

## **IWT in the COVID-19 Crisis**

In the last chapter „Outlook“ of the „ANNUAL REPORT 2020“, published on the 17<sup>th</sup> of September 2020, CCNR gives a short-term impact of the „COVID-19 CRISIS“ in IWT for the discussion. No better material we can find now (see Part I.). Thank you very much for the CCNR Report-Team.

The sources for it are: Stakeholder interviews, Ports mentioned in this part, Seatrade Cruise News, Binnenschifffahrt online, Travel Weekly, ABN AMRO, Entreprises Fluviales de France (E2F), German Federal Ministry of Transport and Digital Infrastructure, DVZ, NPI, Der Bundesverband der Deutschen Binnenschifffahrt (BDB), Centraal Bureau voor de Rijn en Binnenvaart (CBRB), BLN Schuttevaer, Maritime Executive)

More read in source: <https://inland-navigation-market.org/chapitre/8-outlook/?lang=en>

In the Part II. we give a short summary of the information of the Vice-Presidents of the European River-Sea Transport Union e.V. (ERSTU) about the situation of IWT in their countries in the COVID-19 Crisis. These reports were prepared for the 46<sup>th</sup> Executive Committee and the XXIV. General Assembly of ERSTU on the 24<sup>th</sup> of September 2020 in Dresden.

### **PART I.**

#### **SHORT-TERM IMPACT OF THE COVID-19 CRISIS**

- **The Covid-19 crisis could lead to an estimated drop in IWW goods transport in 2020 of 20-25%. Danube ports data for March-April 2020 showed a decrease of 25-35%. Everywhere in Europe, passenger transport was almost at a complete standstill in the first half of 2020.**
- **Energy transition, in particular the phasing out of coal, and a stagnating or even declining steel production in Western Europe, represent major challenges for inland navigation in Western Europe over the coming 20 years. Concerning the Danube region, steel production is expected to grow further, due to a lower current steel intensity in Danube countries and catch-up effects.**
- **Container transport on inland waterways is heavily dependent upon maritime container transport and world trade. For some years now, world trade and seaborne trade have grown at lower rates, and this will be amplified further by the current pandemic crisis.**

**This part of the chapter “Outlook” takes account of the latest available information at the end of May 2020.**

- **The consequences of the Covid-19 crisis for the economy overall, the transport and logistics sectors, including inland navigation (both goods and passenger transport) are and will continue to be severe. The impact of the pandemic on the sector is expected to be felt long after the health crisis comes to an end. Based on GDP forecasts for the EU for 2020 and a comparison with the results for the 2009 financial crisis, a possible reduction of freight transport activity of at least 20-25% is estimated.**

- Available port figures for April 2020 seem to confirm this estimation. However, such effects will depend on the type of commodity, the type of company, and the country and region observed (*The precise effects will only be known when port figures become available for the months of April, May and June*).
- There are four main ways in which the inland navigation transport chain has been/is still impacted:
  - reduction in freight volumes at all levels, as a result of reduced/stopped industrial production,
  - substantial decline in freight volumes due to a major drop in demand,
  - serious disruption of logistical flows, in particular border controls, entry bans, lack of crew and available infrastructure,
  - dramatic decrease in passenger numbers due to the standstill in tourism.
- Some transport segments were immediately hit by the crisis and with great strength. This was the case for passenger transport (both river cruises, day trips and ferry services). It also had a quick impact on goods transport segments related to sectors directly impacted by lockdown regulations (e.g. construction, automotive, mobility sectors, etc.) Other IWT segments were affected “with a delay” (e.g. liquid cargo, containers). Some sectors considered as essential for the survival of the economy and the population resisted better to the crisis, but the trends vary significantly from one region to another. As of May 2020, while the IWT volumes have stabilised, they remain at a low level. The economic situation of the sector remains tense. However, it is important to note that the Covid-19 crisis is not the only reason for the declines observed in the IWT sector, which are also explained by seasonable effects and the structural change in the energy sector.
- For the whole inland navigation sector (goods and passenger transport together), the financial losses for the inland navigation sector are strongly dependent on the length and intensity of the crisis, which currently cannot be predicted. Such turnover losses could be at least 2.2 up to 4.4 billion euros for freight and passenger transport together, according to scenario calculations based on the turnover in IWW goods and passenger transport in the EU.

## **IMPACT OF COVID-19 ON IWT GOODS TRANSPORT**

- Regarding the goods transport sector, IWT transport volumes and demand have been declining continuously since the beginning of the crisis. The three main segments of goods transport (dry cargo, liquid cargo, containers) are affected differently. Based on the port data already available in April 2020 (compared to the same period in 2019), variations of waterside traffic for main western inland ports vary between -18% and -25% (*Swiss Rhine Ports, Lyon, Mannheim, Karlsruhe, Strasbourg, Mulhouse-Rhin*). Danube port data for March-April 2020 showed a decrease of 25-35%. Despite this overall decline, a significant level of grain transportation from the ports of the Middle Danube were recorded in March and April 2020. This intensity decreased at the end of April. However, not all ports sustained a decrease in April 2020 compared to April 2019 as a result of the Covid-19 crisis. This is for instance the case of RheinCargo (Neuss, Düsseldorf and Cologne).

## **Dry cargo**

- The dry cargo segment was affected earlier and more strongly than the liquid cargo and container segments and a high decline in transport volumes can be observed, in particular regarding transport of coal, steel, building materials and agricultural products, albeit the existing regional differences. On some occasions, it has been possible for vessel owners operating in particularly affected market segments to switch to the transport of other goods.
- In France for instance, while the construction sector was particularly affected, some vessel owners were able to transport cereals instead of building materials. In the Rhine area, the demand for the transport of dry cargo has declined significantly, in particular due to declining transshipment volumes in seaports such as Rotterdam. In some areas, an increase is reported, for instance in Germany, for the transport of fertilizers and building materials, especially in the canal areas and on the Danube. In France, the impact of the crisis was stronger at the beginning (a -40% decline in goods transport was reported initially while it currently fluctuates between -3% and -15% depending on the regions).

### **a) Agricultural products, food and foodstuffs**

- In the ports of Strasbourg, Mannheim and Basel, a decline of 10-11% can be observed for agricultural products and cereals in April 2020 compared to April 2019. A strong reduction was also observed in the Swiss Rhine ports in March 2020, mainly explained by the fact that arrivals from China and departures to Asian regions were stopped or delayed.
- At the large port company RheinCargo (ports of Cologne, Neuss and Düsseldorf), foodstuff traffic witnessed increasing figures.

### **b) Iron, steel and non-ferrous metals**

- In general, this market segment was affected rapidly by the crisis, particularly due to the closure of industrial sites having recourse to this type of goods. Iron ore, steel, and coking coal account for around 25% of all volumes transported on the Rhine. Available port figures for April 2020 confirm that this segment was strongly affected by the crisis, with drops varying from -30% (e.g. Swiss Rhine ports) to -60% (e.g. Strasbourg). In Germany, IWW steel transport suffered from the decline in automotive industry but some steel work in Berlin/Brandenburg reported an increase in demand for metal products. In the Swiss Rhine ports, the decline in the steel sector was also a direct effect of the confinement measures and the closure of car factories in France and Italy.

### **c) Sands, stones, gravel and building materials**

- With the closure of main building sites throughout Europe and of relevant production sites (e.g. concrete plants in France), the building material segment was severely impacted, as can be observed from available port data. For

instance, the Swiss Rhine ports reported a reduction of 35% in April 2020 for the building material segments compared to 2019.

- In France, this market experienced a brutal slowdown in March and April with the closure of main building sites. The Haropa ports reported a strong decrease in activities in this segment (while it had been on the rise for several years driven by the Grand Paris Express project). With the decision to gradually re-open those sites in May, transport of building materials is expected to pick up again.
- RheinCargo reported a reduction for sands, stones and gravel.
- In the port of Strasbourg, the effects were also severe, with a drop of approximately 30% both in March and April 2020. In Germany, an increase in demand was reported regionally for the building materials industry, especially for cement.

#### **d) Coal**

- The case of coal transport is specific. Indeed, while the Covid-19 crisis led to a significant drop in electricity demand, and therefore on coal transport in countries where electricity production is based on coal (e.g. in Germany), decline in coal transport is also structural as indicated on several occasions in this report. In Germany, according to press reports, the demand for hard coal for electricity generation has fallen by 44 % in Germany in recent months, thereby impacting IWW coal transport (*Source: Agora Energiewende "Winterstürme und Corona prägen das erste Quartal in der Stromerzeugung"*). In Karlsruhe for instance, coal transport decreased by -80% in April 2020 compared to 2019, although this was also due to the rather low water levels in April 2020. In Mannheim, a decrease of almost 50% was also observed over the same period.

#### **Liquid cargo**

- So far, in the liquid cargo segment, the demand for heating oil remained rather stable. However, regarding the transport of fuels and chemical products, drops can be observed, depending on the regions.

#### **a) Mineral oil products**

- The transport of mineral oil products is dependent on long-term trends (energy transition), seasonal patterns (winter: heating oil demand, summer: fuel demand), the current spot market oil price and the future market situation (when oil prices are expected to rise this leads to more storage-related transport but when falling oil prices are expected, this leads to less storage). Overall, the demand for heating oil remained stable. As the oil price decreased very quickly in early 2020, for a certain period of time (in March and April 2020) there was some extra transport demand in IWT due to replenishing of strategic oil storage.
- This also led to oil products being stored in vessels (floating storage), which may make it possible to benefit from rising oil prices in the future. However, when these storage facilities were complete, and as the crisis continued,

transport demand dropped due to demand-related factors, in particular due to a reduced mobility in aviation and road transport. Indeed, the Covid-19 effect on this goods segment is due to the almost complete grounding of global aviation and limitations for other transport modes.

#### **b) Chemicals and fertilizers**

- Available port data point to a decrease in the transport of chemicals in April 2020, approaching -17% for the ports of Strasbourg, Mannheim and Basel. In Karlsruhe, a more important reduction (-23%) is observed. In Germany, the low level in demand for the transport of chemical products is due mainly to the production losses in the automotive industry.
- At the RheinCargo port group, transport volumes for salt (part of chemicals) increased strongly in April 2020, due to special circumstances (installation of new storage facilities).

#### **Containers**

- In April and May 2020, containers arrived in reduced volumes in European seaports and from Asia, a trade route on which this container segment is highly dependent. However, the situation varies greatly from one region and from one port to another. In Germany, the effects of the pandemic also resulted in significant volume declines. Such declines can be partly explained by the reduced activity in the automotive industry but also the fashion industry. However, the situation is described by some operators as being currently volatile as some reported that the number of container and ship transfers in the ARA ports has risen noticeably. Indeed, the decrease in container volume depended on the type of product, for example, the automotive industry – and therefore the corresponding container volumes – came to a complete halt, whereas the container volumes for the food industry decreased only slightly.
- Figures of the RheinCargo port company for April 2020 showed a strong reduction in the waterside traffic of automobiles and machines, in the wake of the standstill of the car production in Germany.
- In April 2020, the transport of containers remained stable in the Swiss Rhine ports. However, the situation was different regarding transport of empty containers, an essential segment to regulate and ensure that transport between inland and seaports can take place, which recorded some decrease both for imports and exports.
- In France, the Haropa ports reported that container transport on the Seine decreased by 13.5% and that the Covid-19 effect started to be felt from mid-March onwards. On the river Rhône, container transport (in TEU) decreased by 73.7% in March 2020 and by 27.2% in April 2020 compared to the previous year. For the port of Strasbourg, while an increase in containers was observed in the first quarter of 2020 overall, less containers were handled in March and April 2020 compared to 2019 but only to a limited extent.
- Looking at the situation worldwide in the maritime sector, container handling volumes in maritime shipping have been declining since February 2020 (compared to figures

from the previous years), as can be seen in the Container Throughput Index of the RWI – Leibniz Institute for Economic Research and the Institute for Shipping Economics and Logistics (ISL). Indeed, after the strongest drop ever observed in February 2020, mostly resulting from the situation in Chinese ports at that time, a certain normalisation was observed in China in March 2020 when Chinese ports returned to normal operations as measures to contain the crisis were scaled back. However, a further decline in container handling took place in the rest of the world. In April 2020, a decline was observed in Chinese ports, as containers “left behind” during the crisis were loaded in March 2020. In the ports of other countries, container handling remained at a low as in March.

## **2020 forecast for goods transport**

- Overall, it is difficult to make a forecast for goods transport for the rest of 2020 and anticipate the effects of the crisis on the further economic development of the sector and consumer behaviour. Firstly, this depends on the duration of the corona pandemic (and the possibility of a second wave) at national level but also at European and international level. Secondly, once the virus will have been contained in some parts of the world outside Europe, the economy is expected to pick up again. Relaxation of corona restrictions in many European neighbouring countries is now taking place. It is foreseen that that industry production will resume in many locations pointing to a resumption of transport in several segments.
- For inland navigation, an additional challenge will lie in freight price developments which may severally be impacted as a result of overcapacity, thereby contributing to a further deterioration of the liquidity situation. This overcapacity is mainly caused by the structural decline which the sector is facing, particularly observed for coal transport as a result of the energy transition. However, the Covid-19 is expected to further intensify this trend.
- In order to cope with the economic consequences of this crisis, support measures of various natures will need to be taken. Four main types of measures can already be identified:
  - Measures to enable inland navigation companies which can still operate to continue their activity. Such measures should allow more flexibility in the application of existing regulations (employment, working conditions, mobility of crew) and enable continuity of navigation (securing opening of inland waterways, operation of infrastructure, good conditions for fuel supply of vessels, access to seaports and major cities, crew members’ access to vessels, etc.)
  - Strong and immediate financial support measures during the crisis, to avoid the bankruptcy of inland navigation companies and to prepare for its aftermath. Coordination in the application and availability of such measures should be ensured, with the support of the EU decision-makers, for the benefit of all IWT companies and the entire fleet in Europe.
  - Creative, large-scale and ambitious measures to restart the inland navigation sector after the crisis. Such support measures should compensate for the loss of activity related to the downsizing of production, revive demand and support industrial production. Measures to rebuild the trust of users, particularly in the passenger sector, will be essential.
  - Communication measures to strengthen the visibility of the inland navigation sector and to highlight its essential nature during and after the crisis.

## **Part II.**

### **Information of ERSTU-Vice-Presidents for Germany, Austria and Netherland about the situation of IWT in the CORONA-19 Pandemic in their countries (summary)**

#### **Germany**

Even before the Corona crisis, inland waterway transport was already affected by the long low water levels in 2018, quantities of goods will be sustainably lost. This is exacerbated by the gradual phase-out of coal.

In the Rhine basin, the demand for transport of bulk goods has increased against the background of handling in the seaports declined significantly. In Rotterdam, for example, transhipments of coal and other bulk goods in the first quarter of 2020 compared to the same quarter of the previous year by around 39.6 percent and 14.3 percent respectively.

Since March of this year, this has been compounded by the decline in transport caused by the Corona pandemic and the associated "lockdown" of many important economic sectors have been created. This resulted in declining freight rates, longer circulations and berthing times for tanker, dry cargo and container shipping.

The WSV (Waterway Shipping Administration) reduced the possibility of night locks nationwide from March 2020. The step was, according to the GDWS's (General Direction of Waterway Shipping) statement on health care for shift supervisors required. This led to restrictions, which, however, had to be overcome by the industry were. Only the restriction of the lock times on the Upper Rhine provided the container transport for significant obstructions in the form of delayed circulation times. Regular operations were largely resumed from mid-May onwards.

In some cases, inland waterway vessels which normally operate on the Rhine gave way to other waterway areas and also increase the pressure on freight prices there.

Other companies used the time for maintenance and repair work and took their ships out of service.

Free private particular had to contend with declining demand, as potential Principal Orders for carriage primarily by own vessels or by contractual tied undertakings.

Expiring contracts for rental ships were often not concluded or were concluded at significantly conditions extended.

According to the assessment of market participants and experts, bankruptcies in the inland waterway transport cannot be excluded, although smaller shipping companies and private companies are more likely to be affected than medium-sized and larger companies.

In the Corona Weekly Report KW 33 recently published by the BAG (Federal Administration of Good Transport) companies evaluate the current order situation and business expectations for the next 3 months as follows:

Further effects on the volume and freight development until the end of the year are cannot yet be assessed and depends on the further course of the pandemic.

## **The current situation of inland waterway transport in Austria**

In the previous year, an average of 22,941 tonnes of goods were transported on the Austrian Danube every day.

As in the years before, the 46 kilometres between Vienna and the border with Slovakia will be the section of the Danube on which cargo ships carried the largest quantities of goods by 2019. The total volume on this section of the Danube amounted to more than 6.6 million tonnes, 4.7 million tonnes upstream and almost 1.9 million tonnes downstream.

The volume of freight traffic on Austria's largest river shows a clear east-west divide. This is because on the 63 kilometres between Aschach in Upper Austria and Passau the cargo ships only carried just under 3.5 million tonnes in 2019. The volume of goods shipped across the eastern border is thus almost twice as much as in the west.

The "waterway" running in a west-east direction relieves traffic on both the A1 western motorway and the western railway line. The average daily transport volume on the Danube waterway is 22,941 tonnes, corresponding to 918 lorries of 25 net tonnes each or 574 railway wagons of 40 net tonnes each.

The water levels on the Austrian Danube in 2019 were in line with the long-term average, without major deviations into the flood and low water areas.

Due to the corona pandemic, different measures and restrictions were applied on the Austrian Danube when the crisis started in early March 2020. While goods transport on the Austrian Danube continued without any restrictions, there have been immediate closures and restrictions on passenger navigation. At the end of May 2020, these measures were lifted again.

However, the market has not yet recovered and the demand for inland waterway transport has decreased, combined with a reduction of up to 30% of freight.

## **Netherland**

The corona pandemic has so far not had a major direct impact on inland waterway transport in the Netherlands. In all ports, loading and unloading has been continuous and there has been no waiting time. Locks and bridges were also normally manned, unlike in Germany.

Indirectly, the corona pandemic has of course probably caused the weak cargo volume, which was already recorded in the IV quarter of 2019, to continue or become even weaker in the first half of 2020. In Amsterdam, for example, 12% less cargo was transported in the first half of 2020.

The decline in coal handling was extreme, with a 43.6% drop.

Compared to 2019, total transshipment in Rotterdam fell by 9% in the first half of 2020. Container transshipment fell by 7%. However, compared to the figures originally announced (minus 20 to 30%), these figures are acceptable when compared to our neighbouring countries. However, coal handling fell by 34%, while mineral oil remained the same. In this period of declining cargo volumes, it is encouraging to note that growth is still possible in some areas. In the second quarter of 2020, 13.5% more containers were transported via Rotterdam to China. Every week about 1,000 40" containers of timber are transported via the Rhine to Rotterdam

for onward transport to China. The wood from the Black Forest, which is covered with beetles, is stored in Rotterdam for 24-48 hours under gas and then transported further.

Due to the low cargo supply, the ratio to the available ship space is unbalanced. As a result, freight rates have fallen by up to 30%. Expiring contracts can only be renewed at worse conditions or not at all.

The competition is very strong and it is worth noting that Rhine shipping companies also conclude contracts in the canals. Since their own vessels or house particulars are not always suitable for such relations, Dutch particular vessels are very often used for these transports. With over 5,000 units, the Dutch inland waterway fleet is larger than the entire fleet of the Western European countries combined.

The freight revenue is then not sufficient to cover the costs during this period. The Netherland Government supports all companies including shipping companies that can prove that they have lost at least 20% of their turnover. With the so called "NOW scheme" a large part of the personnel costs is reimbursed.

The 4 largest Dutch banks also support the Dutch inland navigation by waiving the repayment of the mortgage this year and only interest has to be paid.

However, despite difficult times, there are still entrepreneurs who invest in inland navigation. Compared to 2019, the number of new ships in 2020 is significantly lower but still several new cruise ships, tankers and dry cargo vessels were delivered in 2020.

The Dutch government still sees a good future for inland navigation and has reserved 1.3 billion euros for 2021 for the development of waterways.