

Inland waterways freight transport - quarterly and annual data

After recovery in 2010 another renewed decline for inland waterways transport in 2011.

In brief

- EU inland waterways transport performance in millions of tonne-kilometres (TKm) in 2011 is 4.9% lower than in 2010.
- Total EU inland waterways transport declined in the fourth quarter of 2011.
- In 2011, the weight of goods transported on EU inland waterways increased for national and international transport.
- Container transport decreased by almost 11% in the fourth quarter of 2011.
- 'Metal ores and other mining and quarrying products; peat; uranium and thorium' (NST2007 – goods group 03) account for the highest share in total goods transport in 2011.
- Transport performance of 'Self-propelled barges' responsible for more than 50% of the total in the EU.
- 'Self-propelled barges' are mainly used for goods transport in the Benelux countries and Germany.

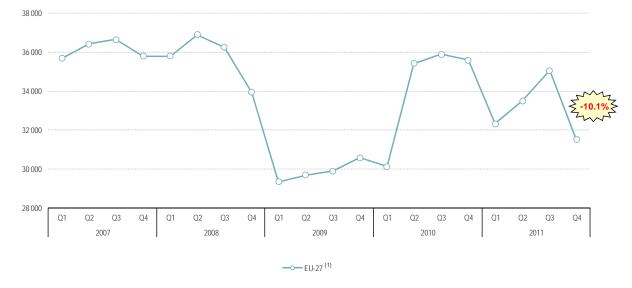


Figure 1: Quarterly transport performance of goods on inland waterways in EU-27 - Mio TKm

(¹) Transit transport reported by Bulgaria and Romania has been excluded to provide comparability over time for the series presented *Source:* Eurostat (online data code: <u>iww_go_qnave</u>)



Drop of total EU inland waterways transport in 2011

			200)9			201	0		2011				
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
EU-27 ⁽¹⁾		30 379	30 678	31 500	32 174	32 713	38 012	38 707	38 500	34 984	35 774	36 745	33 028	
Belgium	BE	1 804	1 669	1 708	1 906	2 056	2 302	2 204	2 507	2 323	2 358	2 264	2 309 pe	
Bulgaria ⁽¹⁾	BG	143	148	155	167	1 322	1 454	1 590	1 683	1 388	1 212	887	824	
Czech Republic	CZ	8	13	6	7	6	12	13	11	10	11	11	9	
Germany	DE	13 512	14 299	14 127	13 714	13 510	16 436	16 450	15 883	13 013	13 782	15 329	12 904	
France	FR	2 083	2 167	2 197	2 263	2 348	2 385	2 317	2 424	2 051	2 377	2 381	2 226	
Luxembourg	LU	65	67	72	74	88	94	95	80	94	68	85	57	
Hungary	HU	460	383	474	514	488	626	690	589	523	502	488	327	
Netherlands	NL	8 982	8 732	8 709	9 235	9 098	10 467	10 386	10 306	11 520	11 634	11 669	11 271 pe	
Austria	AT	437	455	566	545	528	537	699	610	573	538	604	407	
Poland	PL	13	59	72	58	3	29	44	54	5	47	54	55	
Romania	RO	2 673	2 495	3 171	3 426	3 042	3 419	3 874	3 982	3 221	2 996	2 723	2 468	
Slovakia	SK	199	192	241	266	224	251	344	370	262	251	249	170	
Croatia ⁽²⁾	HR	14	16	17	11	13	10	19	14	12	14	10	10	

Table 1: Quarter	y transport	performance of	goods by c	country on	inland waterway	/s - Mio TKm
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 $\binom{1}{2}$ Quarterly transit transport was provided by Bulgaria only from 2010 $\binom{2}{2}$ Transit transport not provided

Source: Eurostat (online data code: <u>iww_go_gnave</u>)

Compared to the height of the global economic crisis a recovery is observed until the third quarter 2010 for inland waterways transport performance in TKm of EU ports (transit transport in Bulgaria excluded).

However, after the fall of about 9% between the fourth quarter of 2010 and the first quarter of 2011, transport performance recovered again in the following two quarters of 2011 followed by another drop of more than 10% in the fourth quarter of 2011.

These ups and downs confirm that the recovery of European port activity is relatively fragile, but at a higher level compared to the years of the global economic crisis.

Despite these fluctuations, the EU total in terms of transported volumes (in 1 000 tonnes) showed relatively stable values for all four quarters of 2011. The transported quantities in the European Union were higher than before the global economic crisis.

			200)9			201	10		2011				
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Belgium	BE	27 648	26 536	26 249	27 810	38 098	39 585	40 748	43 163	43 454	44 106	42 342	43 189 ^{pe}	
Bulgaria ⁽¹⁾	BG	1 029	1 176	1 459	1 166	3 555	4 267	5 389	5 161	3 853	4 078	3 531	3 002	
Czech Republic	CZ	176	245	176	208	125	231	256	220	188	237	254	231	
Germany	DE	49 965	49 775	51 614	52 514	51 375	60 016	59 934	58 283	53 697	56 142	59 250	52 876	
France	FR	15 789	17 456	17 097	17 659	17 228	18 689	17 961	18 869	15 914	17 976	18 505	16 075	
Luxembourg	LU	1 936	1 956	2 121	2 162	2 614	2 763	2 748	2 358	2 768	2 017	2 479	1 691	
Hungary	HU	2 157	1 681	1 769	2 139	2 149	2 717	2 755	2 332	2 000	1 999	1 853	1 323	
Netherlands	NL	68 234	68 185	65 887	69 210	68 719	79 057	78 449	77 841	85 342	88 237	86 775	83 896 ^{pe}	
Austria	AT	2 080	2 150	2 589	2 503	2 424	2 510	3 280	2 838	2 641	2 540	2 734	2 028	
Poland	PL	352	928	1 087	1 006	114	816	1 019	871	190	954	865	1 134	
Romania	RO	5 097	4 763	6 287	8 596	5 912	7 649	9 452	9 075	6 481	7 622	8 005	7 288	
Slovakia	SK	1 624	1 619	2 221	2 359	2 075	2 193	2 899	2 937	2 286	2 151	2 294	1 480	
Croatia ⁽²⁾	HR	125	130	181	96	95	70	209	140	133	138	126	105	

⁽¹⁾ Quarterly transit transport was provided only from 2010

(²) Transit transport not provided

Source: Eurostat (online data code: iww go gnave)

National transport performance increased while international transport performance slowed-down
Table 3: Transport performance of goods by type of transport on inland waterways - Mio TKm

		2008	2009	2010		20 ⁻	11			Growth rate	s 2010-2011	
		Total	Total	Total	National	Inter- national	Transit	Total	National	Inter- national	Transit	Total
EU-27 ⁽¹⁾⁽²⁾		145 287	129 805	148 148	35 750	73 291	31 800	140 840	6.2%	-3.9%	-16.5%	-4.9%
Belgium	BE	8 746	7 087	9 070	3 905	4 714	632	9 251	2.0%	2.0%	2.0%	2.0% ^p
Bulgaria ⁽³⁾	BG	2 890	5 436	6 048	42	412	3 856	4 311	0.3%	-23.7%	-29.4%	-28.7%
Czech Republic	CZ	28	33	43	21	22	-	42	26.7%	-18.5%	-	-1.3%
Germany	DE	64 056	55 652	62 278	10 405	33 184	11 438	55 027	-3.8%	-9.8%	-22.1%	-11.6%
France	FR	8 910	8 711	9 474	5 338	2 856	841	9 035	-0.7%	-6.2%	-20.4%	-4.6%
Italy	ΙТ	64	54	108	:	-	-	:	:	-	-	:
Lithuania	LT	12	3	3	:	-	-	:	:	-	-	:
Luxembourg	LU	367	279	359	-	5	300	305	-	-32.2%	-14.8%	-15.1%
Hungary	HU	2 250	1 831	2 393	4	751	1 085	1 840	4.4%	-25.4%	-21.5%	-23.1%
Netherlands	NL	45 296	35 656	40 286	12 146	26 430	7 738	46 314	22.2%	14.1%	7.7%	15.0% ^p
Austria	AT	2 359	2 003	2 375	88	1 241	794	2 123	21.3%	-7.9%	-16.8%	-10.6%
Poland	PL	277	202	130	106	55	0	161	51.1%	-7.7%	161.2%	24.1%
Romania	RO	8 687	11 765	14 317	3 599	3 541	4 268	11 409	4.7%	-35.0%	-21.5%	-20.3%
Slovakia	SK	1 101	899	1 189	4	79	848	931	5.1%	-63.9%	-12.3%	-21.7%
Finland	FI	80	61	76	90	-	-	90	19.2%	-	-	19.2%
United Kingdom	UK	164	133	:	:	-	-	:	:	-	-	:
Croatia	HR	842	727	940	19	27	646	692	-35.3%	2.2%	-27.0%	-26.4%

 (1) EU-27 does not include data for the United Kingdom in 2010 and for Italy, Lithuania and the United Kingdom in 2011
(2) Growth rates for national and total have been calculated excluding data for Italy, Lithuania and the United Kingdom
(3) Annual transit transport was only partially available in 2008 Source: Eurostat (online data code: iww_go_actygo)

In 2011, national transport performance in TKm increased by 6% while international transport performance decreased by nearly 4%.

However the weight of goods transported on EU inland waterways increased for both national and international transport.

Though, this was the case for the EU total transport volume. After an increase of more than 14% from 2009 to 2010, it increased again by more than 7% between 2010 and 2011. This was mainly due to a growth of national transport volumes in all EU countries except Slovakia. International transport volumes only increased in Belgium and the Netherlands showing similar rates to national transport.

The increase in total transport performance in Belgium, the Netherlands, Poland and Finland could not compensate for the downturn in all other EU countries listed in table 3.

Transport performance in TKm for national transport rose in all EU countries while it decreased for international transport. Only Belgium and the Netherlands were an exception, recording growth for both national and international transport performance. But at EU level as well as in all EU countries except France, Poland and Romania, inland waterways transport contribution to the total international trade of goods is more important than its contribution to national transport of goods. Germany (55 billion TKm) recorded the highest transport performance, followed by the Netherlands (46 billion TKm).

		2000	2009	2010		20			Growth rates 2010-2011			
		Total	Total	Total	National	Inter- national	Transit	Total	National	Inter- national	Transit	Total
EU-27 (1)(2)(3)		511 535	425 151	486 865	264 634	256 327	-	520 961	8.0%	6.6%	-	7.3%
Belgium	BE	130 350	108 243	161 594	49 808	114 297	8 800	172 906	7.0%	7.0%	7.0%	7.0% ^p
Bulgaria (4)	BG	10 956	17 104	18 372	1 579	2 666	10 219	14 465	10.2%	-13.7%	-26.2%	-21.3%
Czech Republic	CZ	752	804	833	510	401	-	911	37.3%	-13.1%	-	9.4%
Germany	DE	245 674	203 868	229 607	54 766	148 503	18 697	221 966	3.2%	-3.7%	-16.6%	-3.3%
France	FR	72 807	67 998	72 747	33 547	27 917	7 007	68 471	-0.8%	-7.3%	-20.3%	-5.9%
Italy	п	498	443	1 259	:	-	-	:	:	-	-	:
Lithuania	LT	146	74	98	:	-	-	:	:	-	-	:
Luxembourg	LU	10 984	8 172	10 467	-	867	8 089	8 956	-	-9.4%	-14.9%	-14.4%
Hungary	HU	8 829	7 745	9 952	37	4 275	2 863	7 175	23.2%	-31.9%	-21.5%	-27.9%
Netherlands	NL	344 797	271 497	304 298	105 159	193 501	45 427	344 086	13.6%	13.8%	9.0%	13.1% P
Austria	AT	11 209	9 322	11 052	565	7 110	2 268	9 943	23.8%	-9.6%	-16.9%	-10.0%
Poland	PL	6 101	3 374	2 820	1 879	1 262	2	3 143	21.4%	-0.8%	131.3%	11.5%
Romania	RO	30 295	24 743	32 088	16 386	6 052	6 958	29 396	10.9%	-33.1%	-15.9%	-8.4%
Slovakia	SK	8 371	7 823	10 103	58	3 221	4 932	8 211	-18.7%	-27.0%	-12.3%	-18.7%
Finland	FI	335	253	303	340	-	-	340	12.3%	-	-	12.3%
United Kingdom	UK	3 689	3 270	:	:	-	-	:	:	-	-	:
Croatia	HR	6 416	5 381	6 928	91	411	4 682	5 184	-37.0%	11.0%	-27.0%	-25.2%

Table 4: Transport of goods by type of transport on inland waterways - 1 000 tonnes

(1) EU-27 does not include data for the United Kingdom in 2010 and for Italy, Lithuania and the United Kingdom in 2011

 (2) Growth rates for national and total have been calculated excluding data for Italy, Lithuania and the United Kingdom
(3) To avoid double counting, the international transport for EU aggregates is calculated by adding the international loadings plus the international unloadings for which the loading country is not in the EU. Then the total transport is the sum of the national and international transport

(4) Annual transit transport was only partially available in 2008

Source: Eurostat (online data code: iww_go_actygo)

Container transport at the level before the global economic crisis

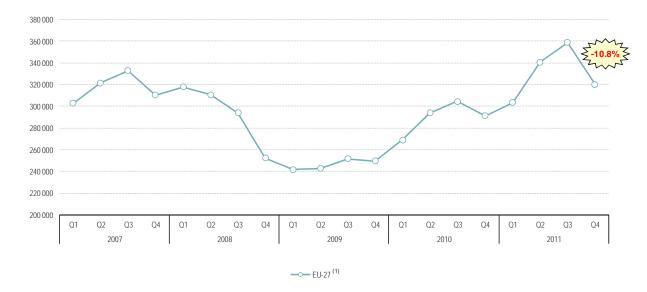


Figure 2: Quarterly transport performance of containers on inland waterways in EU-27(¹) - 1 000 TEU-Km

(¹) Transit transport reported by Bulgaria has been excluded to provide comparability over time for the series presented *Source:* Eurostat (online data code: <u>iww_go_qcnave</u>)

Movements in EU freight container transport followed a similar quarterly pattern to total transport up to the fourth quarter 2010. But contrary to total transport performance the uptrend for the container transport performance (expressed as TEU-km) already started in the first quarter of 2011, and reached a higher level than recorded before the global economic crisis in the third quarter of 2011. However in the fourth quarter of 2011 another decline was recorded. Compared with 2010, EU freight container transport performance in 2011 rose by 15.1% for loaded and 22.3% for empty containers giving a 17.1% rise in total. Total container transport performance in 2011 reached a level which is more than 7% above the value in 2007 before the global economic crisis. The largest contribution came from the Netherlands, which replaced Germany, the leading country in total container transport performance in previous years. This was mainly due to a doubling of transport of loaded containers in the Netherlands and a reduction of about 20% in Germany.

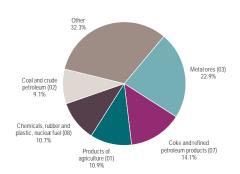
Table 5: Container transport performance on inland waterways - 1 000 TEU-KM

		2008	2009		2010			2011		Growth	n rates 2010	-2011
Container status		Total	Total	Loaded	Empty	Total	Loaded	Empty	Total	Loaded	Empty	Total
EU-27		1 174 884	987 112	831 168	329 816	1 160 983	956 510	403 375	1 359 885	+15.1%	+22.3%	+17.1%
Belgium	BE	61 417	55 036	48 652	13 116	61 768	53 698	14 477	68 175	+10.4%	+10.4%	+10.4%
Bulgaria (1)	BG	23	1 683	1 086	897	1 983	1 315	3 100	4 415	+21.1%	+245.6%	+122.6%
Czech Republic	cz	-	-	-	-	-	-	-	-	-	-	-
Germany	DE	615 684	531 975	499 160	138 715	637 876	398 204	181 054	579 257	-20.2%	+30.5%	-9.2%
France	FR	62 128	76 051	61 908	22 391	84 299	64 327	21 935	86 262	+3.9%	-2.0%	+2.3%
Luxembourg	LU	-	-	-	-	-	-	-	-	-	-	-
Hungary	HU	-	-	1	358	359	45	1 150	1 194	+7763.4%	+221.0%	+233.0%
Netherlands	NL	429 533	317 555	217 985	152 007	369 992	436 232	175 243	611 475	+100.1%	+15.3%	+65.3%
Austria	AT	1 240	1 063	-	420	420	-	558	558	-	+32.9%	+32.9%
Poland	PL	-	-	-	-	-	-	-	-	-	-	-
Romania	RO	4 559	3 662	2 376	1 864	4 240	2 687	5 765	8 452	+13.1%	+209.3%	+99.3%
Slovakia	SK	301	88	-	48	48	2	94	96	-	+97.8%	+101.2%
Croatia	HR	-	-	-	111	111	-	694	694	-	5	+525.0%

(¹) Annual transit transport was only partially available in 2008 *Source:* Eurostat (online data code: iww_go_actygo)

'Metal ores' is the most important individual goods category transported

Figure 3: EU-27⁽¹⁾ transport performance by main type of goods in 2011 on inland waterways - % in TKm

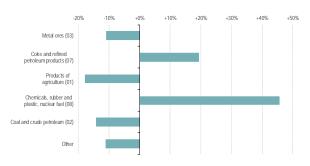


 $(^1)$ EU-27 does not include data for Italy, Lithuania and the United Kingdom

Source: Eurostat (online data code: <u>iww_go_atygo</u>)

At the EU level, the main types of goods (according to NST2007) transported are the categories 'other' and 'metal ores'. Together they account for more than half of all goods transport on EU inland waterways in 2011. Compared with 2010, the shares for these groups in total transport performance decreased by 2.3 and 1.6 percentage points respectively. This was also the case for 'agricultural products' (01) as well as for 'coal and crude petroleum products' (02) which decreased by 1.7 and 1.0 percentage

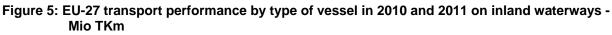
Figure 4: 2010-2011 growth rates of the main types of goods in the EU-27⁽¹⁾ on inland waterways - % in TKm

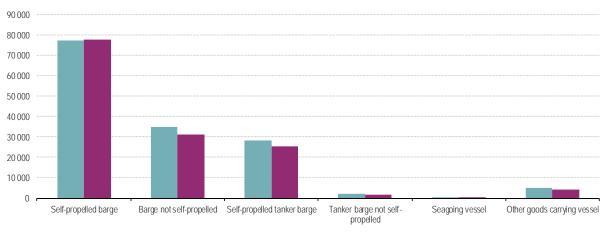


(¹) EU-27 does not include data for Italy, Lithuania and the United Kingdom Source: Eurostat (online data code: iww_go_atygo)

points respectively. Between 2010 and 2011 only 'coke and refined petroleum products' (07) with a growth of more than 19% and 'chemicals, chemical products, man-made fibers, rubber and plastic products, nuclear fuel' (08) with almost 46% recorded a rise in transport performance. As in 2010, the shares in total transport performance of 'coal and crude petroleum' (02), 'metal ores' (03), 'agricultural products' (01) and the category 'others' decreased in 2011.

Only self-propelled barges increased shares in total EU transport performance in 2011





2010 2011

Source: Eurostat (online data code: <u>iww_go_atyve</u>)

In 2011, either 'self-propelled barge' or 'barge not self-propelled' were the predominant types of vessel used for goods transport on EU inland waterways. The first vessel type was the only one which increased its total transport performance between 2010 and 2011. Out of the 13 countries, for which data are available, one of these two vessel categories transported the largest volumes in 6 countries each. 'Self-propelled barges' reached shares of more than 50% in total transport in the Benelux states and Germany, while 'barges not self-propelled' were the dominant element in most eastern European countries, with especially high shares in Poland and Romania (each more than 87%). The only exception was Slovakia where 'other goods carrying vessels' accounted for almost 56% of total goods transport.

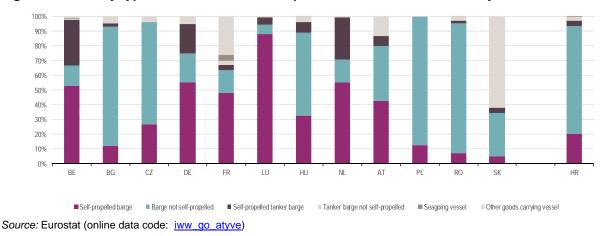


Figure 6: Share by type of vessel in total transport in 2011 on inland waterways - % in tonnes

METHODOLOGICAL NOTES

All figures presented in this publication have been extracted from the Eurostat online inland waterways transport database. The related datasets are collected according to the Regulation on statistics of goods transport by inland waterways of the European Parliament and the Council (EC) <u>No 1365/2006</u> implemented by the Commission Regulation <u>No 425/2007</u> and amended by the Commission Regulation <u>No 1304/2007</u>.

Data coverage

13 Member States are obliged to deliver data: Belgium (BE), Bulgaria (BG), Czech Republic (CZ), Germany (DE), France (FR), Luxembourg (LU), Hungary (HU), the Netherlands (NL), Austria (AT), Poland (PL), Romania (RO), Slovakia (SK) and the United Kingdom (UK). Following the requirements of the Regulation No 1365/2006 (article 2 point 3), the United Kingdom is delivering only a reduced annual dataset E1 (annex E of the Regulation 1365/2006).

On a voluntary basis, Italy (IT), Lithuania (LT) and Finland (FI) provide the reduced dataset E1 (annex E of the Regulation 1365/2006).

The acceding country Croatia (HR) is providing data according to the Regulation requirements.

Calculation of EU aggregates

EU-27:

When presenting quarterly data (Figures 1, 2 and tables 1, 2), EU-27 includes only Member States obliged to provide data.

When presenting annual transport of goods (Tables 3, 4 and figures 3 and 4), EU-27 includes data for all Member States providing data (mandatory and voluntary).

When presenting annual container data (Figure 2 and table 5), EU-27 includes only Member States obliged to provide data.

When presenting annual data by type of vessel (Figures 5 and 6), EU-27 includes only Member States obliged to provide data

<u>Calculation of EU-27 aggregates</u>: In Table 4, the EU-27 international and total goods transport in **tonnes** is calculated excluding double counting. The EU-27 total international transport is calculated by adding the international loadings plus the international unloading for which the loading country is not in the EU-27. Then, the EU-27 total transport is calculated by adding the national transport.

Definitions

<u>National inland waterways transport:</u> inland waterways transport between two ports of a national territory irrespective of the nationality of vessel.

<u>International inland waterways transport:</u> inland waterways transport between two ports located in different national territories. <u>Inland waterways transit:</u> inland waterways transport through a national territory between two ports both located in another national territory or national territories provided that in the total journey within the national territory there is no transshipment.

<u>Container</u>: transport equipment of a permanent nature, strong enough for suitable repeated use, specially designed to facilitate carriage of goods by one or more modes of transport, fitted with devices permitting its ready handling, to be easy to fill and empty of a length of 20 feet or more.

<u>TKm (Tonne-kilometer)</u>: Unit of measurement of goods transport which represents the transport of one tonne of goods over a distance of one kilometre.

<u>TEU (Twenty-foot Equivalent Unit)</u>: A statistical unit based on an ISO container of 20 foot length (6.10 m) to provide a standardized measure of containers of various capacities and for describing the capacity of container ships or terminals. One 20 foot ISO container equals 1 TEU.

<u>TEU-Km (TEU-kilometer)</u>: Unit of measurement representing the movement of one TEU over one kilometre.

Symbols

":" not available

"-" not applicable or real zero

"0" less than half of the unit used and thus rounded to zero

"p" provisional data

"e" estimated data

Country specific notes

Belgium: 2011 data are estimated and provisional. **Bulgaria:** Quarterly transit transport is available from 2010. Annual transit transport is available from 2008 but in 2009 the country implemented a new methodology for the collection of this kind of traffic. To allow comparability, transit traffic has been used for the calculation of 2009-2010 quarterly growth rates.

The Netherlands: 2010 and 2011 data are estimated and provisional.

Romania: From 2010 (quarterly data), and 2009 (annual data) the country has implemented a new methodology for the collection of transit data.

Croatia: Quarterly transit transport is not available.

Breakdown by group of goods

The NST 2007 classification consists of the following 20 goods divisions:

01 Products of agriculture, hunting, and forestry; fish and other fishing products.

02 Coal and lignite; crude petroleum and natural gas.

03 Metal ores and other mining and quarrying products; peat; uranium and thorium.

04 Food products, beverages and tobacco.

05 Textiles and textile products; leather and leather products.

06 Wood and products of wood and cork (except furniture); articles of straw and plaiting materials; pulp, paper and paper products; printed matter and recorded media.

07 Coke and refined petroleum products.

08 Chemicals, chemical products, and manmade fibers; rubber and plastic products; nuclear fuel.

09 Other non-metallic mineral products.

10 Basic metals; fabricated metal products, except machinery and equipment.

11 Machinery and equipment n.e.c.; office machinery and computers; electrical machinery and apparatus n.e.c.; radio, television and

communication equipment and apparatus; medical, precision and optical instruments; watches and clocks.

12 Transport equipment.

13 Furniture; other manufactured goods n.e.c.

14 Secondary raw materials; municipal wastes and other wastes.

15 Mail, parcels.

16 Equipment and material utilised in the transport of goods.

17 Goods moved in the course of household and office removals; baggage transported separately from passengers; motor vehicles being moved for repair; other non-market goods n.e.c.

18 Grouped goods: a mixture of types of goods, which are transported together.

19 Unidentifiable goods: goods, which for any reason cannot be identified and therefore cannot be assigned to groups 01–16.

20 Other goods n.e.c.

This publication was produced with the assistance of Volker Stabernak and Manuel Da Silva.

Further information

Eurostat website: http://ec.europa.eu/eurostat

Data on 'Transport statistics' <u>http://epp.eurostat.ec.europa.eu/portal/page/portal/transport/data/database</u> Select 'Inland waterways transport'

Further information about 'Transport statistics' <u>http://epp.eurostat.ec.europa.eu/portal/page/portal/transport/introduction</u>

Journalists can contact the media support service:

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European Statistical Data Support:

With the members of the 'European statistical system', Eurostat has set up a network of support centres in nearly every Member State and in some EFTA countries.

Their role is to provide help and guidance to Internet users of European statistics.

Contact details for this support network can be found on the Eurostat website at: <u>http://ec.europa.eu/eurostat/</u>.

All Eurostat publications can be ordered via the 'EU Bookshop': <u>http://bookshop.europa.eu/</u>.

Manuscript completed on: 19.10.2012 Data extracted on: 4.09.2012 ISSN 1977-0316 Catalogue number: KS-SF-12-042-EN-N © European Union, 2012