

MARKET INSIGHT

INLAND NAVIGATION IN EUROPE

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SUMMARY

During the first half of 2016, inland navigation in Europe mirrored the general context of European economic growth, boosted in part by intra-EU trade but affected nevertheless by the overall slowing down of the global economy. Economic growth is expected to remain between 1 and 2% in the euro area in 2017.

The countries bordering the Rhine are maintaining their key role in European inland navigation; they represent 84% of Europe's riverborne transport, compared with 15% for the countries bordering the Danube.

The performance of inland waterway transport (IWT) in Europe, traditionally correlated to industrial growth in Europe, suddenly became detached from it in the second half of 2015 as a result of an exceptional period of low water conditions. This particularly affected demand in Germany. After the period of low water conditions at the end of 2015, traffic on the Rhine took an upward turn during the first half of 2016, almost reaching the level of traffic achieved in the first half of 2015. Notwithstanding, the first half of 2016 saw a 2.1% drop in traffic on the Rhine compared with the same period in 2015. Traffic on the Danube, on the other hand, experienced a difficult first half-year in 2016, with a drop in traffic compared with 2015 of as much as 31% on the middle section of the Danube, mainly because of poor harvests and a corresponding decrease in the transport of cereals and agricultural products. However, the transport of other goods - including metals and oil products - on the Danube increased substantially.

The volume of traffic on the Rhine is increasing at different speeds in the main market segments (dry bulk, liquid bulk, containers). Container traffic has experienced an upswing after the period of low water conditions, recording an increase of 20% since the end of 2015 and reaching a record level in the second quarter of 2016, at more than 4 billion TKM in Europe. Dry bulk transport increased during the first half of 2016, but is having difficulty in resuming the level

of traffic of the first half of 2015, whereas liquid bulk, boosted by more dynamic industries and low oil prices, has already achieved a better result than in 2015. While two-thirds of the transport of iron ore and metals is still concentrated on the Rhine, the Moselle and the Saar, the market in this region is currently stagnating as a result of intense global competition in the iron and steel sector. The country bordering the Rhine with the highest growth rate in the first half of 2016 compared with the first half of 2015 is the Netherlands; this is mainly due to the transport of containers and bulk liquids.

There are structural changes to expect in the long term, in order to deal with the steadily increasing proportion of container transport in inland navigation in Europe and the need to anticipate the consequences of Europe's new energy policies, particularly with regard to the transport of coal and oil products.

With the return to normal of water conditions, the price of transport services fell in the first half of 2016, reaching a level lower than that for the first half of 2015. Despite an increase in traffic in the Netherlands, turnover in the sector fell during the first half of 2016.

Inland ports saw varying degrees of activity in the first half of 2016. Whereas traffic in many Rhine and Danube ports was less than in the first half of 2015, the most important inland port in terms of volume of goods - Duisburg - saw an increase of almost 3% of its waterborne traffic.

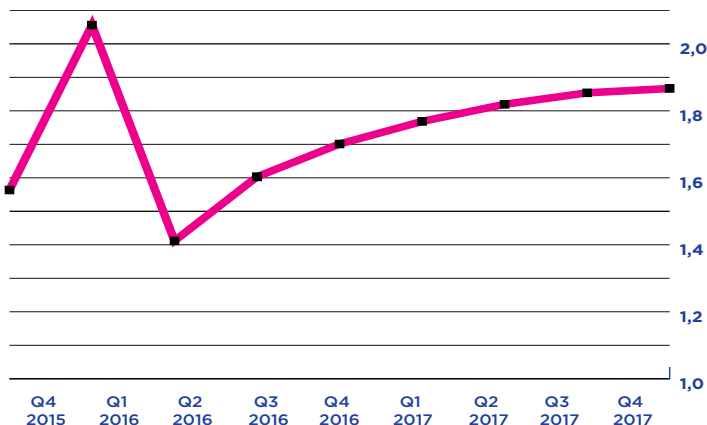


01

ECONOMIC CONTEXT

ECONOMIC CONTEXT IN EUROPE

QUARTERLY GDP GROWTH OUTLOOK IN THE EURO ZONE
(YEARLY RATE IN %)



Source: OECD - Economic outlook n°99

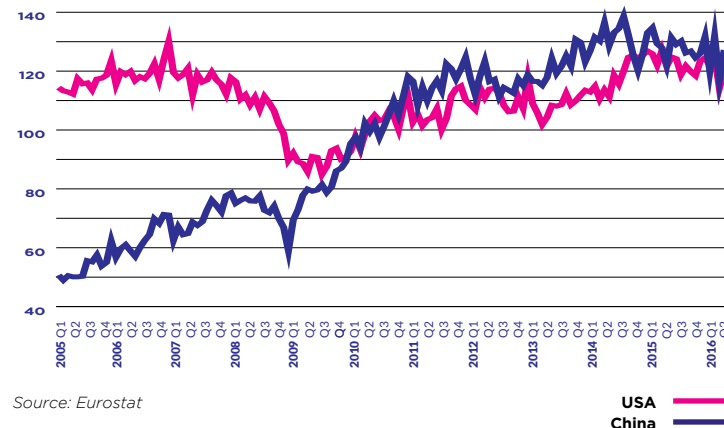
- European GDP growth expectations for 2016 and 2017 remain low, between 1.5% and 2%.
- OECD expectations for 2017 have been lowered from 1.7% to 1.5% for Germany and from 1.5% to 1.3% for France. The expected growth in the Euro zone has been lowered from 1.7% to 1.4%.
- The world economy is faced with a slowdown of world trade, especially between Europe and China / USA. Structural changes in the Chinese economy - the shift from an export-oriented towards a consumption-based economy - explain part of the current slowdown in world trade.
- Intra-EU trade is progressing more steadily, but cannot fully compensate the loss due to momentum in world trade related to weak global demand.

EXPORTS OF THE EUROPEAN UNION TO OUTSIDE (EXTRA-EU-28) AND INSIDE (INTRA-EU-28) THE EU (INDEX 2010=100)



Source: Eurostat

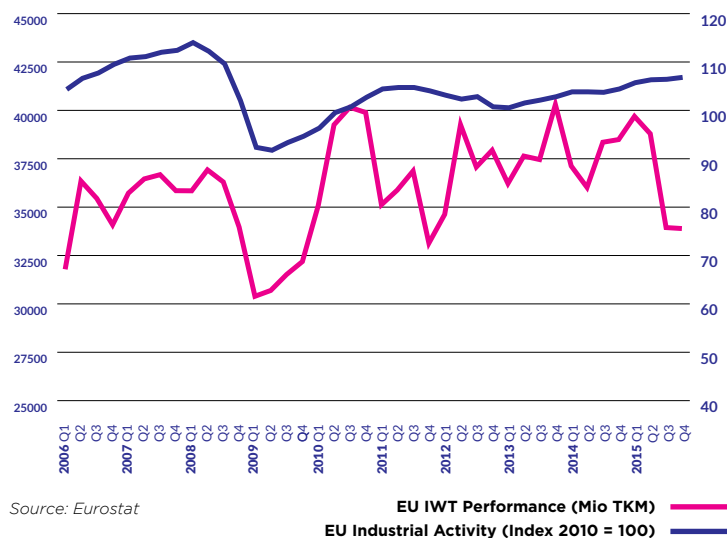
EXPORTS OF THE EUROPEAN UNION TO CHINA AND THE USA (INDEX 2010=100)



Source: Eurostat

INDUSTRIAL ACTIVITY AND INLAND NAVIGATION

INDEX OF INDUSTRIAL PRODUCTION AND GOODS TRANSPORT ON INLAND WATERWAYS IN THE EU



+3.8%

INDUSTRIAL PRODUCTION GROWTH IN THE EU
OVER THE LAST TWO YEARS

- The growing intra-EU trade reflects a similar upward trend as industrial activity.
- The EU has experienced industrial production growth during seven quarters in a row.
- However, this slight upward trend has not yet been reflected in goods transport on inland waterways, especially due to natural conditions that impacted IWT during the last semester of 2015.

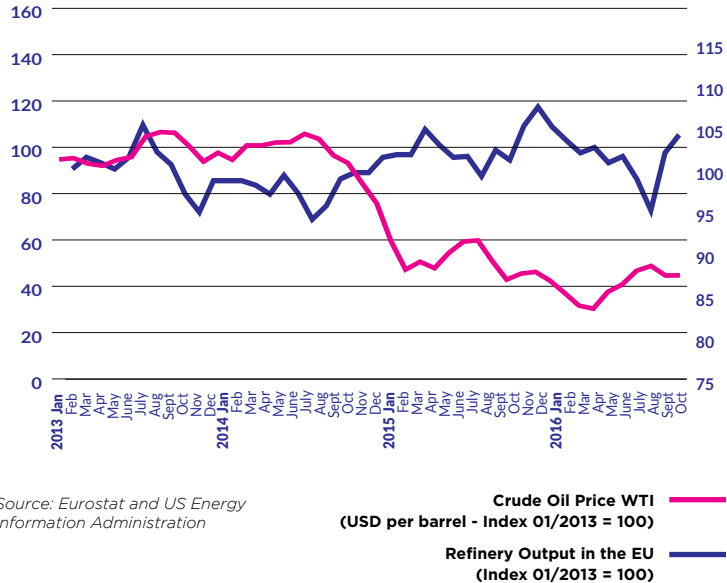
IN 2015

LOW WATER PERIODS
BROUGHT LOSSES OF CARGO
**DECOUPLING INLAND
WATERWAY TRANSPORT FROM
INDUSTRIAL PRODUCTION.**



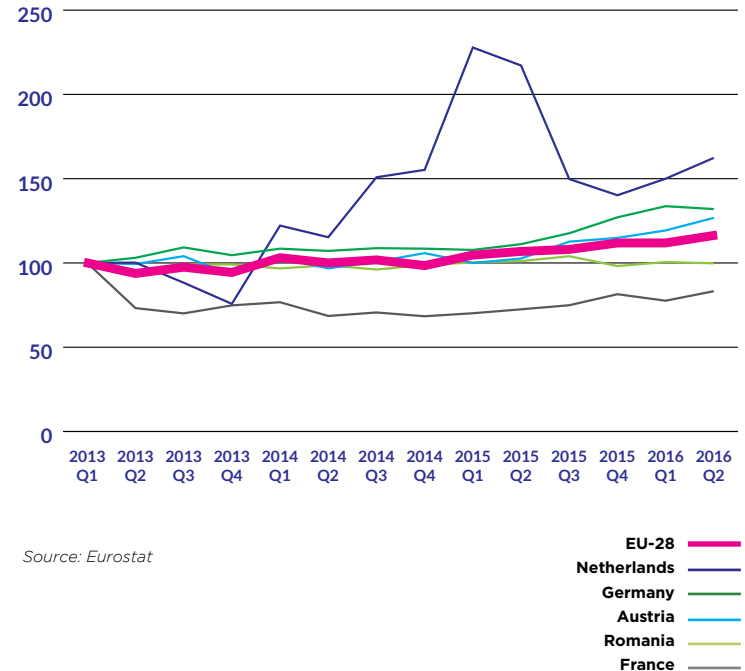
INLAND NAVIGATION-RELATED SECTORS

REFINERY OUTPUT IN THE EU AND CRUDE OIL PRICE



- Oil prices are still very low, in spite of a slight upward tendency in 2016.
- The low oil prices tend to have a positive effect on the refinery output, the economic situation in general, and the outlook of transport demand in the liquid cargo segment.

EVOLUTION OF BUILDING PERMITS FOR RESIDENTIAL HOMES IN THE EU (INDEX 2013=100)



- Despite rising industrial activity, economic conditions of particular dry cargo segments are stagnating.
- Example of the construction sector: since the burst of the housing bubble in 2006/2007, this sector has been characterised by a long period of stagnation. Only since 2015 can a small pickup be noticed in main European countries. Building permits have increased by +9% between Q2 2015 and Q2 2016 in the EU.
- The business cycle of the steel industry also has an important impact on IWT volumes (this is analysed in detail in the chapter "Outlook").

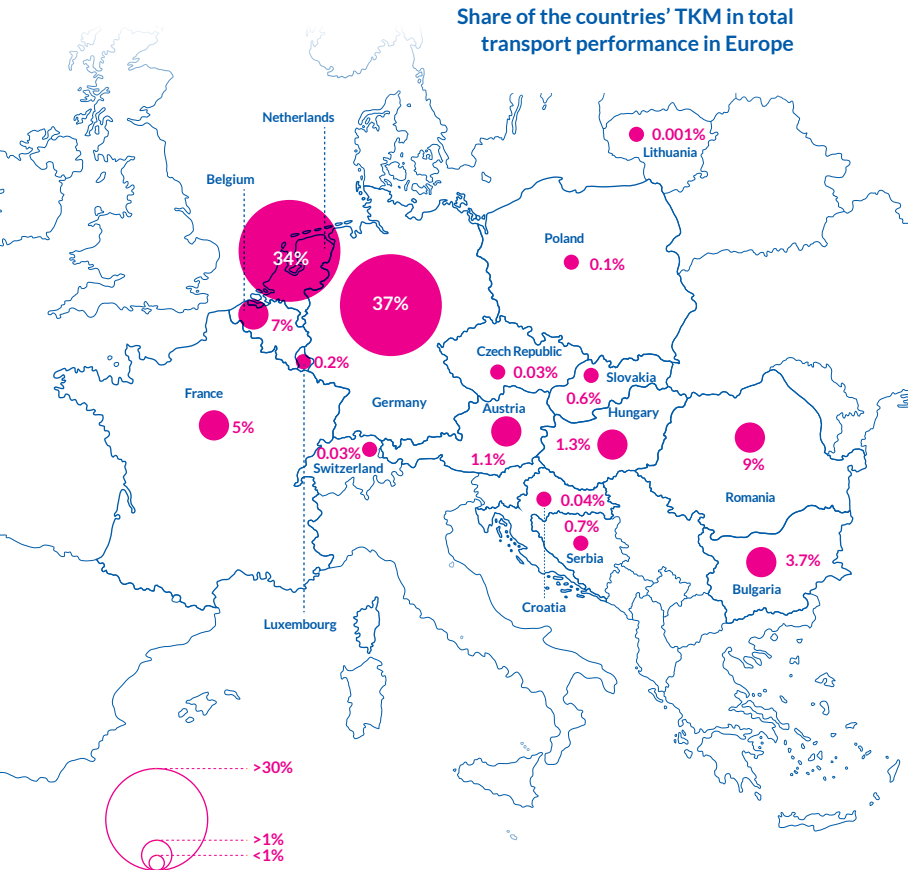


02

FREIGHT
TRAFFIC
ON INLAND
WATERWAYS
AND IN PORTS

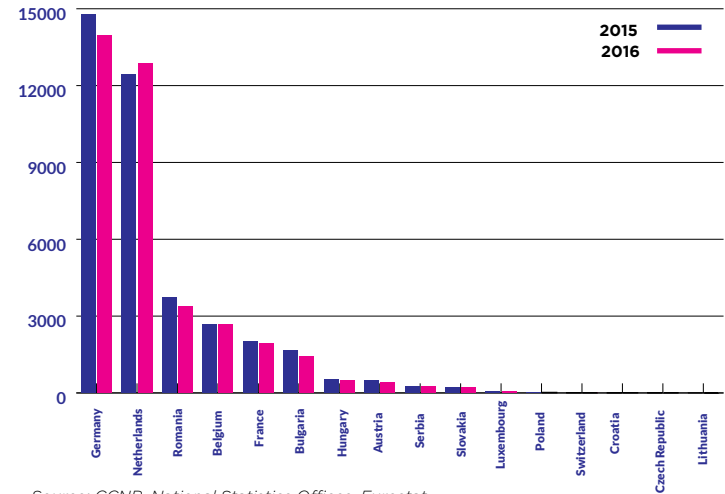
TRANSPORT PERFORMANCE IN EUROPE

TRANSPORT PERFORMANCE IN IWT ON THE NATIONAL TERRITORY OF EACH COUNTRY IN EUROPE FOR Q2 2016



Source: National statistics offices, Eurostat, CCNR.
For the definition of 'Europe': see the methodology at the end of the report

COMPARISON OF TRANSPORT PERFORMANCE PER COUNTRY BETWEEN Q2 2015 AND Q2 2016 (MIO TKM)

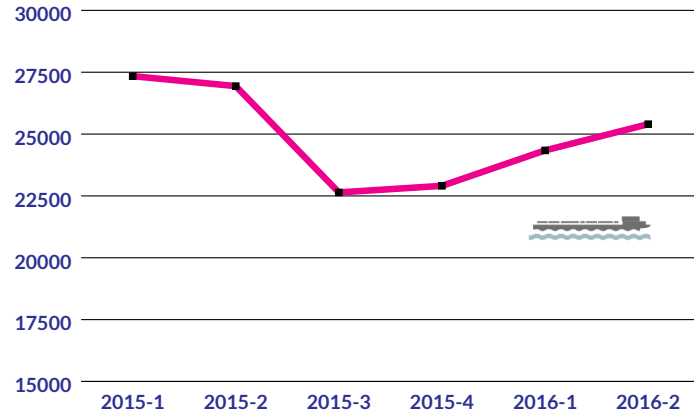


Source: CCNR, National Statistics Offices, Eurostat.

- In Europe, Rhine countries account for 84% of goods transport on inland waterways, whereas Danube countries represent 15%.
- 96.1 million tons of goods were transported on the traditional Rhine during the 1st semester 2016 (Q1+Q2). This represents a decrease of 2.1% compared to the same period in 2015.
- The Rhine traffic has not yet fully recovered from the low water period and the resulting sharp decline in traffic at the end of 2015.
- Compared with 2015, the decrease was greater during the 1st quarter than during the 2nd: -3.2% for Q1 2015-2016 vs -1.1% for Q2 2015-2016. This indicates that IWT traffic is on its way back to 2015 levels on the Rhine.
- The Danube traffic underwent a significant decline during the 1st semester of 2016 (Q1+Q2 2016), notably with a decrease of -31% for the Middle Danube, in particular on account of the sharp decrease for cereal and agricultural products transport decrease (due to bad harvest in 2015).

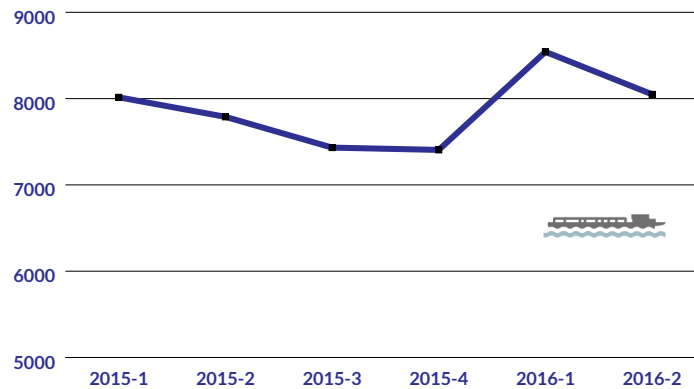
TRANSPORT PERFORMANCE IN EUROPE

DRY CARGO TRANSPORT PERFORMANCE IN EUROPE (QUARTERLY DATA - MIO TKM)



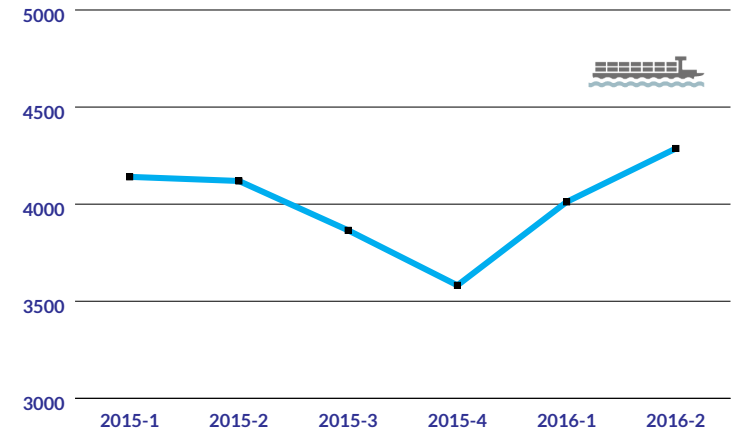
Source: National Statistics Offices, CCNR

LIQUID CARGO TRANSPORT PERFORMANCE IN EUROPE (QUARTERLY DATA - MIO TKM)



Source: National Statistics Offices, CCNR

CONTAINER TRANSPORT PERFORMANCE IN EUROPE (QUARTERLY DATA - MIO TKM)



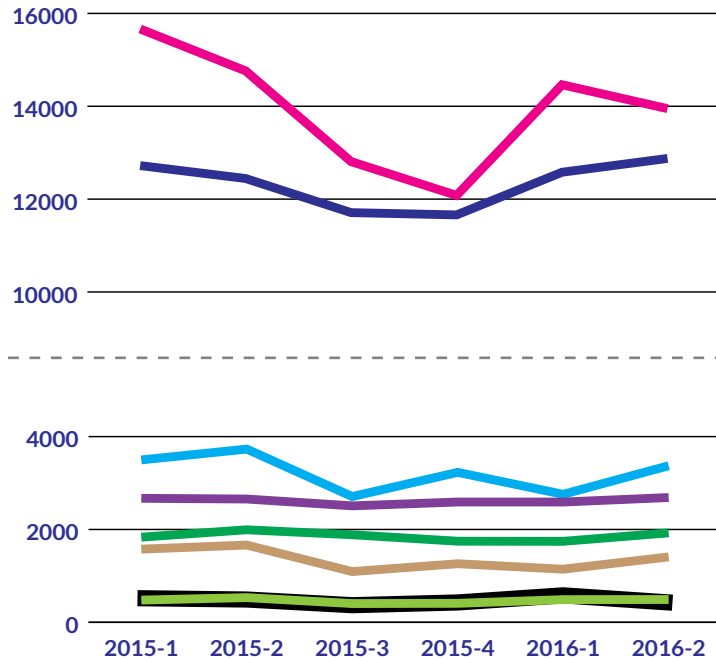
Source: National Statistics Offices, CCNR

- Container transport reached a record level during Q2 2016 reaching almost 4.3 billion TKM in Europe (+7% compared to Q1 2016 and +4.3% compared to Q2 2015).
- Dry cargo is slowly on its way back to the Q1 2015 level.
- In Q2 2016, liquid cargo transport slowly decreased compared to Q1 2016 (-6%), but remained higher than 2015 transport performance levels.
- Taking all segments together, transport performance in Q2 2016 increased by 2.3% compared to Q1 2016 and by decreased by 2.9% compared to Q2 2015.

+20%
BETWEEN Q4 2015 AND Q2 2016 CONTAINER TRANSPORT EXPERIENCED A STRONG INCREASE RECOVERING FROM THE LOW WATER PERIOD OF END 2015.

TRANSPORT PERFORMANCE IN MAIN EUROPEAN IWT COUNTRIES

INLAND SHIPPING TRANSPORT PERFORMANCE IN MAIN EUROPEAN IWT COUNTRIES (MIO TKM)



Source: Eurostat and National Statistics Offices



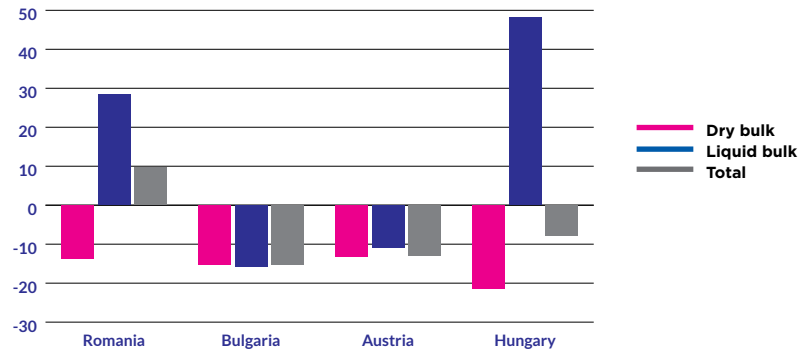
- The evolution in the two countries with the highest IWT volumes shows that the low water period in the 2nd half of 2015 had a more negative effect on transport demand in Germany than in the Netherlands. This is due to the fact that navigation conditions on rivers in Germany (especially on the Elbe and the German stretch of the Danube) were impacted more seriously by the low water conditions in autumn 2015. Complete recovery in Germany has not yet been achieved.
- In France, a slight upward trend for certain goods (agricultural products, foodstuff, fertilizers, metal products) is offset by negative tendencies for other products (coal, iron ores, oil products, sands, soil & building materials). This results in a rather stable evolution for the overall transport performance in France. Still considering the important weight of agricultural products in French inland navigation, bad harvests in 2016 are expected to have a negative impact after the summer.
- The evolution in the Danube countries was rather negative during the 1st half of 2016 for the Upper Danube (Austria), as well as the Middle Danube (Croatia, Hungary, Serbia) and Lower Danube (Bulgaria, Romania)- mainly due to a reduction in movement of agricultural products and foodstuff. This decline does not reflect long-term trends since it was the direct consequence of bad harvest results in 2015.
- Also on the German stretch of the Danube and on the Rhine-Main-Danube canal, severe reductions of cargo were registered.

+2.4%

Q2 VS Q1 2016 IN THE NETHERLANDS, THE UPWARD TREND REGISTERED SINCE END 2015 IS STILL ONGOING.

DRY BULK, LIQUID BULK AND CONTAINER TRANSPORT

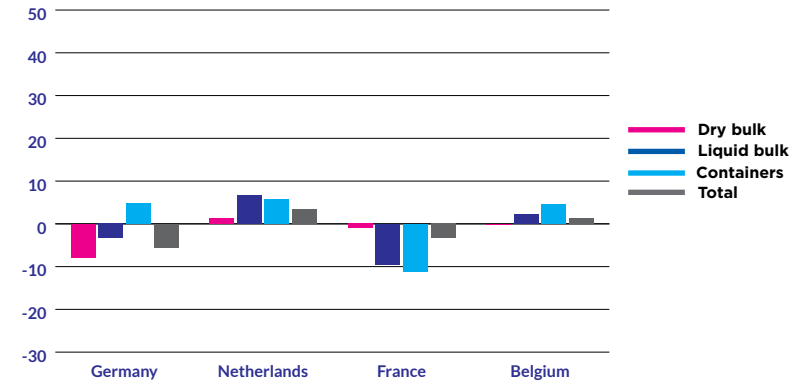
RATE OF CHANGE IN INLAND SHIPPING TRANSPORT PERFORMANCE IN DANUBE COUNTRIES (Q2 2016 VS Q2 2015 IN%)



Source: Eurostat

- Dry cargo is the overall dominant market segment in the Danube region. It is marked by high volatility, which is due to the major importance of agricultural products, while container transport is still very limited.
- Despite decreasing transport performance in the dry cargo segment due to bad harvests in the Danube region, some other dry cargo segments like metals and iron ores have experienced transport increase in parts of the Danube.
- The strong increase in liquid cargo transport in Hungary is due to the transport increase in mineral oil products. The still relatively low volumes explain the important rate of change.
- Container transport on the Danube remains very low, representing 0.5% of total transport performance during Q2 2016, while it represents 13.5% in the Rhine countries.

RATE OF CHANGE IN INLAND SHIPPING TRANSPORT PERFORMANCE IN RHINE COUNTRIES (Q2 2016 VS Q2 2015 IN%)

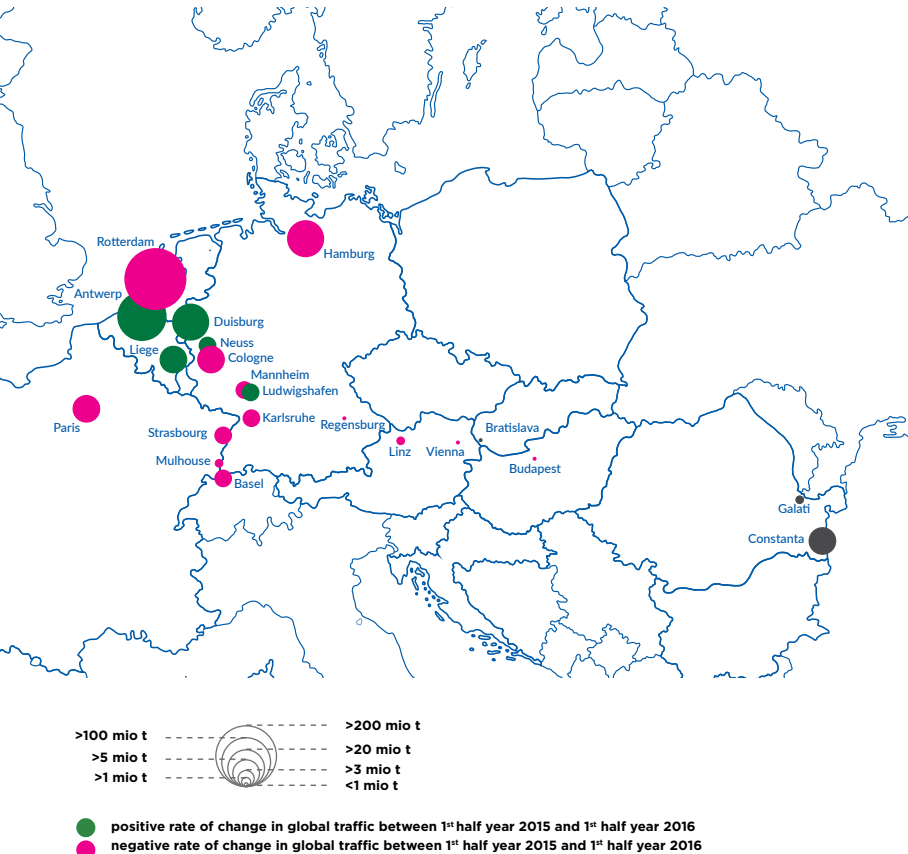


Source: Eurostat

- Container transport has renewed with a positive trend in both Germany and the Netherlands, while undergoing a severe decrease in France.
- Liquid cargo transports are performing well in the Netherlands, whereas they lost momentum in Germany. For Germany, these volumes are decreasing in the long run due to a falling consumer demand for heating oil and gasoline. In the Netherlands, however, these transports are fostered by rising trade movements of oil products and inter-refinery movements.
- Dry cargo segment is the weakest segment in all countries, reflecting saturation tendencies in certain industries.
- In France, the situation is explained by different trends according to goods segments. In Q2 2016, mineral oil products and iron ores accounted for losses of 20-30% with respect to Q2 2015, while agricultural products respectively gained 2%, foodstuff 20%, metals 3%, and fertilisers 14%.

TRANSSHIPMENTS IN EUROPEAN PORTS

GLOBAL TRAFFIC IN EUROPEAN PORTS IN 2016



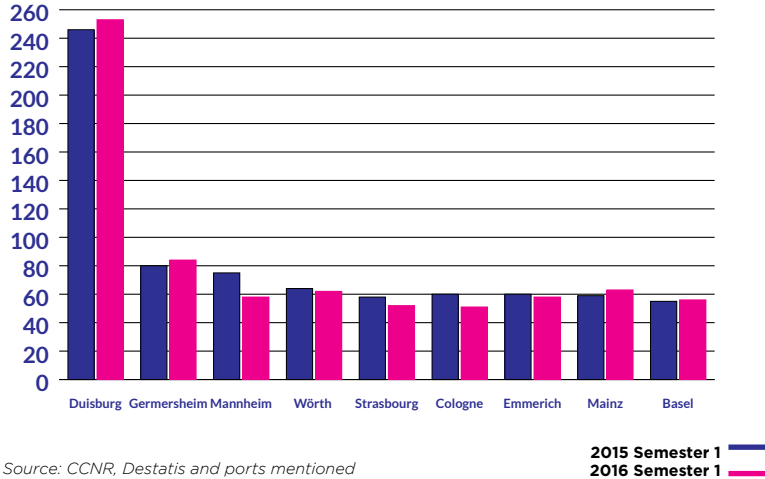
Source: CCNR, Danube Commission and ports mentioned

- The goods traffic in Rotterdam and Hamburg decreased between the 1st half of 2015 and 2016.
- The dry bulk segment was particularly impacted in the port of Rotterdam with a decrease of 3.9% between the 1st half of 2015 and 2016.
- The liquid bulk also experienced a decrease (-1.1%) but remains at historically high levels, helped by low fuel prices.
- Antwerp was able to increase its maritime traffic by almost 4% between the 1st half of 2015 and 2016, relying strongly on container traffic increase.
- The biggest European inland port, Duisburg, counted an increase of almost 3% in its IWT traffic over the same period.
- In parallel to the decrease in the main maritime port for the Rhine hinterland (Rotterdam), the major Rhine ports saw a decrease in transshipment between the 1st semester 2015 and the 1st semester 2016 (average rate of decrease was 4% for the biggest eight Rhine ports).
- The port of Neuss-Düsseldorf was the positive “outlier” with an increase in traffic of 8%.
- The major Danube ports witnessed a decrease in their traffic as well.

**INCREASE IN GOODS TRAFFIC
IN THE 1ST HALF OF 2016
FOR 1 OF THE 3 MAJOR MARITIME PORTS
AND 2 OF THE 3 MAJOR INLAND PORTS
IN EUROPE**

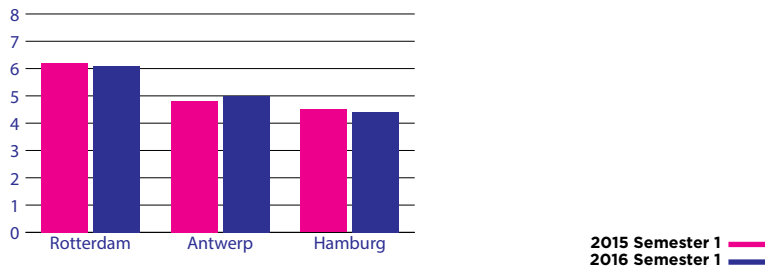
TRANSSHIPMENTS IN EUROPEAN PORTS

IWT CONTAINER TRAFFIC IN EUROPEAN INLAND PORTS IN THE 1ST HALF OF 2015 AND 2016 (IN 1000 TEU)



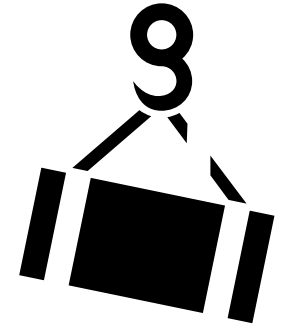
Source: CCNR, Destatis and ports mentioned

MARITIME CONTAINER TRAFFIC IN EUROPEAN SEA-PORTS IN THE 1ST HALF OF 2015 AND 2016 (IN MIO TEU)



Source: CCNR and ports mentioned

**+2.9% CONTAINER
TRANSSHIPMENT INCREASE
IN DUISBURG
BETWEEN 1ST SEMESTER 2015
& 1ST SEMESTER 2016**



- Container handling in inland ports is part of multimodal logistics chains, and represents a growth segment especially along the Rhine, with its dense industrial areas requiring container transport possibilities.
- Ports offering multimodal container terminals help to further integrate IWT in logistical chains, by connecting it with high added-value products (machines, computers, equipment, etc.).
- Major container ports on the Rhine experienced contrasted evolution during the 1st half of 2016 compared to the 1st half of 2015, with, for example, an increase in containers transshipment in the ports of Duisburg, Germersheim, Mainz and Basel.
- The development potential of container traffic has still to be exploited in the Danube area.
- Maritime ports experienced the same evolution for container transshipment as for total goods transshipment (increase in Antwerp and decrease in Rotterdam and Hamburg between 1st semesters of 2015 and 2016).
- Although the maritime container traffic in Rotterdam declined slightly (-2.3 %) in the 1st half of 2016, IWT container traffic in the Netherlands and in Germany benefited from the growing container traffic in the port of Antwerp. In Antwerp, the maritime container traffic in the 1st half 2016 was higher by 4.2 % than in the 1st half year 2015, which resulted in a growing hinterland container transport from Antwerp to the Netherlands and Germany.

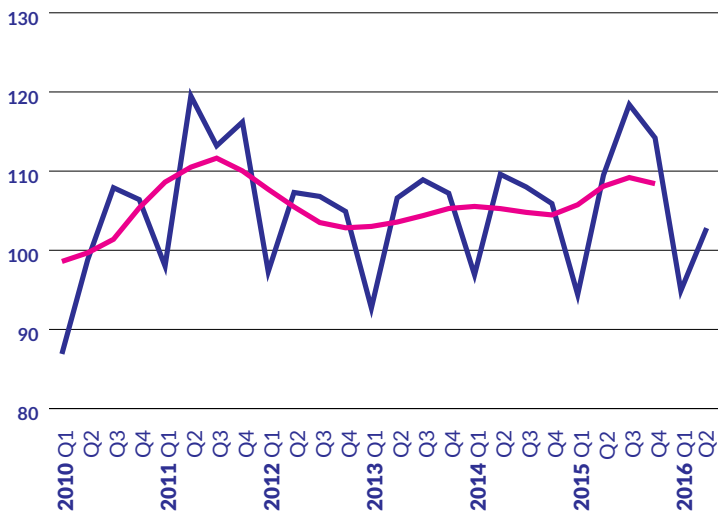


03

OPERATING CONDITIONS

TURNOVER DEVELOPMENT IN EUROPE

TURNOVER DEVELOPMENT IN THE NETHERLANDS
INDEX: 2010 = 100



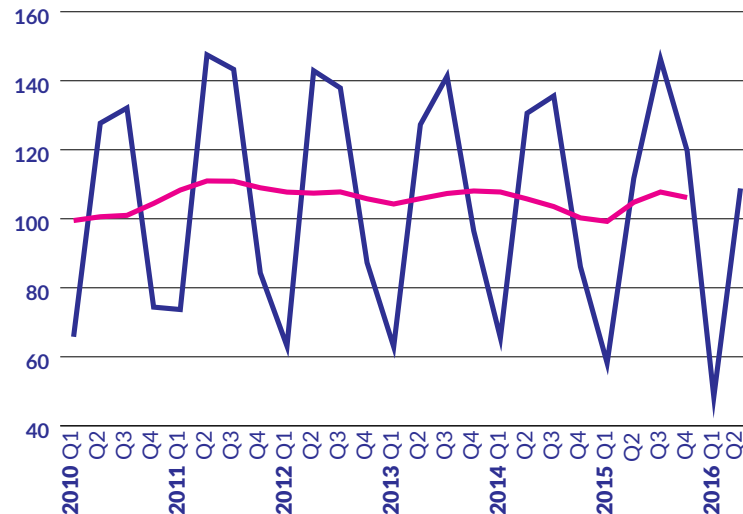
Source: CBS and CCNR calculation

Original series —
Seasonally adjusted —

TURNOVER IN THE NETHERLANDS
IN Q2 2016 SHRANK BY 6%
COMPARED TO Q2 2015

-6%

TURNOVER DEVELOPMENT IN AUSTRIA
INDEX: 2010 = 100



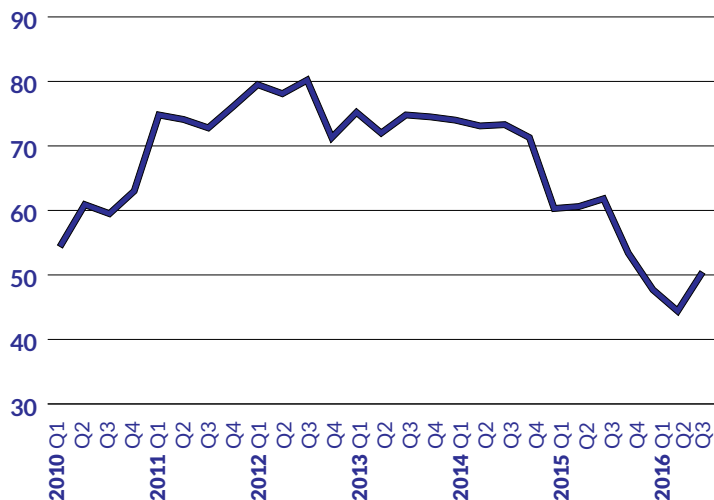
Source: Statistics Austria and CCNR calculation

Original series —
Seasonally adjusted —

- During Q2 2016, water conditions enabled a high degree of loading and led to shrinking freight rates and turnovers.
- This evolution remains aligned with usual seasonal evolution.
- In Austria, where passenger transport is greater than goods transport, the high volatility of passenger shipping has a strong influence on turnover.
- After a trough in Q1 2016, turnover recovered slightly in Q2 2016, despite still being 3% lower than in Q2 2015.

FREIGHT RATES AND FUEL PRICE

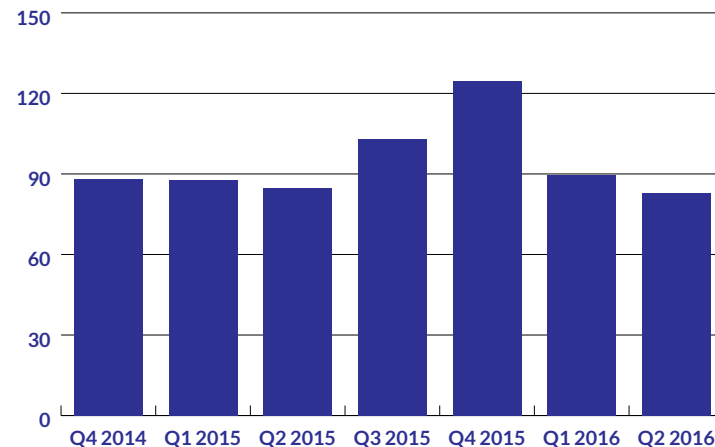
DEVELOPMENT OF FUEL PRICES IN THE IWT SECTOR (IN EUR/100L.)



Source: CBRB

- Following the declining oil price, fuel prices did reach a trough in Q2 2016.
- In Q3 2016, fuel prices showed some signs of recovery, as oil prices picked up slightly.
- The OPEC countries' agreement at the end of 2016 might lead to a further upward trend in fuel prices during 2017.

DEVELOPMENT OF INLAND NAVIGATION FREIGHT RATES IN THE NETHERLANDS (2015 = 100)

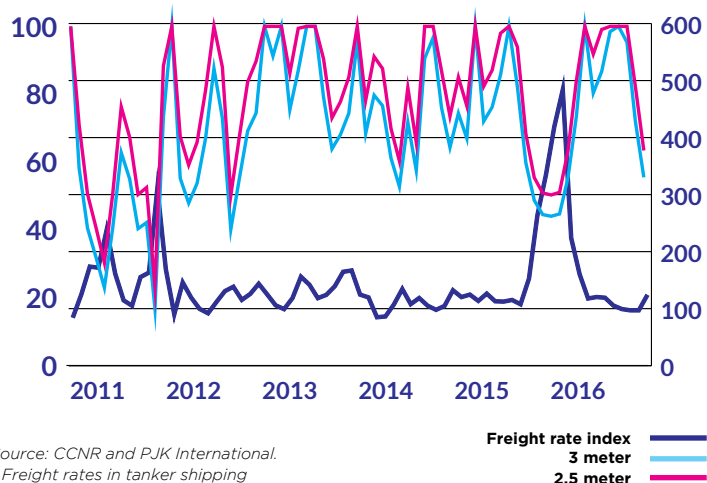


Source: CBS

- In Q2 2016, freight rates in goods transport in the Netherlands were slightly below the level of Q2 2015.
- Taking only tanker freight rates into account, we also observed a decrease during the Q2 2016 (-3.5% compared to Q2 2015).
- On the Danube, freight rates are correlated to transport running costs. As these costs are essentially composed of fuel cost (between 50 and 60%), low fuel prices during the 1st semester of 2016 have triggered a decrease in inland navigation freight rates.

FREIGHT RATES AND WATER CONDITIONS

POSSIBLE LOADING DEGREES AT KAUB/MIDDLE RHINE FOR VESSELS WITH A DRAUGHT OF 2.5 AND 3 METERS, COMPARED WITH FREIGHT RATES INDEX*



- Freight rates were much weaker during the 1st half of 2016 than in autumn 2015, when low water levels increased prices sharply.
- Apart from supply/demand ratios, freight rates are strongly influenced by the natural conditions (water levels).
- Water levels and transport prices (freight rates) are negatively correlated.
- In the 1st half of 2016, the water levels along the Upper, Middle and Lower Rhine were rather favourable towards a high loading degree of vessels. However, this put a brake on freight rates.





04

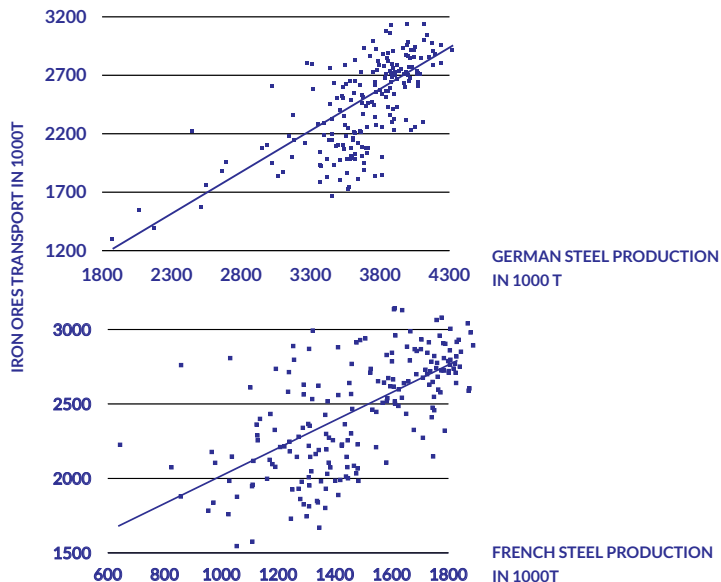
OUTLOOK

■ FOCUS ON STEEL INDUSTRY

The transport of steel, steel products, iron ore and coal is strongly correlated with IWT. In Europe, the greatest transport volumes in this segment can be found in the Rhine area. The steel industry in Germany, France and Luxembourg is connected with the Rhine, the Moselle and the Saar rivers.

Due to high international competition, steel production and iron ore transport are stagnating in Europe.

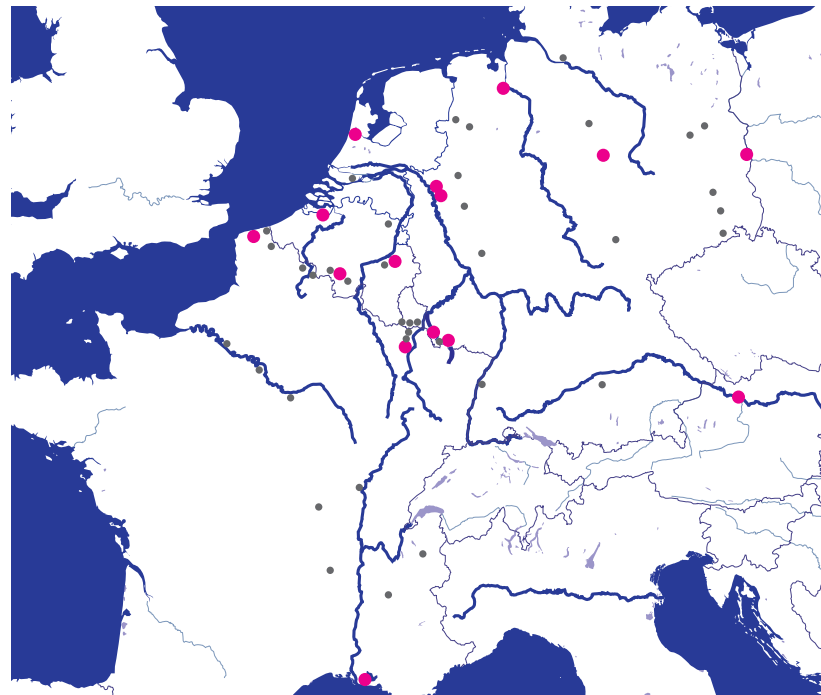
GERMAN AND FRENCH STEEL PRODUCTION AND TRANSPORT OF IRON ORE ON THE RIVER RHINE *



Source: World Steel Association and destatis / * monthly data from 1/2000 until 9/2016

2/3 OF ALL IRON ORE AND METAL TRANSPORT ON EUROPEAN INLAND WATERWAYS ARE OBSERVED ALONG THE RHINE, MOSELLE AND SAAR.

WEST EUROPEAN WATERWAYS AND STEEL PRODUCTION

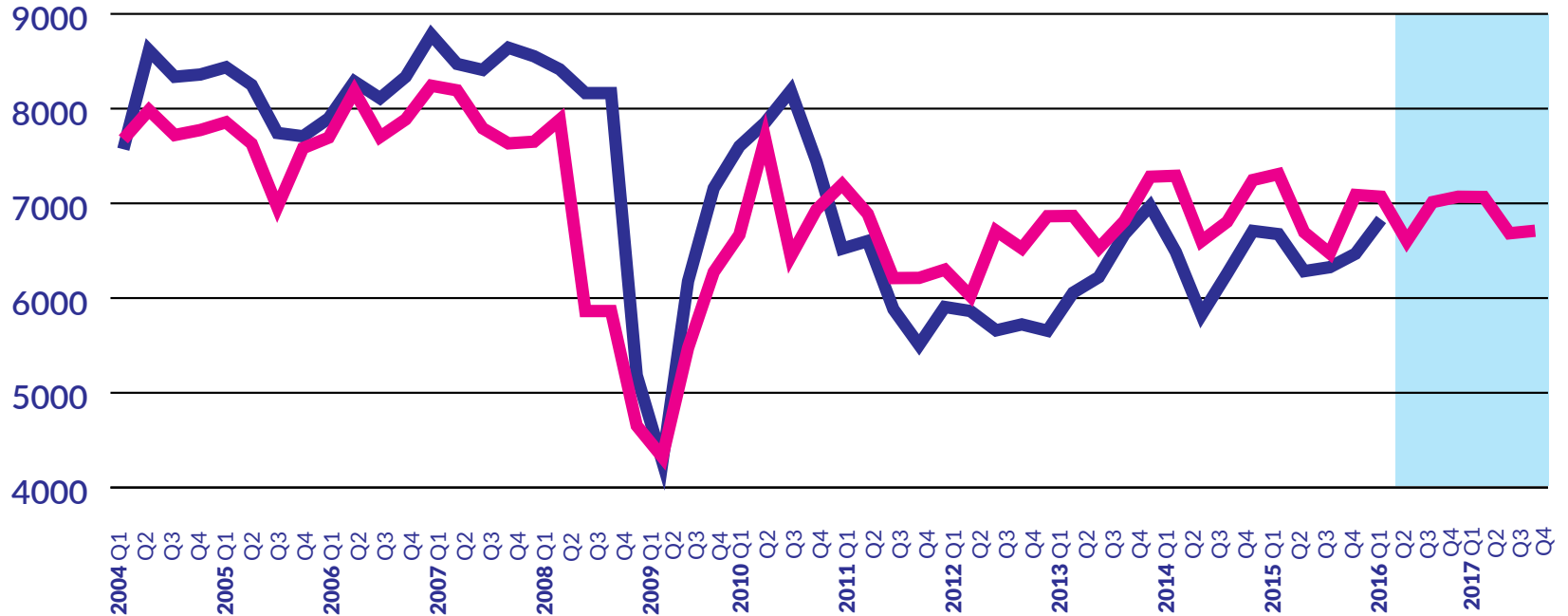


Blast furnace steelwork ●
Electric steel plant ●

Source: CCNR

FORECAST MODEL AND RESULTS

IRON ORES VOLUME TRANSPORTED ON THE RHINE IN 1000T AND FORECAST MODEL



Source: CCNR

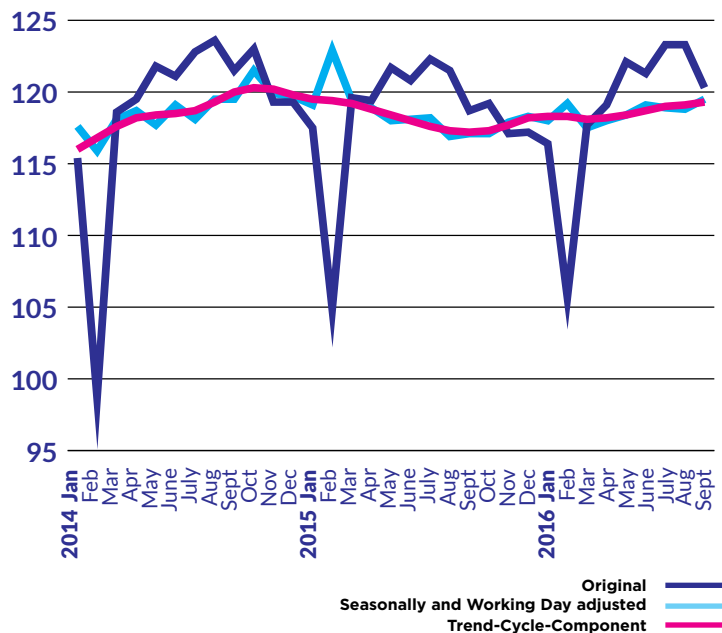
Iron ore Transport —
Forecasting model —

- Iron ore transport on the Rhine is expected to stagnate in 2017, in parallel with an expected stagnation of steel production in Western Europe.

- The main reason why Western European steel production is expected to pursue its stagnation trend in 2017 is the sharp global competition in this sector, especially from countries like China and India.

WORLD TRADE OUTLOOK AND TRANSPORT TRENDS

RWI/ISL CONTAINER THROUGHPUT INDEX



Source: RWI and ISL calculation based on data from 81 ports

- The RWI/ISL Container throughput index is based on data from 81 world container ports covering 60% of worldwide container handling. This index is an early indicator for world trade and maritime container shipping.
- For the 2nd half of 2016, the trend-cycle-component of the index is still on an upward trend, giving credit to the positive outlook for the container transport.

TRENDS IN DEMAND FOR TRANSPORT IN 2017

| | Main driver(s) | Trends in demand |
|---------------------------------|--------------------------------------------------|------------------|
| Agricultural products | Harvest results | Decrease |
| Iron ores | Steel production | Stagnation |
| Metals | Steel production | Stagnation |
| Coal | Weather & Energy policy, partly steel production | Decrease |
| Containers | World trade | Increase |
| Sand, soil & building materials | Construction activity | Stagnation |
| Mineral oil products | Oil prices | Stagnation |
| Chemicals | Chemical production | Increase |

Source: CCNR

- Bad harvests in 2016 in Western Europe will keep having an impact on IWT at the end of 2016 and beginning of 2017. On the other hand, contrary to 2015, the Danube region has experienced good harvest results in 2016 that should have a positive impact on agriculture products IWT transport on the Danube.
- The outlook for the steel segment has changed from a decreasing to a stagnant tendency, due to the new outlook of steel production in Germany forecasting a stabilisation in the steel industry.
- The outlook on coal transport is still weak due to the ongoing growth of renewable energies. AGEBA is indeed expecting a decrease in coal use within the German energy sector (-4.4% for the first 9 months of 2016 compared to 2015).
- The outlook for the liquid cargo sector is more uncertain. The transport of mineral oil products might be less favourably affected by low oil prices and high profit margins in the refinery sector because of the recent OPEC countries agreement.

GLOSSARY

AGEB: AG Energiebilanzen e.V. / Working Group on Energy Balances (Germany)

CBRB : Vereniging Centraal Bureau voor de Rijn- en Binnenvaart / Central Bureau for Inland Barging (Netherlands)

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 the 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

Loading degree: percentage of maximum vessel loading

MIO: Million

OECD: Organisation for Economic Co-operation and Development

Q1: First Quarter

Rhine countries: Belgium, France, Germany, Luxemburg, Netherlands, Switzerland

RWI/ISL Container Throughput Index: Index of worldwide container throughput in ports

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

TEU: twenty-foot equivalent unit - unit of cargo capacity

Turnover: Sales volume net of sales taxes

WTI: West Texas Intermediate (grade of crude oil used as benchmark in oil pricing)

NATIONAL STATISTICS OFFICES & INSTITUTES

| Acronym | Original Name | English Name | Country |
|------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|--------------------|
| Statistik | Bundesanstalt Statistik Österreich | Statistics Austria | Austria |
| Statbel | Algemene Directie Statistiek / Direction générale Statistique/ Generaldirektion Statistik | Statistics Belgium | Belgium |
| NSI | Национален статистически институт | National Statistical Institute | Bulgaria |
| DZS | Državni Zavod za 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 |
| AIPO | Agenzia Interregionale 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 | Luxembourg |
| CBS | Centraal Bureau voor de Statistiek | Statistics Netherlands | Netherlands |
| GUS | Główny Urząd Statystyczny | Central Statistical Office of Poland | 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 |
| OECD | OECD | World |
| World Steel Association | World Steel Association | World |
| AG Energiebilanzen | Working Group on Energy Statistics | Germany |
| Centraal Bureau voor de Rijn- en Binnenvaart | Central Bureau for Inland Barging | Netherlands |
| Federation Francaise de l'Acier | French Steel Association | France |
| Wirtschaftsverband Stahl | German Steel Association | Germany |
| Institut für Seeverkehrswirtschaft und Logistik | Institute of Shipping Economics and Logistics | Germany |
| Rheinisch-Westfälisches Institut für Wirtschaftsforschung | RWI - Leibniz-Institute for Economic Research | Germany |
| US. Energy Information Administration | US. Energy Information Administration | USA |
| PJK International | PJK International | Netherlands |

METHODOLOGY

Freight traffic on inland waterways and in ports

Europe as defined in chapter 2 takes 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 16).

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 are taken into account.

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

When available, general cargo is included in dry cargo.

Hungary and Bulgaria transport performance split by segment is based on Hungary and Bulgaria quarterly transport volume split provided by the National Statistics Offices.

Outlook

Explanatory variables for the iron ore transport forecast model are German steel production, French steel production, weighted by indicators for the market share of inland shipping within the steel sector.

The forecast model result is based on the following formula:

$$\log(\text{Iron ores transport}) = 0.24 * \log(\text{Steel production in France}) + 0.73 * \log(\text{Steel production in Germany})$$

CREDITS

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CONTRIBUTORS

CCNR

Guillaume LEGEAY (Project leader)

Norbert KRIEDEL (Economist)

Clémentine HURBOURQUE (Editorial coordination)

Angelika ESPENHAHN (Translation coordination)

Joseph DÜCK (Intern)

Contact: ccnr@ccr-zkr.org

IN PARTNERSHIP WITH

Danube Commission

Moselle Commission

Sava Commission

EBU

ESO

IVR

TRANSLATION

Christophe HENER (French)

Bettina ACHHAMMER (German)

Pauline de ZINGER (Dutch)

Jane SWIFT (English proofreading)

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