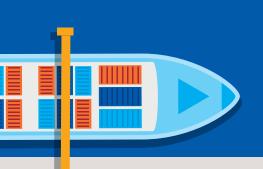
# MARKET INSIGHT INLAND NAVIGATION IN EUROPE

**PUBLISHED IN** 

### **FALL 2018**





## Market Insight INLAND NAVIGATION IN EUROPE

Published in Fall 2018

Please find all our data at: www.inland-navigation-market.org

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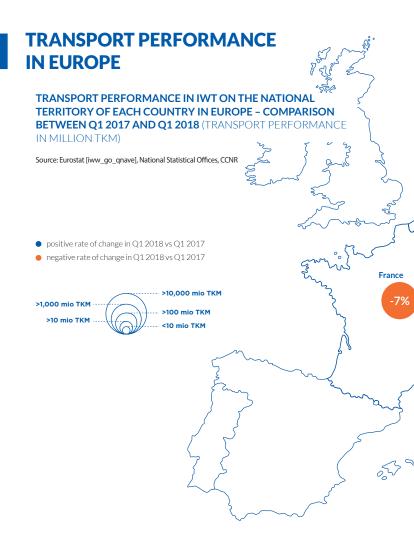
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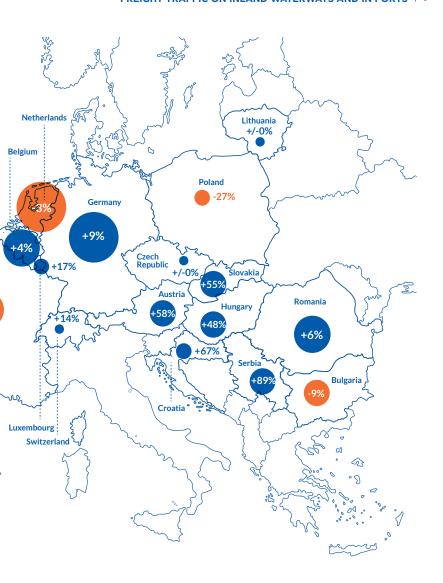
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- In the first quarter of 2018, transport performance on European inland waterways reached 34.9 billion TKM.
- This transport performance represented an increase of 4% compared to the first guarter of 2017.



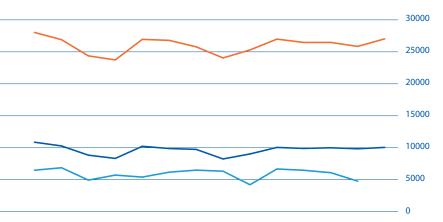


## INLAND WATERWAY TRANSPORT PERFORMANCE EVOLUTION ON THE RHINE AND DANUBE (TRANSPORT PERFORMANCE IN MILLION TKM)\*

Source: Destatis, Eurostat [iww\_go\_gnave]

\*For Q2 2018, the value contains an estimation for the Belgian part of the North-South Axis. Data for the Danube were not yet available for Q2 2018





2015-1 2015-2 2015-3 2015-4 2016-1 2016-2 2016-3 2016-4 2017-1 2017-2 2017-3 2017-4 2018-1 2018-2

+4.3%

GROWTH RATE
OF TRANSPORT
PERFORMANCE ON THE
TRADITIONAL RHINE IN
THE FIRST HALF YEAR 2018

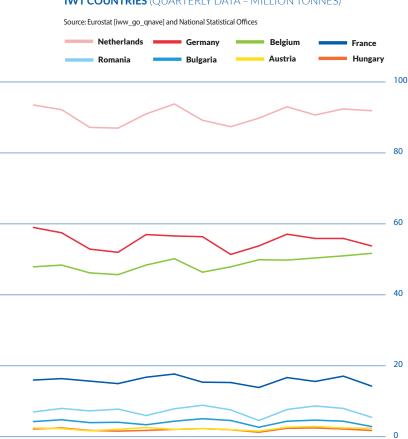
- Within the series "Rhine, affluents and North-South Axis", the traditional Rhine has a share of 38.1%, the Netherlands 45.5%, Belgium 11.1% and the Rhine affluents (Moselle, Main, Neckar) together 5.3%.
- On the traditional Rhine, the growth rate of transport performance between Q1 2017 and Q1 2018 was +9%, while the results in Q2 2017 and Q2 2018 were at the same level.
- On the Moselle, transport performance in Q1 2018 was 8% higher than in Q1 2017, and in Q2 2018, the corresponding rate was +1%.
- On the Main and Neckar, the difference was +55% (Main) and +5% (Neckar) between Q1 2017 and Q1 2018. However, the trend on the Main and Neckar since Q3 2017 was rather negative, whereas it was very positive on the Moselle.
- On the Danube, currently 53% of transport demand is made up of grain and iron ores, and the bad harvest result in the Danube region in 2017 weakened transport demand at the beginning of 2018.

<sup>1</sup>Calculation for O1 2018



#### TRANSPORT VOLUME IN MAIN EUROPEAN IWT COUNTRIES

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





 The following figures\* represent a detailed comparative analysis made of major cargo segments in Germany and Belgium.

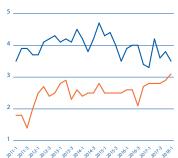
Source: Analysis CCNR based on StatBel and Destatis data \*Unit: Mio. tonnes



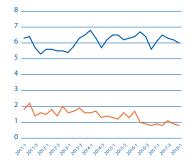




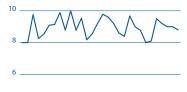
#### **AGRIBULK**



#### **IRON ORES**



#### MINERAL OIL PRODUCTS





- Sands, stones, building materials. In Belgium this segment plays a
  major role for many inland ports (e.g. Liège, Brussels, Namur) and
  currently benefits from a growing construction activity in western
  Europe.
- Agribulk. A detailed modal split analysis<sup>2</sup> shows that IWT in Germany lost some market shares in this segment. Bad harvest results in 2016 also had a share of responsibility.
- Iron ores. The German steel industry holds its production on a high level, while the Belgian steel industry's capacities have reduced since 2011. The curves reflect this trend.
- Mineral oil products. This segment is very important on the Rhine, which explains the higher level in Germany. The outlook is orientated towards a stagnative trend in both countries.
- The comparison shows a stagnative trend in 3 out of 4 cargo segments for Germany, and 1 negative (recent) evolution. For Belgium there is a positive trend in 2 out of 4 cargo segments. Taken all together, this can largely explain the more positive overall evolution of transport demand in Belgium compared to Germany (see page before).

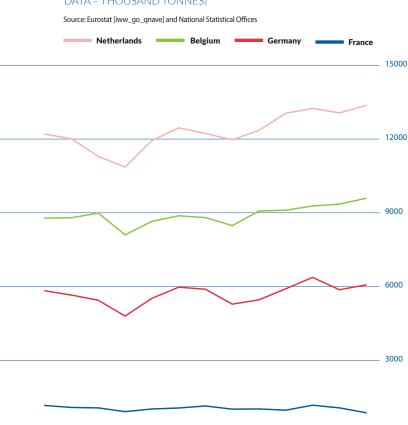
+20%

INCREASE OF TRANSPORTS OF SANDS, STONES AND BUILDING MATERIALS IN BELGIUM BETWEEN 2011 AND 2017

<sup>&</sup>lt;sup>2</sup> See: CCNR (2018), Annual Report Market Observation, September 2018, p. 55

#### TRANSPORT VOLUME FOR CONTAINER TRANSPORT PER COUNTRY

INLAND SHIPPING TRANSPORT VOLUMES IN THE CONTAINER **SEGMENT IN MAIN EUROPEAN IWT COUNTRIES (OUARTERLY** DATA - THOUSAND TONNES)



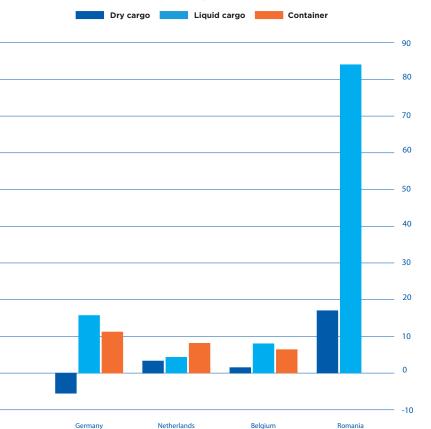


# DRY BULK, LIQUID BULK AND CONTAINER TRANSPORT

RATE OF CHANGE IN INLAND SHIPPING TRANSPORT IN FOUR MAJOR IWT COUNTRIES (Q1 2018 VS Q1 2017 - %)\*



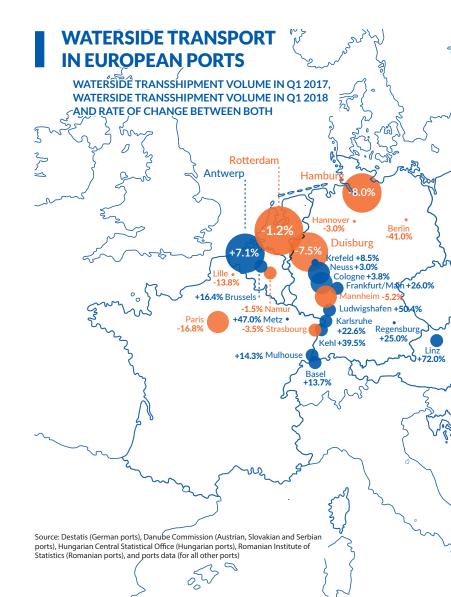
\*In Romania, container transport is at a very low level.



- The better results for liquid cargo can be explained by a growing transport demand for chemicals since the end of 2016. With regard to the dry cargo segment in Germany, in comparison with Belgium, it appears that there are several dry cargo goods segments in Germany with a stagnative trend, and the coal transport shows a downward orientated trend.
- In Romania, the extraordinary growth in the liquid cargo sector is due to particular effects. First of all, liquid cargo represents only the very small share of 7% of the total transport volume in Romania. Secondly, the increase in Q1 2018 compared to the previous year is only 168,000 tonnes, from 200,000 tonnes in Q1 2017 to 368,000 tonnes in Q1 2018. This was a small growth in absolute figures but a strong one in terms of percentage.
- In Romania, the dry cargo growth rate is a result of iron ore and coal transport which was, in Q1 2018, 45% higher than in Q1 2017; this was a consequence of the recovery of water levels in the first quarter of 2018 compared to the previous year. But the agricultural products segment showed a decrease in Q1 2018 (-28%), due to a weak grain harvest in the Danube region in 2017. This dampened the overall growth rate for dry cargo.

+16%

INCREASE IN TRANSPORT VOLUME FOR LIQUID CARGO IN GERMANY IN Q1 2018 COMPARED TO Q1 2017



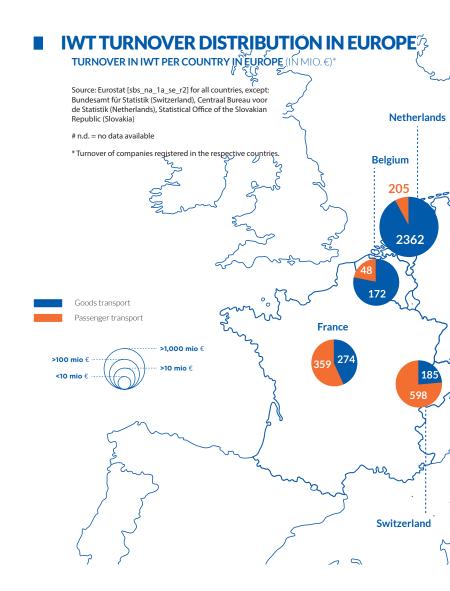


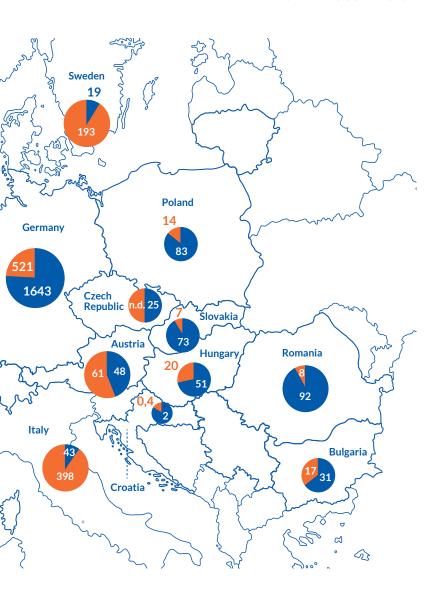


# 02

# OPERATING CONDITIONS

- Turnover generated in the European inland shipping sector: around 5.1 billion euros (goods transport) and around 2.5 billion euros (passenger transport).
- The 5 countries with the highest turnover for goods transport in Europe are the following (share per country in %): Netherlands (46.3%), Germany (32.2%), France (5.4%), Switzerland (3.6%), Belgium (3.4%).
- The 5 countries with the highest turnover for passenger transport in Europe are the following (share per country in %): Switzerland (24.4%), Germany (21.3%), Italy (16.3%), France (14.7%), Netherlands (8.4%).



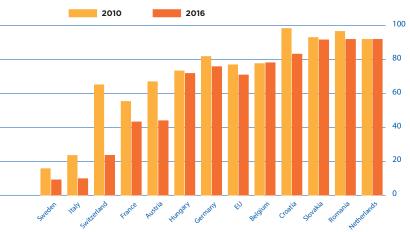


#### **OPERATING CONDITIONS**

#### IWT TURNOVER - GOODS TRANSPORT AND PASSENGER TRANSPORT SHARES PER COUNTRY AND IN THE EU

#### SHARE OF GOODS TRANSPORT IN TOTAL IWT TURNOVER PER COUNTRY AND IN THE FU (%)

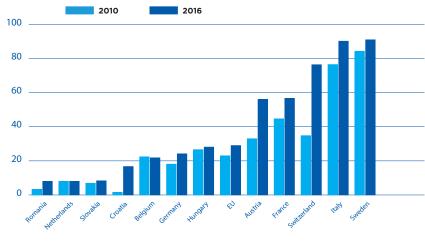
Source: Calculation CCNR based on Eurostat [sbs\_na\_1a\_se\_r2], for all countries, except: Bundesamt für Statistik (Switzerland), Centraal Bureau voor de Statistik (Netherlands), Statistical Office of the Slovakian Republic (Slovakia)



- The two countries in Europe where goods transport has the highest share in total turnover in IWT are the Netherlands and Romania. Both countries have a high level of goods transport due to their key geographical position near the seaports of Rhine and Danube.
- On the EU level, the share of goods transport activities within total IWT turnover was 71% in 2016, compared to 77% in 2010. Note that such a decrease in the share of goods transport activities within total IWT turnover does not necessarily mean that the turnover of IWT companies in relation to goods transport has also decreased. A separate analysis per country must be conducted to calculate the evolution of turnover.

#### SHARE OF PASSENGER TRANSPORT IN TOTAL IWT TURNOVER PER COUNTRY AND IN THE EU (%)

Source: Calculation CCNR based on Eurostat [sbs\_na\_1a\_se\_r2], for all countries, except: Bundesamt für Statistik (Switzerland), Centraal Bureau voor de Statistik (Netherlands), Statistical Office of the Slovakian Republic (Slovakia)



- Countries with a particular strong increase in the turnover share of passenger shipping are Austria and Switzerland. Hereby, the boom in river cruises since 2010 plays a decisive role. Countries where the share of passenger shipping is traditionally high are Sweden and Italy, due to the large number of lakes.
- On the EU level, the share of passenger transport activities within total IWT turnover was 29% in 2016, compared to 23% in 2010.

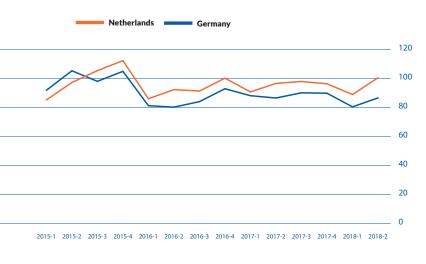
### QUARTERLY IWT TURNOVER

**FVOI UTION PFR COUNTRY IN FUROPF3** 

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

Source: CBS and 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.



 In the Netherlands and Germany, the freight rate level in Q1 2018 was lower than in the same quarter the previous year. The main explanation was the relatively normal water level at the beginning of 2018. In such a situation, prices and turnover are not pushed upwards.

<sup>&</sup>lt;sup>3</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 HSO (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 (Austria, Hungary, Slovakia). For the Netherlands and Germany, turnover data on a quarterly basis are provided by the national statistical offices (CBS and Destatis).

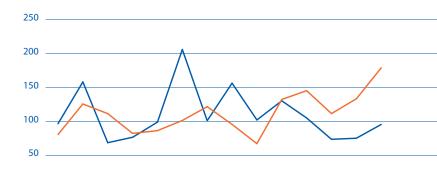
#### TURNOVER DEVELOPMENT IN HUNGARY AND SLOVAKIA – MAINLY GOODS TRANSPORT\* (2015=100)

Slovakia

Source: Eurostat [sts\_setu\_q]

Hungary

\*In Slovakia, 92% of total IWT turnover comes from goods transport, and 8% from passenger transport. In Hungary, the relation is 72% (goods transport) versus 28% (passenger transport).



2015-1 2015-2 2015-3 2015-4 2016-1 2016-2 2016-3 2016-4 2017-1 2017-2 2017-3 2017-4 2018-1 2018-2

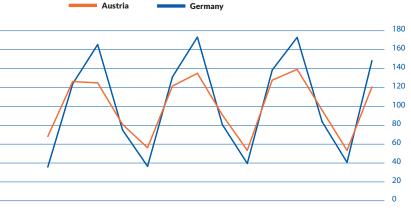
In Hungary, goods transport has a share of 72% in total IWT turnover.
The turnover curve has shown an upward trend since Q1 2017. This last
mentioned quarter was characterized by very low water levels and
ice on the Danube, with very negative consequences for turnover of
companies. The turnover evolution since then reflects the recovery
and the high growth in transport demand.

#### OPERATING CONDITIONS

#### TURNOVER DEVELOPMENT IN AUSTRIA AND IN GERMANY -PASSENGER TRANSPORT\* (2015=100)

Source: Eurostat (sts setu gl and Destatis

\*For Austria, the series contains turnover from total IWT, but passenger transport has a high share of more than 50%; for Germany, the series contains only turnover from passenger transport.



2015-1 2015-2 2015-3 2015-4 2016-1 2016-2 2016-3 2016-4 2017-1 2017-2 2017-3 2017-4 2018-1 2018-2

 The turnover evolution in Austria is compared with the turnover evolution of German passenger transport companies. The high correlation is striking evidence of the strong seasonality in the activity of river cruises and day trip vessels. In both countries, the share of passenger shipping within total turnover shows a rising trend.

**INCREASE IN TURNOVER** OF GERMAN PASSENGER
TRANSPORT COMPANIES IN Q2 **2018 COMPARED TO Q2 2017** 

#### FREIGHT RATES

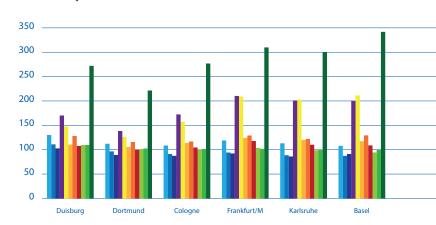
- Freight rates in tanker shipping on the Rhine were rather stagnant in Q1 and Q2 2018. This situation changed in Q3 2018, when dry and hot weather and the lack of rain over several months caused water levels on the Rhine to fall to very low levels.
- As a consequence, freight rates for the delivery of liquid cargo from the ARA region to destinations along the Rhine were, in Q3 2018, sometimes three times as high as under normal conditions (see Frankfurt/M. or Karlsruhe). For deliveries from Rotterdam to Basel, freight rates were even more than three times higher than normal.

FREIGHT RATES IN TANKER SHIPPING ON THE RHINE PER QUARTER AND PER DESTINATION – FOR DELIVERIES FROM ROTTERDAM/
AMSTERDAM TO THE HINTERLAND (INDEX O1 2015=100)\*

Source: PJK International, analysis CCNR

\*Index values based on quarterly averages of international barge freight rates including pilotage, harbour and canal dues from Rotterdam/Amsterdam to hinterland destinations.







# 03

# FOCUS ON THE NETHERLANDS

- Yearly goods transport performance on inland waterways in the Netherlands represents 1/3 of the total European inland waterway transport performance.
- There are more than 5,000 inland vessels active in the goods transport sector in the Netherlands, of which over 3,500 are dry cargo vessels.
- The share of the Dutch fleet within the total European cargo fleet is around 37% (share based on number of vessels).

#### ■ IWT COMPANIES IN THE NETHERLANDS

General remark: The "focus on" chapter is a new chapter of market insight reports and consists in a country approach. This first edition focuses on the Netherlands. It is the first edition of a series of "focus on" chapters which all shall have a very similar structure. Their aim is to

- 1) present a fact sheet with key IWT figures for one particular country,
- 2) visualize the transport demand evolution per goods segments for this country, and
- 3) show key figures about the most important port in the country.

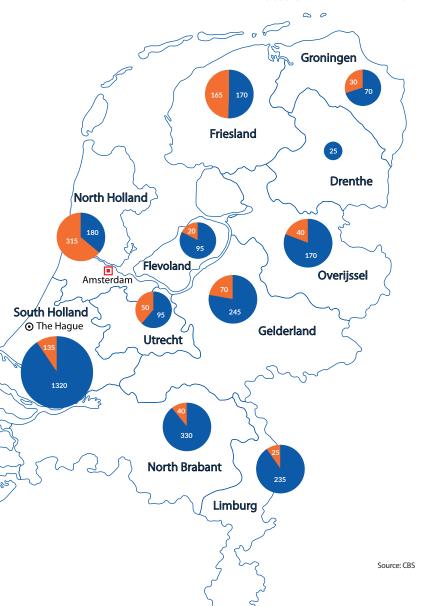
In the following market insight reports, other countries will be analysed in an according manner, thereby alternating between Rhine and Danube countries, and presenting also countries outside these two areas. until all countries in Europe are dealt with.

Number of IWT companies active in goods transport

Number of IWT companies active in passenger transport



#### **FOCUS ON THE NETHERLANDS**



#### 34 | FOCUS ON THE NETHERLANDS

#### **FACT SHEET IWT IN THE NETHERLANDS**

ABSOLUTE VALUE 2017 FOR THE NETHERLANDS VS SHARE IN EU TOTAL



48,998 Mio. TKM 33,3% SHARE IN EU TOTAL

#### VOLUME OF TOTAL GOODS TRANSPORT

- - Netherlands: 365.7 Mio. t
- - Germany: 222.7 Mio. t
- Belgium: 201.1 Mio. t

#### TRANSPORT PERFORMANCE CONTAINER

7 427 Mio TKM 44.6% SHARE IN FUTOTAL



#### GOODS SEGMENTS IN IWT

- 1. Ores, sands, building material: 12,875 Mio. TKM 39.5% SHARE IN EU TOTAL
- 2. Mineral oil products: 10.188 Mio. TKM **46% SHARE IN EU TOTAL**
- 3. Container: 7.427 Mio. TKM 44.6% SHARE IN EU TOTAL





MODAL SPLIT SHARE OF **IWT - TOTAL TRANSPORT PERFORMANCE** 

Source: Analysis CCNR 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], CBS, CCNR fleet database Notes: "Share in EU total" contains figures for the EU plus Switzerland and Serbia.

#### **FOCUS ON THE NETHERLANDS**



#### **PERSONS ACTIVE**

#### NUMBER OF COMPANIES

Passenger transport: 915

 13,418
 31% SHARE IN EU TOTAL 43%
 4,263

 Goods transport: 10,118
 44% SHARE IN EU TOTAL 58%
 Goods transport\*: 3,348



#### LEVEL OF TURNOVER

Passenger transport: 3,300 16% SHARE IN EU TOTAL 22%

2,567 Mio. € 37% SHARE IN EU TOTAL

Goods transport: 2,362 Mio. € 47% SHARE IN EU TOTAL

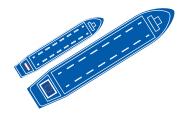
Passenger transport: 205 Mio. € 10% SHARE IN EU TOTAL

#### NUMBER OF ACTIVE CARGO VESSELS

5.058 **37% SHARE IN EU TOTAL** 

Dry cargo: 3,519 Liquid cargo: 811

Push & tug: 724 35% SHARE IN EU TOTAL





#### TONNAGE OF ACTIVE CARGO VESSELS

7.79 Mio. t 46% SHARE IN EU TOTAL

Dry cargo: 6.04 Mio. t Liquid cargo: 1.75 Mio. t

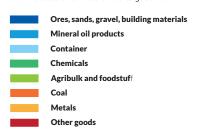
<sup>\*</sup>Dry cargo: 2,575 / Liquid cargo: 245 / Push & tug: 295

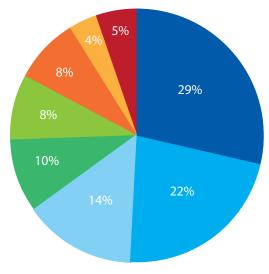
#### **IWW GOODS TRANSPORT IN THE NETHERLANDS BY SEGMENT**

#### STRUCTURE OF INLAND WATERWAY GOODS TRANSPORT IN THE **NETHERLANDS** (IN %)\*

Source: CBS

\*% share based on tonnes of annual cargo traffic

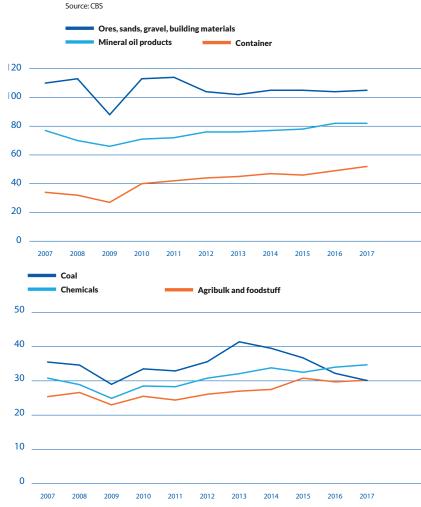




#### FOCUS ON THE NETHERLANDS | 37

#### INLAND WATERWAY TRANSPORT VOLUME IN THE **NETHERLANDS BY GOODS SEGMENT (IN MILLION TONNES)**





#### **PORT OF ROTTERDAM**

Source: Port of Rotterdam and CBS

Indicator	Value 2017
Maritime traffic total	467.4 mio. tonnes
Inland waterway traffic total	158.1 mio. tonnes
- Outgoing IWT (loaded) - Incoming IWT (unloaded)	112.4 mio. tonnes 45.7 mio. tonnes
Number of inland vessels (frequentation)	105,000
Modal share IWT (for loaded goods)	55 %

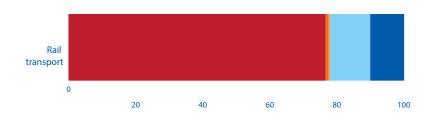
- In 2017, 917 million tonnes of cargo were loaded in the Netherlands by inland vessels, trucks and trains, and within this figure, almost 1/41/4 were loaded in the Rotterdam port area.
- Of the goods loaded in the Rotterdam port area, 112.4 million tonnes were delivered by inland vessels to the hinterland (= modal share of 55%), 37% by trucks and 8% by railways.
- 70.5% of the goods loaded on inland vessels and 93% of the goods loaded on trains left from Rotterdam to destinations abroad.
- Among the destinations abroad, Germany had a share of 70% for the goods loaded on inland vessels and 76.5% for the goods loaded on trains
- Around two-thirds of the goods transported by inland vessels and trains to Germany were iron ores (42.5%) and coal (25%).

#### LOADED GOODS IN THE PORT OF ROTTERDAM AND THEIR **DESTINATIONS IN THE HINTERLAND** (2017, IN %)









#### GLOSSARY

20XX-1/20XX-Q1: First Quarter

BN: Billion

**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

**GDP**: Gross Domestic Product

**IWT**: Inland Waterways Transport

IWW: Inland Waterway

**LOADING DEGREE**: Percentage of maximum vessel loading

MIO: Million

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

PP: Percentage point

RHINE COUNTRIES: Belgium, France, Germany, Luxemburg,

Netherlands, Switzerland

**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 Netherlands and Germany

TURNOVER: Sales volume net of sales taxes.

#### NATIONAL STATISTICS OFFICES

Acronym	Original Name	English Name	Country
Statistik	Statistik Austria	Statistics Austria	Austria
Statbel	Statistics Belgium	Statistics Belgium	Belgium
NSI	Национален статистически институт	National Statistical Institute	Bulgaria
DZS	Državni Zavodza Statistiku	Central Bureau of Statistics of Croatia	Croatia
MDCR	Ministerstvo dopravy České republiky	Ministry of Transport of the Czech Republic	Czech Republic
FTA	Liikennevirasto	Finnish Transport Agency	Finland
VNF	Voies Navigables de France	Navigable Waterways of France	France
destatis	Statistisches Bundesamt	Federal Statistical Office of Germany	Germany
KSH/ HCSO	Központi Statisztikai Hivatal	Hungarian Central Statistical Office	Hungary
MIT	Ministero delle Infrastrutture e dei Trasporti	Ministry of Transport and Infrastructure	Italy
AlPo	AgenziaInterregionale per il fiume Po	Interregional Agency of the Po River	Italy
OPS	Oficialiosios Statistikos Portalas	Statistics Lithuania (Official Statistics Portal)	Lithuania
STATEC	Institut national de la statistique et des études économiques du Grand- Duché de Luxembourg	National Institute of Statistics and Economic Studies of the Grand Duchy of Luxembourg	Luxemburg
CBS	Centraal Bureau voor de Statistiek	Central Statistical Office	Netherlands
GUS	Główny Urząd Statystyczny	Central Statistical Office	Poland
P3C	Републички завод за статистику	Statistical Office of the Republic of Serbia	Republic of Serbia
INSSE	Institutul National de Statistica	National Institute of Statistics	Romania
Slovstat	Štatistický úrad Slovenskej republiky	Statistical Office of the Slovak Republic	Slovak Republic
Trafa	Trafikanalys	Transport Analysis	Sweden
DfT	Department for Transport	Department for Transport	United Kingdom

#### **■ OTHER SOURCES**

Original Name	English Name	Country
EUROSTAT	EUROSTAT	EU
<b>European Commission</b>	<b>European Commission</b>	EU
Ports mentioned in the report	Ports mentioned in the report	EU
PJK International	PJK International	Netherlands

#### **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.

When available, general cargo is included in dry cargo.

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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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Moselle Commission

Sava Commission

FBU

**ESO** 

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#### www.inland-navigation-market.org



