

# MARKET INSIGHT

INLAND  
NAVIGATION  
IN EUROPE

PUBLISHED IN  
**NOVEMBER**  
**2019**



**CCNR**

CENTRAL COMMISSION  
FOR THE NAVIGATION OF THE RHINE



**Market Insight**  
INLAND NAVIGATION IN EUROPE

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**November 2019**

Please find all our data at:  
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# TABLE OF CONTENTS

## 01

### **FREIGHT TRAFFIC ON INLAND WATERWAYS AND IN PORTS (P.5)**

Transport performance in Europe **(p.6)**

Transport volume in main IWT European countries **(p.13)**

Dry bulk, liquid bulk and container transport **(p.14)**

## 02

### **OPERATING CONDITIONS (P.19)**

Water levels and vessels' loading degrees in the Rhine basin **(p.20)**

Water levels and vessels' loading degrees in the Danube basin **(p.24)**

Freight rates in the Rhine basin **(p.27)**

Quarterly IWT turnover evolution per country in Europe **(p.30)**

## 03

### **FOCUS ON GERMANY (P.33)**

The 40 largest German inland ports **(p.34)**

Fact sheet IWT in Germany **(p.36)**

IWT sector in Germany within Europe **(p.38)**

Port of Duisburg and Port of Hamburg **(p.39)**



# 01

## FREIGHT TRAFFIC ON INLAND WATERWAYS AND IN PORTS

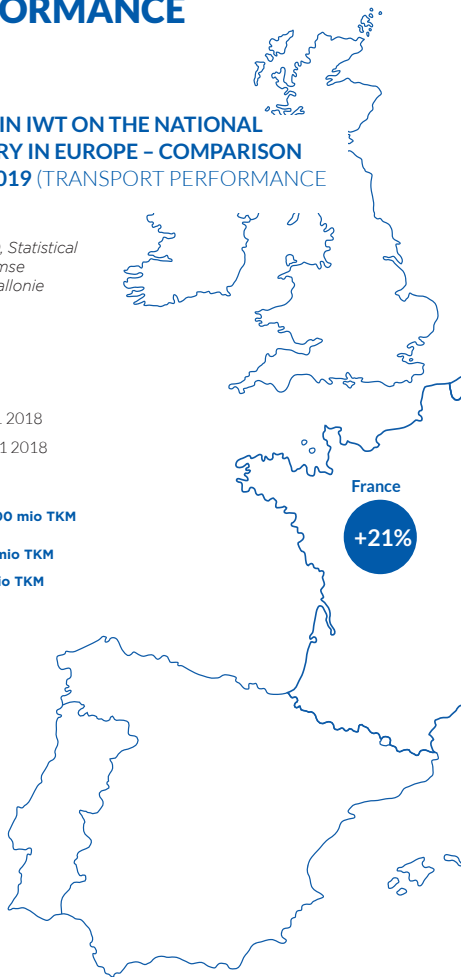
- Transport performance on inland waterways in the European Union in Q1 2019 recovered from the low water period in the second half of 2018. Indeed, with a value of 37.5 billion tonne-kilometres in Q1 2019, transport performance was 30 % higher than in Q4 2018, a period during which the Rhine, the Danube and the Elbe suffered heavily from low waters.
- Among the three countries with the highest IWW transport performance in the EU (Germany, the Netherlands, Romania) in Q1 2019, the growth rate in Q1 2019 compared to Q4 2018 was the highest in Germany (+62 %), which was mainly a result of the resumption of transports on the Rhine on a large scale.
- The EU IWW transport performance in Q1 2019 was also 5.5 % higher compared to the same quarter one year earlier (Q1 2018).

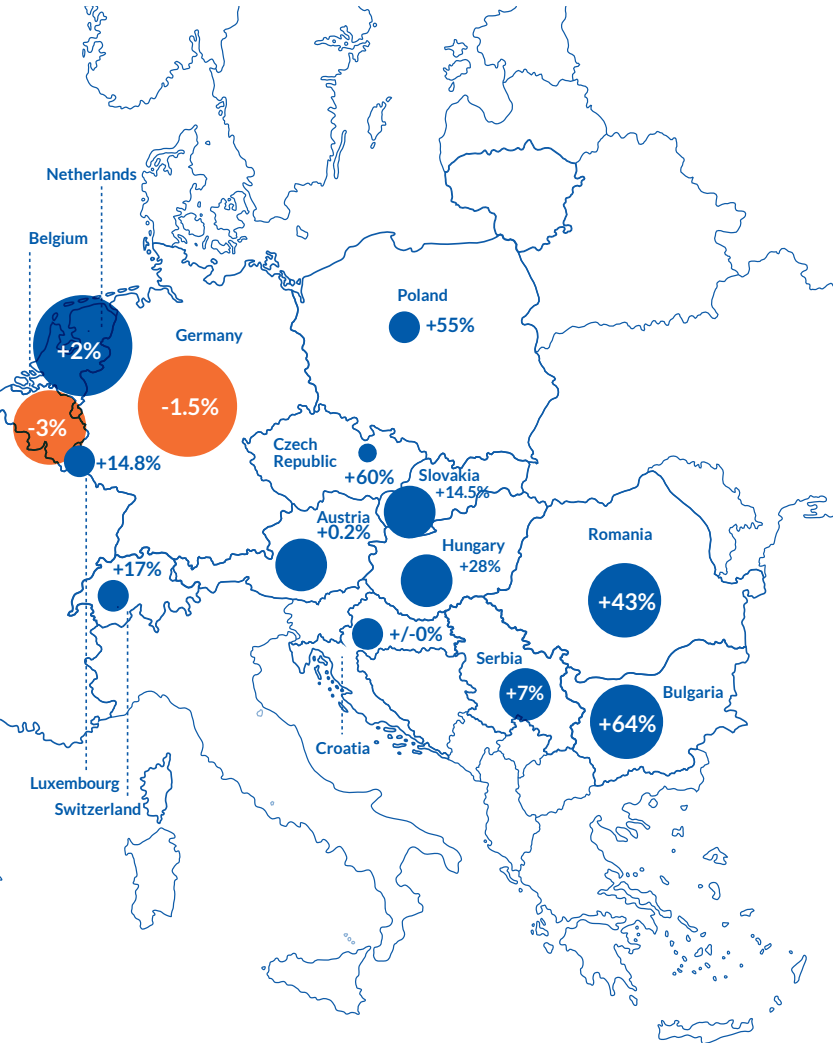
## TRANSPORT PERFORMANCE IN EUROPE

### TRANSPORT PERFORMANCE IN IWT ON THE NATIONAL TERRITORY OF EACH COUNTRY IN EUROPE – COMPARISON BETWEEN Q1 2018 AND Q1 2019 (TRANSPORT PERFORMANCE IN MILLION TKM)

Source: Eurostat [iww\_go\_qnave], OECD, Statistical Office of the Republic of Serbia, De Vlaamse Waterweg, SPW Service Public de la Wallonie

- Positive rate of change in Q1 2019 vs Q1 2018
- Negative rate of change in Q1 2019 vs Q1 2018



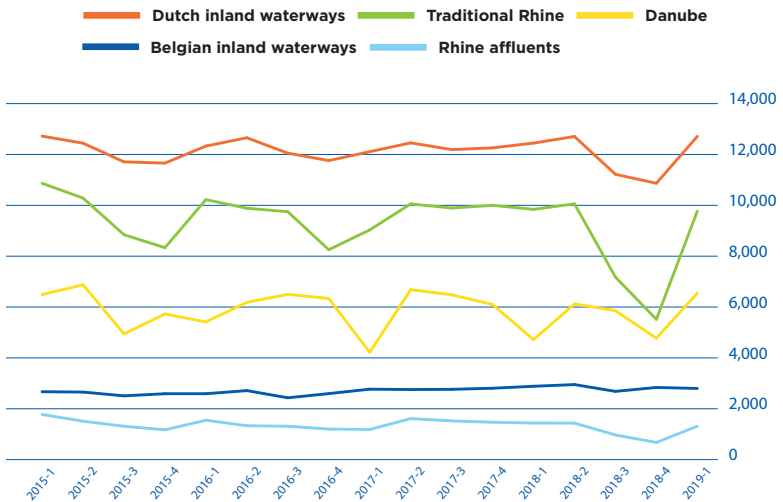


**FIGURE 1: INLAND WATERWAY TRANSPORT (IWT) PERFORMANCE ON THE RHINE, RHINE AFFLUENTS\*, DANUBE\*\*, BELGIAN AND DUTCH WATERWAYS (TRANSPORT PERFORMANCE IN MILLION TKM)**

Source: Eurostat [iww\_go\_qnave], OECD, Destatis, Stat.Bel, De Vlaamse Waterweg, SPW Service Public de la Wallonie

\*Traditional Rhine: Rhine from Basel to the German-Dutch border. Rhine affluents: Main, Moselle, Neckar, Saar

\*\*Danube: Transport performance in Austria, Slovakia, Hungary, Croatia, Serbia, Romania, Bulgaria

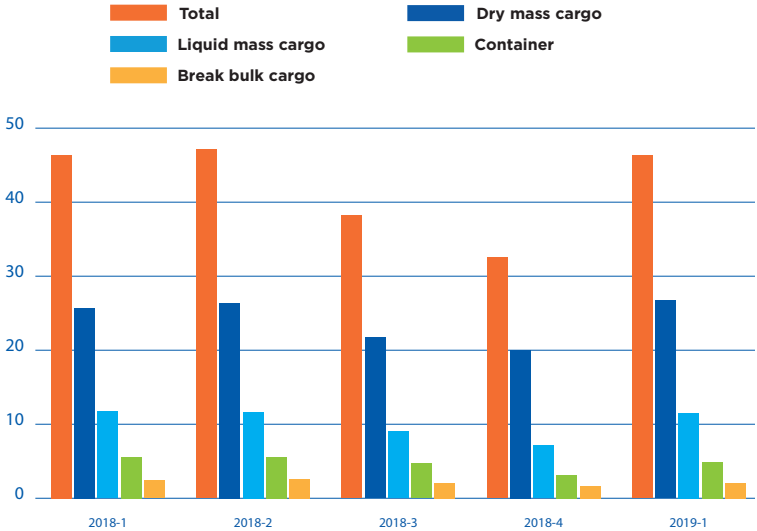


- Goods transport on Dutch inland waterways, the traditional Rhine and the Danube recovered from the low water period in the second half of 2018. On the Rhine, dry mass cargo made the strongest upward bound, as its transport performance was 3.9 % higher in Q1 2019 than in Q1 2018. It is possible that Q1 2019 dry and liquid cargo volumes also include the backlog volumes which were originally to be shipped in Q4 2018, thus contributing to this strong increase.



**FIGURE 2: GOODS TRANSPORT ON THE TRADITIONAL RHINE PER CARGO SEGMENT AND QUARTER (IN MILLION TONNES)**

Source: Destatis. Break bulk cargo or general cargo are goods that must be loaded individually, and not in intermodal containers nor in bulk.



- An exception from the recovery is container transport. Its performance on the traditional Rhine was still 11 % lower in Q1 2019 than in Q1 2018. Two main explanations can be found for this phenomenon.
  1. First, according to some main logistics operators, shippers are currently more reluctant to choose inland waterways for container transport than they had been before the low water crisis<sup>1</sup>. Indeed, compared to the dry and liquid mass cargo transport, where inland waterway transport is often the only possible mode of transport, containers can also be delivered by rail or road. This is also shown by the evolution of waterside container traffic in the Swiss Rhine ports. In the first half year 2018,

<sup>1</sup> Information by Danser France, Haeger & Schmidt Logistics, Contargo AG

a modal shift from rail to IWT had taken place due to the effects of the Rastatt accident (interruption of railway line on the Rhine axis). However, the low water period in the second half of 2018 led again to a modal shift, but this time it was a loss of market shares for inland waterway transport: the results of Rhine container traffic in the first half year of 2019 were 16 % lower than they had been in the first half year of 2018<sup>2</sup>.

2. A second reason for the weaker results in container traffic is the cooling off in economic framework conditions, notably of world trade, since the second half of 2018. This had a more important effect on container transport (which is more world-trade-oriented) than on mass cargo transports.
- The Danube also recovered from the low water period of 2018. Transport for the two main market segments - agricultural products and iron ores - registered remarkable growth rates in Q1 2019, not only with regard to the second half of 2018 but also with regard to Q1 2018.
  - Cross-border transport between Serbia, Croatia and Hungary registered a 30 % increase in Q1 2019 compared to Q1 2018 (source: Danube Commission), as did total inland waterway transport in Hungary (source: Eurostat). Booming upstream transport of iron ore and downstream transport of agricultural products were the underlying growth factors.
  - The Danube Commission market observation report for Q1 2019 also indicates that downstream traffic of grain - from the Middle Danube region of Hungary, Serbia and Croatia to the ports in Romania - doubled in Q1 2019 compared to Q1 2018. Better harvest results and a recovery of water levels were the main reasons for this increase. Other market segments on the Danube, such as mineral oil products and coal, registered a certain decline.
  - Product segments and their trends are also a major reason for

<sup>2</sup> Source: Swiss Rhine ports

the evolution of transport on Rhine affluents. Traffic on the Main, Moselle, Neckar is presented in the following chart. It shows that the two major eastern affluents of the Rhine (Main and Neckar) recovered from the low water period much better than the major western affluent, the Moselle. Traffic on the Moselle was, in Q1 2019, still well below the levels of Q1 and Q2 2018.

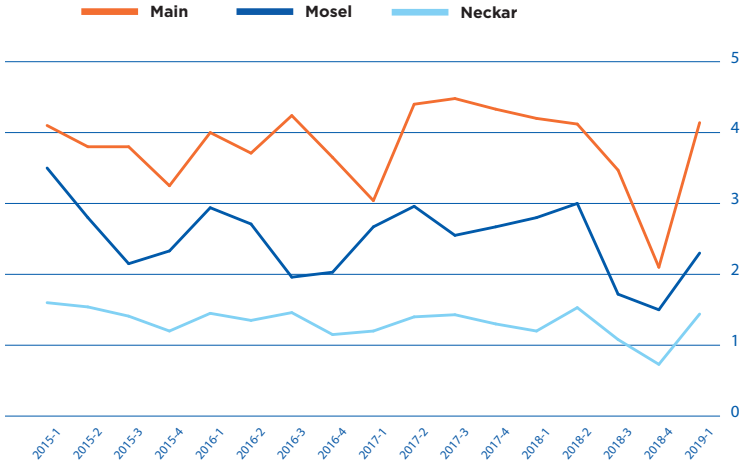
- An underlying cause can be found in the different trends on the level of goods between the Main and Neckar on the one hand, and the Moselle on the other hand. On the Main and Neckar, the largest goods segment is that of sands, stones and gravels, which reveals a growth orientated outlook (see chapter 9 of the 2019 annual market observation report)<sup>3</sup>.
- Coal transport on the Moselle, however, has decreased quite strongly in recent years without being compensated by other goods segments, such as agricultural products, ores and steel, which have been rather stagnant. The energy transition and the decrease in coal transport are therefore major challenges for inland waterway transport on the Moselle.

<sup>3</sup> See: CCNR / EC (2019), Annual Report of Market Observation 2019, chapter 9: [https://inland-navigation-market.org/wp-content/uploads/2019/11/ccnr\\_2019\\_Q2\\_en-min2.pdf](https://inland-navigation-market.org/wp-content/uploads/2019/11/ccnr_2019_Q2_en-min2.pdf)



FIGURE 3: QUARTERLY INLAND WATERWAY TRANSPORT ON RHINE AFFLUENTS (IN MILLION TONNES)

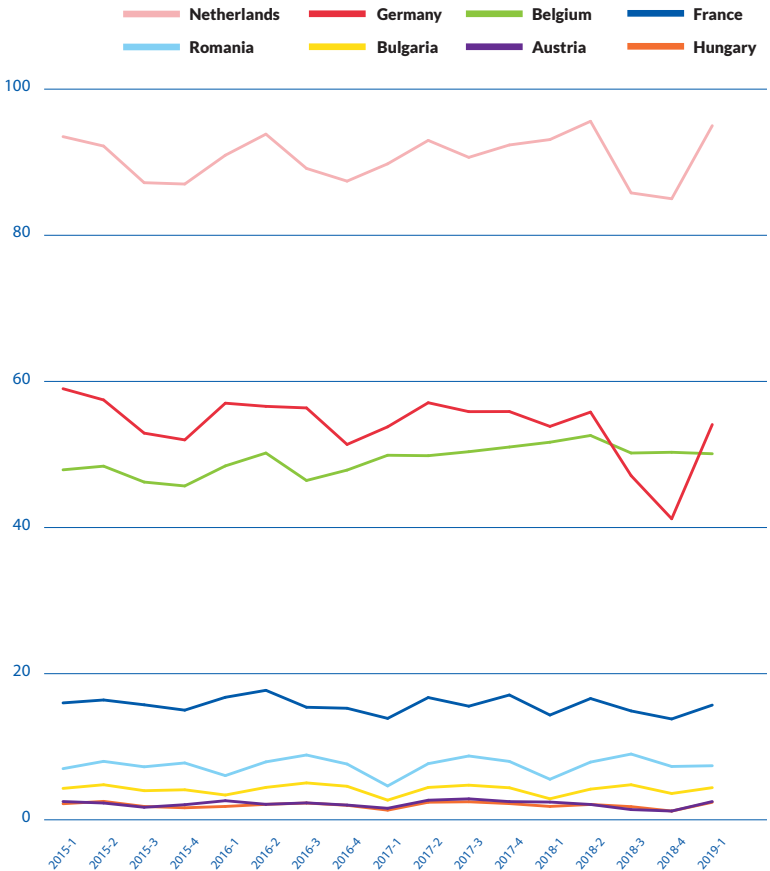
Source: Destatis



## TRANSPORT VOLUME IN MAIN EUROPEAN IWT COUNTRIES

FIGURE 4: INLAND SHIPPING TRANSPORT VOLUME IN MAIN EUROPEAN IWT COUNTRIES (QUARTERLY DATA - IN MILLION TONNES)

Source: Eurostat [iww\_go\_qnave], National Statistical Offices and Belgian Waterway Administrations

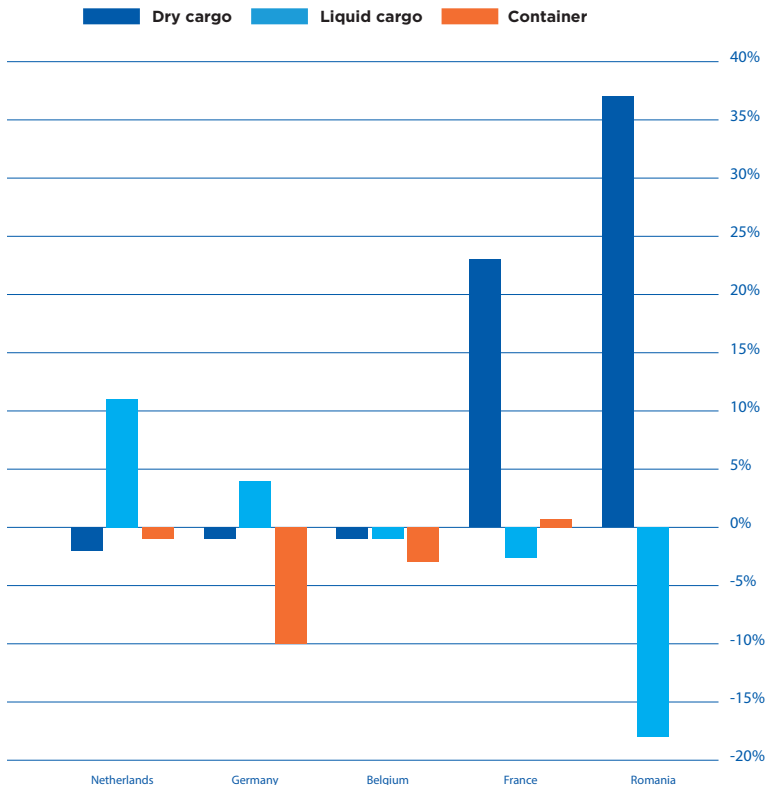


## DRY BULK, LIQUID BULK AND CONTAINER TRANSPORT

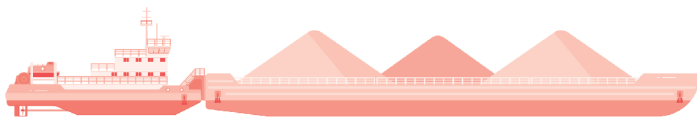
**FIGURE 5: RATE OF CHANGE IN INLAND SHIPPING TRANSPORT VOLUME (TONNES) IN FIVE MAJOR IWT COUNTRIES (Q1 2019 VS Q1 2018 - %)\***

Source: CBS, Destatis, StatBel, De Vlaamse Waterweg, SPW Service Public de la Wallonie, VNF, Romanian Institute of Statistics

\* In Romania, container transport is almost non-existent and is therefore not depicted in the graph.



- France witnessed a very strong increase in dry cargo transport in Q1 2019. This is also confirmed by figures from *Ports de Paris*: inland waterway traffic in the largest French port was 32.8 % higher in the first six months of 2019 compared to the same period in 2018 and reached 12.7 million tonnes.
- For sands, stones and building material, which is the largest product segment in *Ports de Paris*, an inland waterway traffic of 9.8 million tonnes in the first half year 2019, compared to around 7.3 million tonnes in the first half year 2018 (+34 %), is observed. A main reason for this increase is the *Grand Paris Express* project, which integrates inland vessels for the construction of new metro lines<sup>4</sup>. In addition, during the first half of 2018 floods on the Seine reduced cargo transport.
- In the Netherlands and Germany, the common feature in Q1 2019 was a recovery of liquid cargo transports. Container transport in Germany has not been able to reach the level it had in the first half of 2018 so far (see the explanations on Rhine transport on page 9 and 10).
- Romania's strong growth in dry cargo is due to a recovery of its large segments: agricultural products (+85 %), iron ore (+15 %) and construction material (+62 %). As confirmed in the Danube Commission market observation report<sup>5</sup>, this very large growth in agricultural transports can be explained by the recovery of water levels in the Middle Danube, from which grain and other products are delivered to the Lower Danube ports in Romania.



<sup>4</sup> Sources: *Ports de Paris*, and INSEE *Conjoncture Normandie - Le bilan économique, June 2019*  
<sup>5</sup> *Market observation report of the Danube Commission for the 1st quarter 2019*

**TABLE 1: SHARE OF DRY CARGO, LIQUID CARGO AND CONTAINER TRANSPORT IN Q1 2019 (BASED ON TONNES)**

Source: CBS, Destatis, StatBel, VNF, Romanian Institute of Statistics

\* For Germany, transport statistics also contain the category of break bulk cargo, representing around 5 % (not included in table above). Break bulk cargo or general cargo are goods that must be loaded individually, and not in intermodal containers nor in bulk.

	Dry cargo	Liquid cargo	Container
Netherlands	52%	34%	14%
Germany*	59%	25%	10%
Belgium	51%	31%	17%
France	81%	13%	6%
Romania	96%	4%	0%

# In Q1 2019...

**... POSITIVE EVOLUTION OF DRY CARGO TRANSPORT IN FRANCE AND RECOVERY OF LIQUID CARGO TRANSPORT IN THE NETHERLANDS AND IN GERMANY**

**... TRANSPORT OF DRY CARGO REPRESENTED MORE THAN 50% OF TOTAL IWT TRANSPORT IN THE NETHERLANDS, GERMANY AND BELGIUM AND MORE THAN 80% IN FRANCE AND ROMANIA**







# 02

## OPERATING CONDITIONS

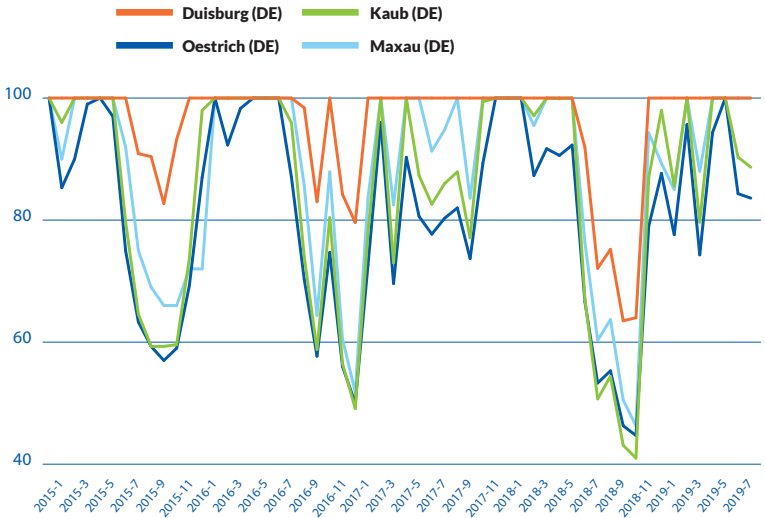
- With water levels normalising in Q1 2019 and in Q2 2019, inland vessels once again reached higher loading degrees, which in turn had a strong effect on transport prices: transport prices fell, especially on the spot market for deliveries from the ARA region to destinations in the Rhine hinterland (Germany, France, Switzerland).
- Due to falling transport prices in Q1 2019, official statistics on the turnover in IWW goods transport in the Netherlands and in Germany show that turnover decreased in both countries. In Q2 2019, turnover continued to decrease in Germany, while it increased again in the Netherlands.

## WATER LEVELS AND VESSELS' LOADING DEGREES IN THE RHINE BASIN



**FIGURE 1: MAXIMUM LOADING DEGREE OF VESSELS WITH A DRAUGHT OF 3 M AT GAUGING STATIONS ALONG THE RHINE (%)**

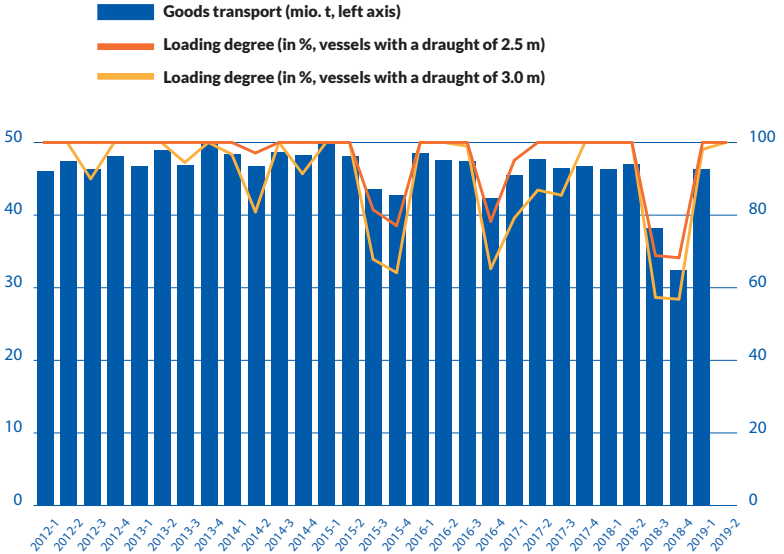
Source: CCNR calculation based on data provided by the Federal German Office of Hydraulicity



- At the beginning of the year 2019, water levels on the Rhine normalised, allowing inland vessels to reach rather high loading degree values again. The two gauging stations of Kaub and Oestrich at the Middle Rhine showed slightly more difficult navigation conditions than Maxau on the Upper Rhine and Duisburg on the Lower Rhine.
- The correlation between water levels and goods transport on the Rhine remained intact, as shown by the fact that the rising water levels in Q1 2019 were followed by an increase in goods transport.

**FIGURE 2: QUARTERLY GOODS TRANSPORT ON THE RHINE AND VESSELS' LOADING DEGREES AT KAUB/RHINE**

Source: Destatis and CCNR calculation based on data provided by the Federal German Office of Hydraulicity



## NORMALISATION OF WATER LEVELS ON THE RHINE AND VESSELS' LOADING DEGREES IN Q1 2019 AFTER LOW WATER LEVELS IN Q4 2018







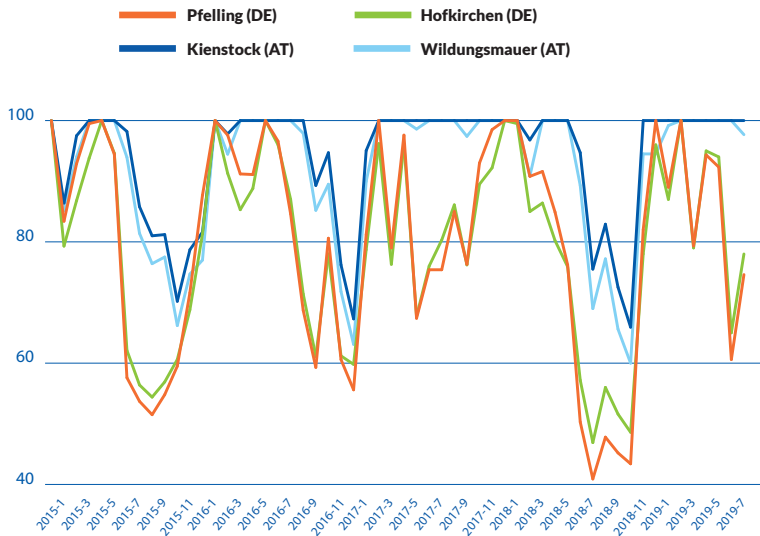
# WATER LEVELS AND VESSELS' LOADING DEGREES IN THE DANUBE BASIN





**FIGURE 3: MAXIMUM LOADING DEGREE OF VESSELS WITH A DRAUGHT OF 3 M AT GAUGING STATIONS ALONG THE DANUBE (%)**

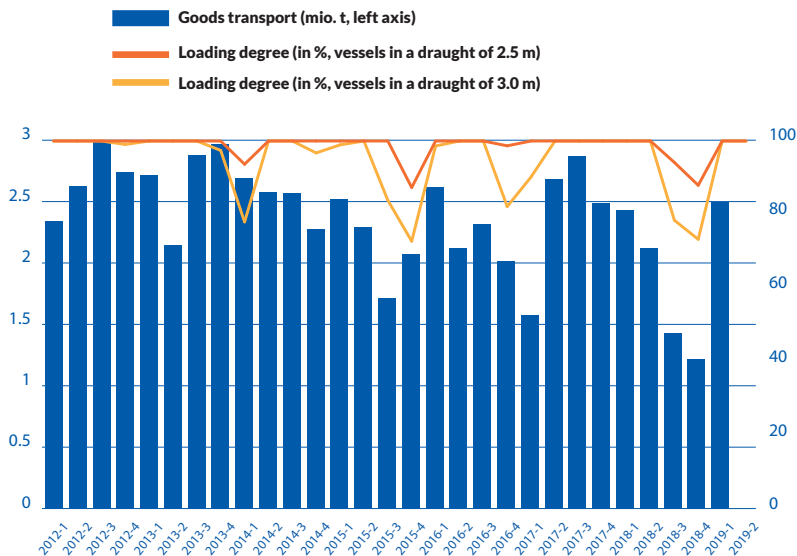
Source: CCNR calculation based on hydrological data provided by the Federal German Office of Hydraulicity, and the Federal State of Lower Austria



- Within the Danube basin, the differences in hydraulicity conditions between the Austrian and the German Danube remained intact in 2019. While navigating conditions were recovering quickly in Kienstock and Wildungsmauer, both located in Lower Austria, they continued to be quite volatile and less favourable on the German Danube in Lower Bavaria.

FIGURE 4: QUARTERLY GOODS TRANSPORT IN AUSTRIA AND VESSELS' LOADING DEGREES IN WILDUNGSMAUER, LOWER AUSTRIA

Source: Eurostat [iwvv\_go\_qnave] and CCNR calculation based on hydrological data from the Federal State of Lower Austria



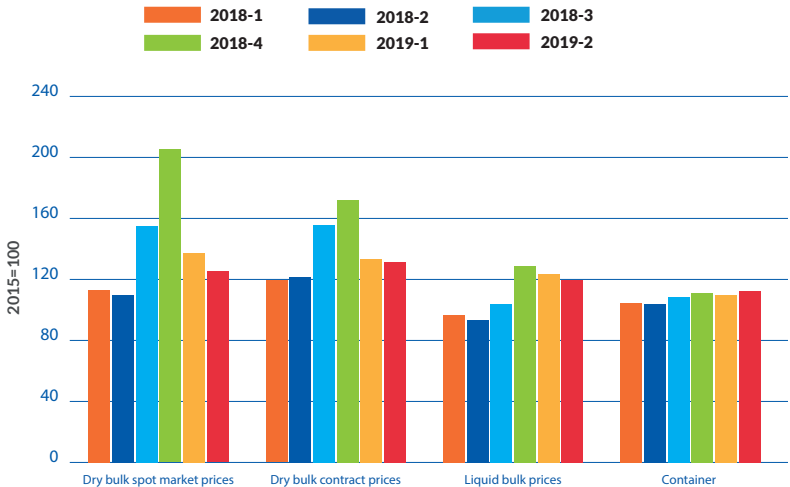
**RECOVERY OF NAVIGATION CONDITIONS IN AUSTRIA AND OF VESSELS' LOADING DEGREES IN Q1 2019 AFTER LOW WATER LEVELS IN Q4 2018**



## ■ FREIGHT RATES IN THE RHINE BASIN

FIGURE 5: CBS FREIGHT RATE INDEX FOR INLAND NAVIGATION IN THE NETHERLANDS

Source: CBS (Netherlands)



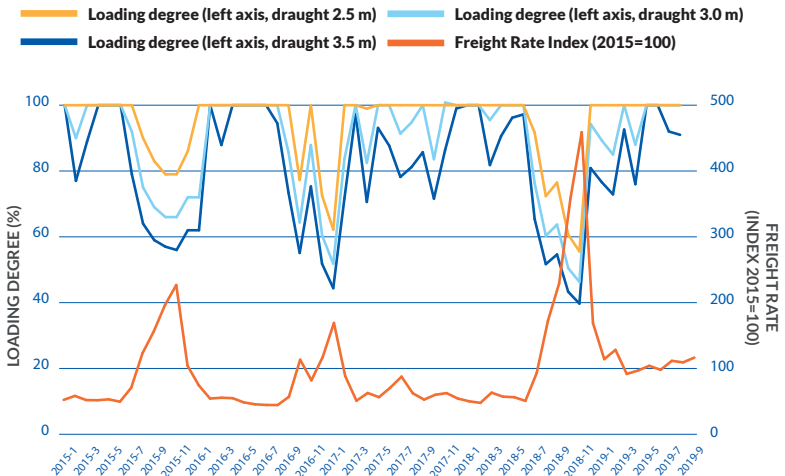
- The CBS conducts regular surveys among 80 Dutch IWW companies, eight times per year. The revenue of a company determines the influence it has on the price index. According to this index, dry bulk spot market freight rates fell in the first half of 2019, more or less in parallel with normalising water levels on the Rhine.
- The liquid bulk prices of the CBS index cover freight traffic on the Rhine, but also shorter trips within the ARA area (Amsterdam-Rotterdam-Antwerp) and other locations within the Netherlands. It contains spot market rates as well as (long-term) contract rates, and the delivery of all types of liquid bulk (chemicals, diesel, fuel oil, methanol, naphtha, sunflower oil, etc.)

- Another freight rate index is the liquid bulk PJK index<sup>6</sup>, which is a spot market index based on the transport of oil products from the ARA region via the Rhine to destinations in Germany, France and Switzerland. Its spot market and its ARA-Rhine trade character make it quite volatile.
- Within the PJK index, freight rates fell strongly in December 2018 and at the beginning of the year 2019 and settled at a lower level in Q1 and Q2 2019. However, as is the case for the CBS liquid bulk index part, the price level did not fall back completely.

**FIGURE 6: PJK FREIGHT RATE INDEX FOR LIQUID CARGO (GASOIL) FROM THE ARA REGION TO DESTINATIONS ALONG THE RHINE - COMPARED WITH VESSELS' LOADING DEGREES AT MAXAU/UPPER RHINE\***

Source: Calculation CCNR based on PJK International

\* The freight rate index was calculated on the basis of the price per tonne of liquid cargo transport. Index values show the price in a given month in relation to the average price in the year 2015.

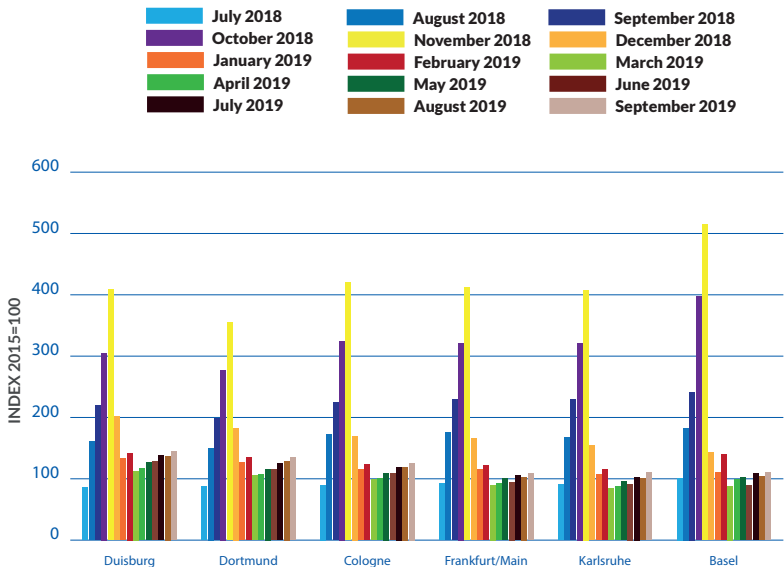


<sup>6</sup> PJK International/Insight Global is a market research company in Breda, the Netherlands, specialised in the liquid cargo sector.

- A detailed look at the PJK index (per destination along the Rhine) reveals that the Swiss destination (Basel) showed by far the strongest price increase during the low water period in late 2018. In 2019, however, the freight rate level for deliveries to Basel fell very strongly. When water levels normalised, the reduction of the freight rate level for deliveries to lower Rhine destinations (Duisburg, Cologne) and to Ruhr destinations (Dortmund) was relatively inferior than for Basel.

**FIGURE 7: PJK FREIGHT RATE INDEX FOR LIQUID CARGO (GASOIL) FROM THE ARA REGION TO DESTINATIONS ALONG THE RHINE - INDEX VALUES PER DESTINATION**

Source: CCNR calculation based on PJK International

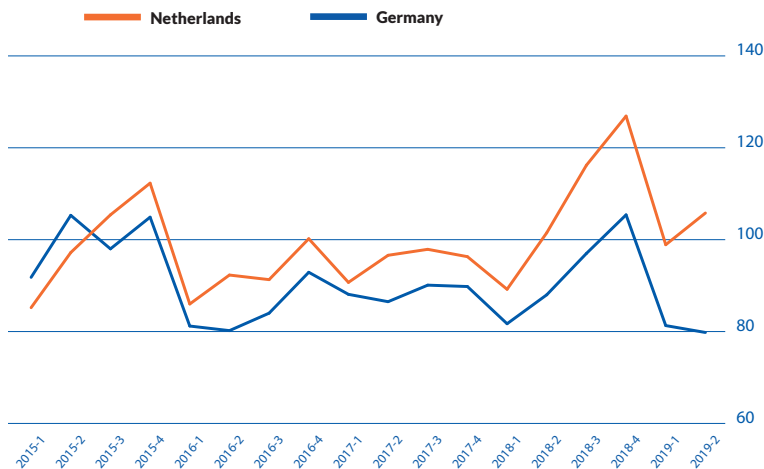


## QUARTERLY IWT TURNOVER EVOLUTION PER COUNTRY IN EUROPE<sup>7</sup>

FIGURE 8: TURNOVER DEVELOPMENT IN THE NETHERLANDS AND IN GERMANY - MAINLY GOODS TRANSPORT\* (2015=100)

Source: CBS, Destatis

\* For the Netherlands, the series contains turnover from total IWT, but goods transport has a very high share of 92 %; for Germany, the series contains only turnover from goods transport.



- Both in the Netherlands and in Germany, turnover from freight transport reached a certain peak in the fourth quarter of 2018. This was a consequence of very high freight rates due to the low water period, notably on the Rhine. With prices decreasing in the first half year 2019, turnover normalised in Germany, while it remained rather high in the Netherlands, reflecting a more positive transport demand evolution in the Netherlands than in Germany.

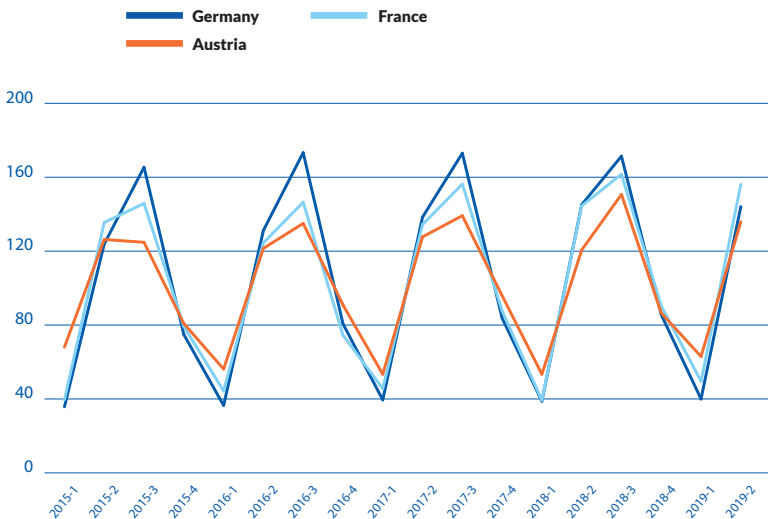
<sup>7</sup> Quarterly data on turnover in IWT are at present only available for very few countries, due to statistical limitations. EUROSTAT presents data for the NACE sector H50 (water transport) which covers maritime and IWT transport together. Based on this dataset, it is possible to identify turnover in IWT only for countries with almost no activity in maritime shipping. For France, Germany and the Netherlands, quarterly turnover data are provided by the national statistical offices (INSEE, Destatis, CBS).

- Turnover of Austrian, French and German passenger shipping companies showed the usual seasonal variations. In Q2 2019, turnover of French passenger transport companies was 8 % higher than in Q2 2018, and 16 % higher than in Q2 2017.
- For German passenger transport companies, the result in Q2 2019 was 1 % lower than the previous year, but 4 % higher than in Q2 2017. The turnover of Austrian IWW companies, the majority of which are linked to passenger transport, was 13 % higher in Q2 2019 than the previous year and 6 % higher than in Q2 2017.

**FIGURE 9: TURNOVER DEVELOPMENT IN AUSTRIA, FRANCE AND GERMANY – MAINLY PASSENGER TRANSPORT\*** (2015=100)

Source: Eurostat [sts\_setu\_q] for Austria, Destatis for Germany and INSEE for France

\* For Austria, the series contains turnover from total IWT, but the sector activity is dominated by passenger transport; for Germany and France, the data contain only turnover in passenger transport.







# 03

## FOCUS ON GERMANY

- Inland waterway transport on German waterways accounted for 36 % of all IWW transport performance in the EU in Q1 2019, compared to 35 % in the year 2018. For container traffic taken separately, this share is 39 %.
- The number of German IWT companies represents 11 % of all IWT companies in the EU, while their share in turnover is much higher: 34 % of all turnover generated in IWW goods transport companies in the EU is produced in German companies.
- This also shows that German companies are on average larger than in many other IWW countries with a high degree of market fragmentation.

## THE 40 LARGEST GERMAN INLAND PORTS<sup>8</sup> - WATERSIDE TRAFFIC IN Q1 2019

Source: Destatis



<sup>8</sup> These 40 inland ports accounted for 74.6 % of all waterside goods traffic in German inland ports in Q1 2019. Detailed information on the 32 largest German inland ports is available on the next page.

In Q1 2019  
(Mio. t.)

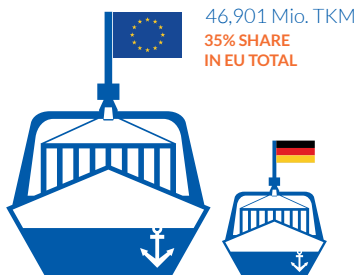
	Import from abroad	Import from national origins	Export to national destinations	Export abroad	Total waterside traffic
Duisburg	9.17	0.38	0.88	1.99	12.4
Hamburg	0.00	1.08	1.41	0.01	2.5
Mannheim	1.33	0.27	0.26	0.47	2.3
Cologne	0.64	0.45	0.42	0.80	2.3
Neuss	1.13	0.29	0.21	0.48	2.1
Karlsruhe	0.69	0.13	0.50	0.43	1.8
Ludwigshafen am Rhein	0.68	0.44	0.15	0.40	1.7
Frankfurt	0.61	0.27	0.24	0.23	1.3
Gelsenkirchen	0.27	0.15	0.32	0.50	1.2
Kehl	0.33	0.29	0.23	0.15	1.0
Mainz	0.37	0.23	0.07	0.26	0.9
Kiesbaggerei Kreis Wesel	0.00	0.41	0.03	0.48	0.9
Marl	0.52	0.15	0.05	0.19	0.9
Botrop	0.46	0.03	0.13	0.25	0.9
Hamm	0.55	0.23	0.02	0.07	0.9
Krefeld	0.35	0.23	0.09	0.19	0.9
Brunsbüttel	0.00	0.03	0.80	0.00	0.8
Lünen	0.59	0.08	0.02	0.13	0.8
Bremen	0.02	0.57	0.14	0.05	0.8
Saarlouis	0.45	0.00	0.03	0.20	0.7
Andernach	0.10	0.10	0.03	0.45	0.7
Salzgitter	0.02	0.41	0.23	0.01	0.7
Heilbronn	0.24	0.11	0.28	0.04	0.7
Leverkusen	0.33	0.12	0.09	0.07	0.6
Rheinberg	0.47	0.00	0.04	0.09	0.6
Lingen (Ems)	0.10	0.11	0.28	0.09	0.6
Magdeburg	0.02	0.28	0.16	0.11	0.6
Wesseling	0.01	0.05	0.26	0.22	0.5
Wesel	0.16	0.08	0.07	0.22	0.5
Dormagen	0.14	0.02	0.18	0.16	0.5
Bendorf	0.15	0.10	0.07	0.18	0.5
Berlin	0.02	0.33	0.12	0.00	0.5

## FACT SHEET IWT IN GERMANY

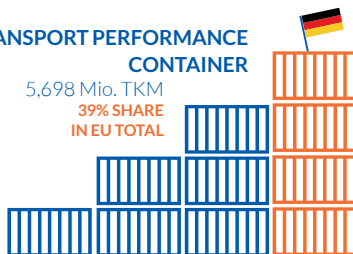
### ABSOLUTE VALUE<sup>9</sup> FOR GERMANY VS SHARE IN EU TOTAL

Notes on the factsheet - See page 43

#### TRANSPORT PERFORMANCE TOTAL



#### TRANSPORT PERFORMANCE CONTAINER

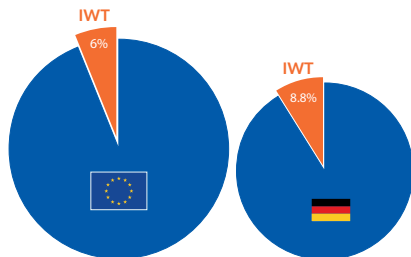


**Volume of total goods transport:** 197.9 Mio. tonnes (# - See page 43)

**Volume of container transport:** 21.2 Mio. tonnes (# - See page 43)

#### GOODS SEGMENTS IN IWT

1. Ores, sands, stones: 8,724 Mio. TKM  
25% SHARE IN EU TOTAL
2. Mineral oil products: 7,838 Mio. TKM  
38% SHARE IN EU TOTAL
3. Chemicals: 5,672 Mio. TKM  
38% SHARE IN EU TOTAL



#### MODAL SPLIT SHARE OF IWT TOTAL TRANSPORT PERFORMANCE

<sup>9</sup> The data on all transport indicators are for 2018, while the data on modal split, employment, turnover, companies and number of vessels are for 2017. The modal split share of IWT is calculated as the IWT share within the total transport performance of IWT, rail and road traffic.

**PERSONS EMPLOYED IN IWT**

10,314

24% SHARE IN EU TOTAL

Goods transport: 4,211

21% SHARE IN EU TOTAL

Passenger transport: 6,103

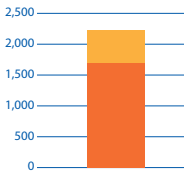
27% SHARE IN EU TOTAL

**NUMBER OF IWT COMPANIES**

1,102

Goods transport: 668

Passenger transport: 434

**LEVEL OF IWT TURNOVER**

2,234 Mio. € 30% SHARE IN EU TOTAL

● Goods transport: 1,689 Mio. € 34%

● Passenger transport: 545 Mio. € 22%

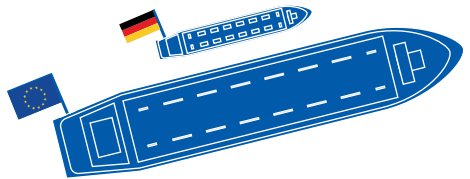
**NUMBER OF ACTIVE CARGO VESSELS**

2,394 16% SHARE IN EU TOTAL

Dry cargo: 1,564 14%

Liquid cargo: 419 25%

Push &amp; tug: 411 18%

**TONNAGE OF ACTIVE CARGO VESSELS**

Dry cargo: 1.8 Mio. tonnes

13% SHARE IN EU TOTAL

Liquid cargo: 0.75 Mio. tonnes

22% SHARE IN EU TOTAL

Source: CCNR analysis based on Eurostat data [sbs\_na\_1a\_se\_r2], [iww\_go\_atygo], [iww\_go\_actygo], [tran\_hv\_frmod], [iww\_eq\_loadcap], [road\_go\_ta\_tcrq], [rail\_go\_contwgt], [iww\_eq\_age], CCNR fleet database

## IWT SECTOR IN GERMANY WITHIN EUROPE

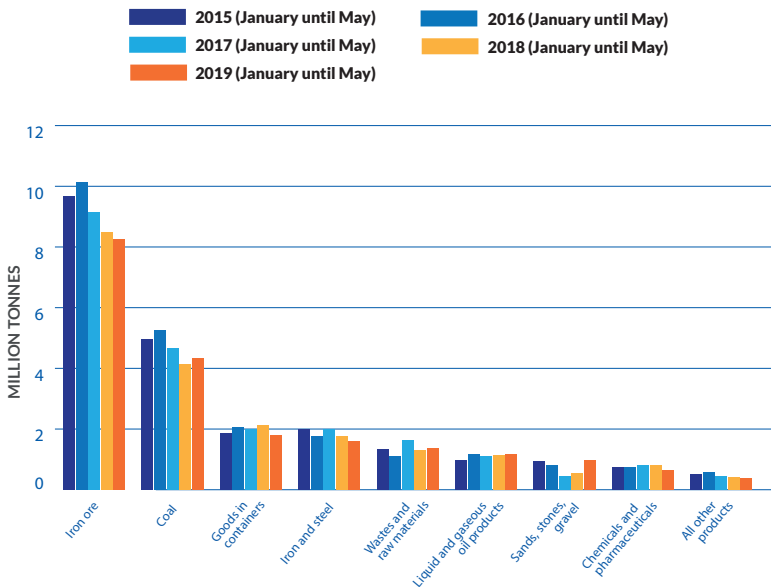
- Inland vessels carried **197.9 million tonnes of goods** in 2018 and 222.7 million tonnes in 2017 on German inland waterways. In 2018, the transport performance (product of tonnes and distance) represented **35 % of total IWW transport performance in the EU**.
- Within **container transport**, IWW transport performance in Germany has a share of **39 % of total container transport performance in the EU**.
- In addition to container transport, the **liquid cargo transport** in Germany also has an **over-proportional transport performance in the EU**. Mineral oil products and chemical transports in Germany each have a share of 38 % of total European transport performance in these two segments.
- Around **10.3 thousand persons are employed** in German IWW companies and the companies generate a turnover of more than 2.2 billion euros per year.
- With 10.3 thousand persons employed, Germany's share in EU employment in the IWT sector is 24 %, which means that **almost one out of four persons active in European IWW companies works in German IWW companies**.
- **German IWW companies are larger than the EU average**, according to two size indicators:
  1. Their **share in the total number of EU IWT companies is 11 %**, but the share of persons active in these German companies is 24 % of all EU employment in IWT.
  2. The share of German companies in the number of IWT companies in the EU is 11 %, but they generate **30 % of turnover of European IWT**.
- The fleet of German inland vessels represents 16 % of all European inland vessels. For liquid cargo vessels taken separately, this share is 25 % - **one out of four tanker vessels registered in Europe is registered in Germany**.

## PORT OF DUISBURG AND PORT OF HAMBURG

- Duisburg is the largest inland port in Germany, as well as in Europe, with 48.1 million tonnes of river traffic in 2018. Its river traffic takes place in the public port of Duisburg (duisport GmbH) and in private ports of the local steel industry. The following figure takes into account all waterside traffic in the city of Duisburg. Raw materials (iron ore, coal) for steel production and iron and steel represent a share of 70 %. In 2018, waterside traffic was 48.1 million tonnes and 12.4 million tonnes in Q1 2019, just as in Q1 2018.

FIGURE 1: INLAND WATERWAY TRAFFIC IN THE PORTS IN DUISBURG (JANUARY UNTIL MAY) IN MILLION TONNES

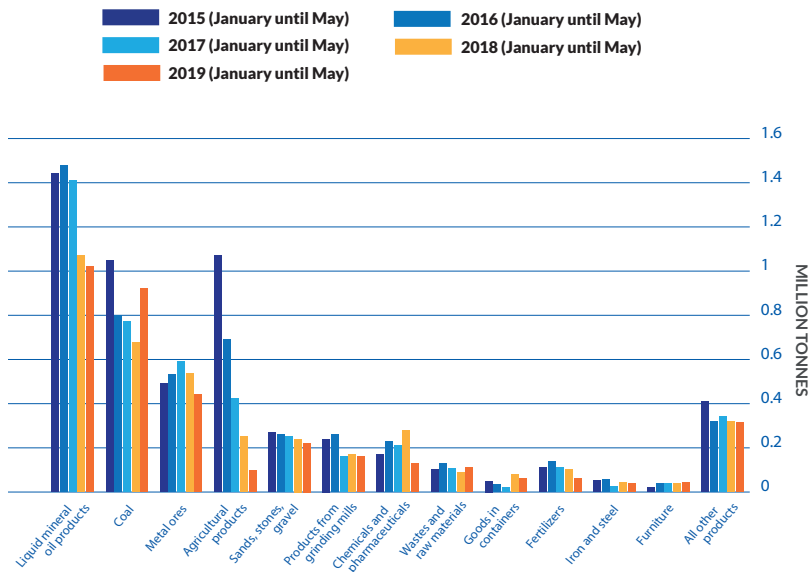
Source: CCNR analysis based on Destatis



- The port of Hamburg is not only the largest German seaport but also the second largest German inland port. Its waterside traffic in 2018 amounted to 10 million tonnes (source: Destatis) and 2.5 million tonnes in Q1 2019 (2.3 million tonnes in Q1 2018). Liquid cargo is currently the most important type of goods in Hamburg, while container traffic so far plays a relatively small role in the Elbe hinterland compared to the Rhine.

FIGURE 2: INLAND WATERWAY TRAFFIC IN THE PORT OF HAMBURG (JANUARY UNTIL MAY) IN MILLION TONNES

Source: CCNR analysis based on Destatis







## ■ GLOSSARY

**20XX-1/20XX-Q1:** First quarter

**20XX-3/20XX-Q3:** Third quarter

**ARA REGION:** Amsterdam-Rotterdam-Antwerp

**BN:** Billion

**CEMT:** Classification of European Inland Waterways

**DANUBE COUNTRIES:** Austria, Bulgaria, Croatia, Hungary, Romania, Serbia, Slovakia

**EU:** European Union

**EUROPE:** European inland navigation in this report includes two countries not belonging to European Union, Switzerland and Serbia

**FREIGHT RATE:** Price at which a cargo is delivered from one point to another

**IWT:** Inland Waterways Transport

**IWW:** Inland Waterway

**LOADING DEGREE:** Percentage of maximum vessel loading capacity. Calculated based on two waterways parameters (equivalent water level and target water depth), the security margin under the keel of the vessel and the water levels at a given gauging station.

**MIO:** Million

**OECD:** Organisation for Economic Co-operation and Development

**RHINE COUNTRIES:** Belgium, France, Germany, Luxemburg, Netherlands, Switzerland

**TEU:** Twenty-foot equivalent unit

**TKM:** Tonne-Kilometer (unit for transport performance which represents volume of goods transported multiplied by transport distance)

**TRADITIONAL RHINE:** Rhine from Basel to the border between the Netherlands and Germany

**TURNOVER:** Sales volume net of sales taxes

## NOTES ON THE FACTSHEET

1) “Share in EU total” contains figures for the EU plus Switzerland and Serbia

2) For container transport, the numbers include the weight of container boxes, according to the Eurostat Reference Manual on Inland Waterways Transport Statistics (See: [https://circabc.europa.eu/sd/a/b1c81773-ce2b-47cd-ad43-a0fbfe395402/Reference\\_Manual\\_April\\_2018\\_.pdf](https://circabc.europa.eu/sd/a/b1c81773-ce2b-47cd-ad43-a0fbfe395402/Reference_Manual_April_2018_.pdf))

*# In contrast to transport performance, for transport volume a country-specific share cannot be calculated. Example: when iron ores are transported from Rotterdam to Duisburg, the tonnes transported are counted in the statistics of both countries, while the tonne-kilometres (tkm) are split up between both countries according to the distance (km) travelled in each country. This allows the country-specific share for transport performance (tkm) to be calculated. For transport volumes (tonnes) the share cannot be calculated, as the sum of the shares of all countries would exceed 100 %.*

## NATIONAL STATISTICS OFFICES

Acronym	Original Name	English Name	Country
CBS	Centraal Bureau voor de Statistiek	Central Statistical Office	Netherlands
Destatis	Statistisches Bundesamt	Federal Statistical Office of Germany	Germany
INSEE	Institut national de la statistique et des études économiques	National Institute of Statistics and Economic Studies	France
INSSE	Institutul National de Statistica	National Institute of Statistics	Romania
P3C	Републички завод за статистику Србије	Statistical Office of the Republic of Serbia	Serbia
Statbel	Statistics Belgium	Statistics Belgium	Belgium

## OTHER SOURCES

Original Name	English Name	Country
Bundesanstalt für Gewässerkunde	German Federal Office for Hydraulicity	Germany
CCNR/ZKR/CCR	CCNR	Europe
Contargo AG	Contargo AG	Germany
Danser France	Danser France	France
Danube Commission	Danube Commission	Europe
De Vlaamse Waterweg	The Flemish Waterways	Belgium
European Commission	European Commission	EU
EUROSTAT	EUROSTAT	EU
Haeger & Schmidt Logistics	Haeger & Schmidt Logistics	Germany
Land Niederösterreich	Federal State of Lower Austria	Austria
OECD	OECD	World
Ports mentioned in the report	Ports mentioned in the report	Europe
PJK International	PJK International	Netherlands
SPW Service Public de Wallonie	Public Service of Wallonia	Belgium
Swiss Rhine ports	Swiss Rhine ports	Switzerland
Voies Navigables de France	Navigable Waterways of France	France

## ■ METHODOLOGY

### **Freight traffic on inland waterways and in ports**

Europe as defined in chapter 1 is taking into account all European countries providing quarterly data on inland waterway transport. All these countries are listed on the Transport Performance in Europe map (page with map in chapter 1).

When discrepancies on total transport performance are observed between Eurostat and National Statistics data, the information is notified to Eurostat and National Statistics Office data is taken into account.

When available, NST product classification is used in order to split transport performance on following transport segments: dry cargo, liquid cargo, containers.

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This notice does not constitute a formal commitment on the part of those organisations referred to in the report.

**The Market Insight of European inland navigation  
is a common project of the CCNR and the European Commission**

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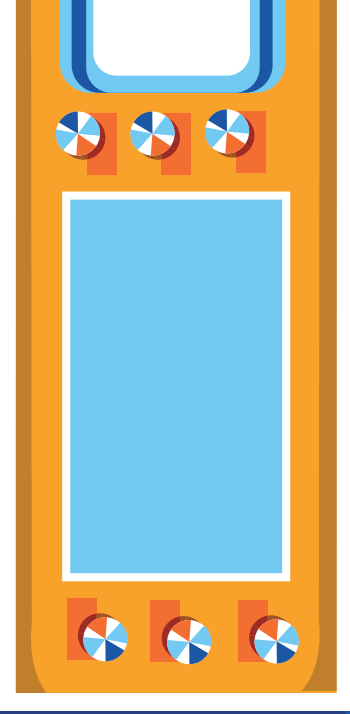
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