel industry and led to a severe reduction in transport demand for coal, iron ore, metal products, but also for port hinterland transport of containers.

B. Evolution of inland water transport performance since mid-1990s

14. Comparison of IWT performance in absolute terms with the situation in 1990 as described in the 1996 White Paper reveals contrasting trends. The most significant growth can be observed in several Danube countries. The bulk of this growth is very recent and is linked to the end of the disruption of traffic on the Danube. The growth in Romania (+71 per cent) relates to large-scale expansion and improvement of the port of Constanza and its satellite terminals at Midia, both served directly by IWT through the Danube-Black Sea Canal and its northern branch. The same applies to Bulgaria (+133 per cent), Croatia (+230 per cent) and Hungary (+76 per cent), yet with much smaller volumes. Then come the countries with stable networks and stable overall economic conditions applicable to IWT, which show substantial growth over this period: Belgium (55 per cent), France (15 per cent) and the Netherlands (19 per cent) are in the fore, while Germany shows stability (1 per cent) after having achieved higher growth than the other countries of the same group between 1990 and 1995. The high overall volume and the strength of this group are a good indicator for continuing IWT expansion, once the present economic and financial crisis is over. Altogether, these four countries account for some 60 per cent of total European IWT, including the Russian Federation. The growth in Austria (27 per cent) relates both to the opening of the Main-Danube Canal and, lately, to the revival of through traffic on the Danube.

Table 3

Freight transport by inland waterway (1000 million t-km)

	1970	1990	1995	2000	2005	2007	2007/1995 per cent change
Austria	1 293	1 663	2 046	2 444	2 760	2 597	27
Belarus	1 224	1 805	133	26	90	93	-30
Belgium	6 734	5 448	5 807	7 313	8 719	9 006	55
Bulgaria	1 832	1 606	733	397	1 532	1 711	133
Croatia	253	527	33	63	119	109	230
Czech Republic			1 319	773	779	898	-32
Finland	0	70	77	118	75	102	32
France	12 728	7 581	7 649	9 110	8 905	8 830	15
Germany	48 813	54 803	63 982	66 466	64 096	64 716	1,15
Hungary	1 760	2 038	1 260	891	2 110	2 212	76
Italy	350	118	135	170	89	94	-30
Lithuania	120	164	18	1	1	11	-39

Luxemburg	300	336	331	373	337	345	4
Netherlands	30 741	35 662	35 098	41 271	42 225	41 868	19
Poland	2 295	1 034	876	1 173	1 277	1 338	53
Romania	1 346	2 090	3 107	2 634	5 146	5 325	71
Russian Federation	163 870	213 949	90 872	70 988	87 173	86 027	-5
Serbia	3 504	3 232	336	980	1 622	1 584	371
Slovakia			1 468	1 383	680	1 004	-32
Switzerland	139	196	160	124	124	128	-20
Ukraine		11 925	5 680	5 898	6 315	5 670	-0,2
United Kingdom	300	200	200	210	170	140	-30
Total	277 602	344 447	221 320	212 806	234 344	233 808	6

Source: OECD

15. As documented in the 1996 White Paper, traffic levels in many Eastern European countries showed a marked decline after their change from centrally planned economies to the new “free market”. This shows in the figures for the Czech Republic, Lithuania, Poland, the Russian Federation, Serbia, Slovakia and Ukraine. The situation has turned around and increases are observed today in practically all of these countries. The decline observed in Italy, Switzerland and the United Kingdom of Great Britain and Northern Ireland does not reveal any significant trend, since the traffic concerned – and the distances covered – are relatively small.

16. In terms of the modal split, however, there is a slight decline in comparison with the mid-1990s in most of the countries in the region.

Table 4

Modal split in the selected UNECE countries (1995–2007)
(percentage in total inland freight t-km)

	<i>Inland Waterways</i>			<i>Road</i>			<i>Rail</i>		
	1995	2000	2007	1995	2000	2007	1995	2000	2007
EU-27		6.6	5.8		73.7	76.2		19.7	18.0
Austria	4.9	4.5	4.2	63.5	64.8	60.9	31.6	30.6	34.8
Belgium	9.7	10.9	14.9	77.4	77.4	69.7	12.9	11.6	15.3
Bulgaria		2.6	4.8		52.3	70.0	45.2	25.1	25.1
Croatia	1.0		0.8	38.4		74.0	60.6		25.2
Czech Republic	0.8	0.2	0.1	57.5	68.0	74.7	41.6	31.9	25.3
Finland	0.2	0.3	0.3	72.3	75.8	73.9	27.5	24.0	25.9
France	2.8	3.4	3.4	76.5	76.0	80.9	20.7	20.6	15.7
Germany	17.2	15.5	12.4	63.9	65.3	65.7	18.9	19.2	21.9
Hungary	6.1	3.1	4.6	58.3	68.1	74.5	35.6	28.8	20.9
Lithuania	0.1	0	0	41.6	46.6	58.5	58.2	53.4	41.5
Luxemburg	5.3	4.4	3.4	85.9	87.8	93.8	8.9	7.9	2.8
Netherlands	33.6	32.9	35.1	63.6	63.4	59.4	2.9	3.7	5.5
Poland	0.7	0.9	0.1	42.6	56.9	73.5	56.7	42.2	26.4
Romania	6.6	7.9	9.8	42.0	42.9	71.3	51.4	49.1	18.9

Slovakia	3.5	5.3	2.7	63.7	53.0	71.8	41.7	25.5	25.5
United Kingdom	0.1	0.1	0.1	92.3	90.0	86.6	7.6	9.8	13.3

Source: Eurostat

17. The recent study of the EU and the non-EU Danube countries concluded the existence of a global trend consisting in the increasing importance of the road transport at the expense of inland navigation. The study notes that the IWT share in the EU countries dropped by more than one per cent between 1995 and 2010. Among the four EU countries (Belgium, Germany, the Netherlands and France), representing around 88 per cent of the IWT market, the place of IWT deteriorated in all but one of them (Belgium) and some of the Danube countries (Romania and Serbia, above all) experienced a drastic decline. While some long-term forecasts established for the EU predict 50 per cent increase of the modal split by 2030, other EU and national models are much more pessimistic, predicting, at best, that the current very modest market share will remain stable.²

18. It is certain that the geographic factor has a defining impact on the IWT place at the national and regional levels. The two main international inland waterways in Western Europe remain the Rhine and the Danube where around 310 and 73 million tons of goods were carried in 2008 respectively. The Rhine and Danube riparian countries, therefore, present higher degrees of the IWT use.

19. However, expert studies reveal the importance of national and regional transport policies (in particular, infrastructure investment policies) and economic and geographical factors (closeness of raw materials-intensive industries and power stations). For instance, the Danube countries perform quite differently while enjoying comparable natural conditions.³

20. To account for both the importance of the geographical factor and the local economic and political factors this paper offers in the following chapter a detailed analysis of the IWT use in the region, using as a basis the main stretches of the network of inland waterways of international importance, as codified by the 1996 European Agreement on Main Inland Waterways of International Importance (AGN).

² EU/Central Commission for the Navigation of the Rhine, "Inland Navigation in Europe: Market Observation", 2010–2011, Fact Sheet 2: Evolution of the modal position of inland navigation, p. 32.

³ *Ibid.*, p. 32.