



# RIVER-SEA-TRANSPORT

CHALLENGES AND OPPORTUNITIES OF RIVER-SEA-TRANSPORT  
FROM RHENUS' POINT OF VIEW

# WHO WE ARE



## A strong family

Rhenus Group is a global logistics service company with a turnover of € 5.1 billion. Rhenus has more than 660 locations worldwide and employs 31,000 people. The Rhenus business areas - Contract Logistics, Freight Logistics and Port Logistics - manage complex supply chains and create wealth by means of innovative value-added services.

Ecological and Industrial Service Partner



**REMONDIS®**

**36,000** **7.9** Mrd. €

LOGISTICS



**31,000** **5,1** Mrd. €



## Partner for our customers

We see ourselves as partners to provide our customers with value added services. We analyze highly complex logistics operations and optimize them using individual solutions that cover sourcing, production and distribution.



BIO-INDUSTRY

**SARIA®**

**11,000** **2.5** Mrd. €

MOBILITY



**82,000** **6.9** Mrd. €

# RHENUS – YOUR GLOBALLY OPERATING LOGISTICS PARTNER

## RHENUS-GROUP

### Contract Logistics



- AIR CARGO
- AUTOMOTIVE
- HEALTH CARE
- HIGH TECH
- HOME DELIVERY
- OFFICE SYSTEMS
- WAREHOUSING SOLUTIONS

### Freight Logistics



- AIR & OCEAN
- ROAD

### Port Logistics



- PORTS
- TRANSPORT
- INTERMODAL
- COMMODITY LOGISTICS

## OPERATING IN LOCAL UNITS

# RHENUS PORT LOGISTICS

The comprehensive services offered by Rhenus Port Logistics provide you with efficient, end-to-end solutions that meet your individual procurement and distribution requirements. In order to ensure a seamless transport chain, we can draw on our own port and inland capacities as well as our own infrastructure in combination with our perfectly coordinated trimodal transport network.

# PORTFOLIO OF RHENUS PORT LOGISTICS



- Fleet of max. 350 units with 700 to 6.500 t deadweight capacity
- Supply of all European Markets



- Up to 30 ships in daily traffic
- Regular Services to UK, Scandinavia, Iberian Peninsula and Black Sea



- Fleet of abt. 220 own and external trucks
- National und international Transport solutions, area-wide



- Private Railroad Company with abt. 110 Locomotives
- >10 Traction Licences in Western, Middle and Southern Europe
- Combined Cargo and Bulk/Breakbulk

# ONE TEAM FOR ALL KIND OF GOODS



Agricultural and Chemical Logistics



Automobile Logistics



Construction Material and Minerals



Coal and Ore



Project Cargo



Paper and Forestry Products



Containers



Steel and Metals



Recycling und Waste



## RHENUS INLAND NAVIGATION – EVERYTHING'S ON THE MOVE

- Headquarters in Duisburg
- 22 subsidiaries all over Europe
- Up to 350 ships in daily traffic
- Own service station (Rheintank)
- Own bunker and disposal vessels (bilge oil boats)
- Push convoys/Tug barges up to 8.500 t capacity for dry cargo

Our compact network of branches includes many inland waterway terminals on the most important rivers in continental Europe, e.g. the Rhine, Main and Danube; customers can use them for transshipment and warehouse logistics, too. They also serve as the starting and finishing points for the transport services that we organize and provide on inland waterways. The Rhenus inland waterway services are also closely linked to the short-sea shipping handled by coastal vessels, which often make their way far inland.

## RHENUS MARITIME SERVICES – ON THE MOVE IN EUROPE

- ◆ Rhenus Maritime Services GmbH (RMS) is headquartered in Duisburg, right in the heart of Europe's largest inland port
- ◆ RMS is part of the Rhenus Group and can make use of its extensive resources and network
- ◆ RMS can offer complete supply chains on logistics demands, chartering, ship management and can act as shipbrokers for cargoes all across Europe
- ◆ Vessels are able to reach covered loading/unloading facilities which provides additional protection for the goods being carried
- ◆ The RMS tonnage meets the high environmental protection standards regulated by EU law





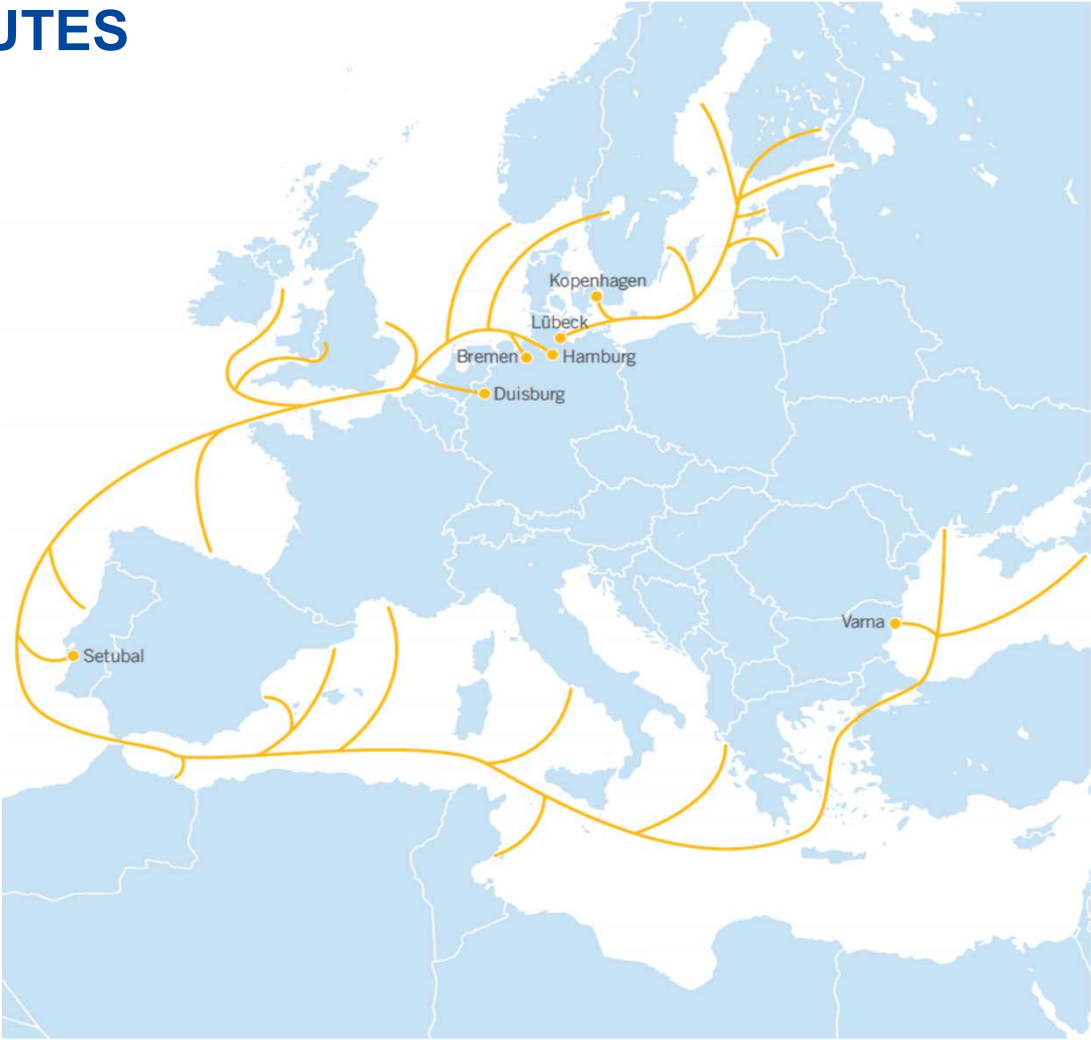
## OUR FLEET IS MODERN, FLEXIBLE AND VERSATILE

### Our vessels

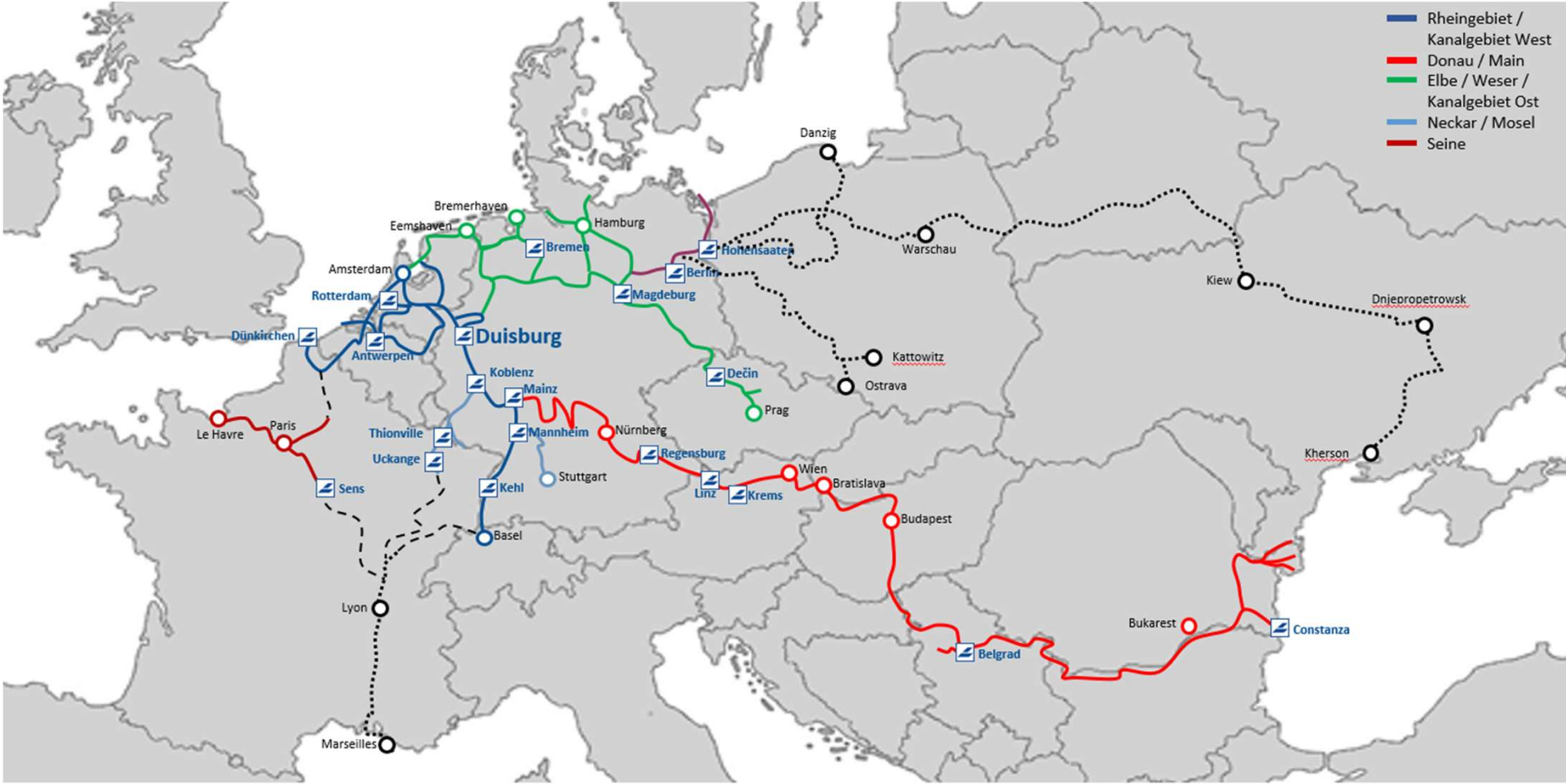
- ◆ can be used to carry any cargo ranging from bulk to break bulk goods
- ◆ have flexible bulkheads to separate cargoes
- ◆ are strengthened with ice class for winter traffic
- ◆ are modern with box holds
- ◆ can be used all across Europe
- ◆ are suitable for handling hazardous goods or waste material
- ◆ are certified according to ISO 9001:2000 and ISO 14001



# RMS SHORT SEA SHIPPING ROUTES



# RHENUS PARTNERSHIP- OUR NETWORK OF LOCATIONS IS UNIQUE IN EUROPE



# OUR PORTS

- Intersection for all modalities
- Optimized routes and safe transportation
- All kind of goods and raw materials
- Close network of ports/terminals along all European waterways
- Seaports with large capacities for transshipment of bulk/break bulk
- Presence at almost all important junctions and economic regions

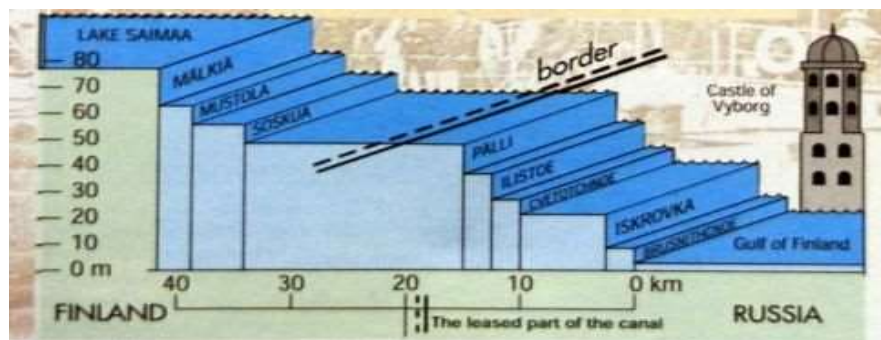


## THE SAIMAA CANAL – BOTTLENECK OF FINISH INDUSTRY

The Saimaa Canal has been opened in 1856 and leads from Lake Saimaa through Finish and Russian territory to the Gulf of Finland

It has been important in all times for the transportation of forestry goods.

Today the canal is a 43 km long waterway with most modern technology. The canal has a slope of 80 m which is nivelled through 8 locks.





## THE SAIMAA CANAL – BOTTLENECK OF FINISH INDUSTRY

The Saimaa Canal is closed in winter time between January and April, not only because of heavy ice but also in order to carry out necessary repair works. In that time the loading of ships will take place in Hamina.



## RIVER-SEA-SHIPPING - CHALLENGES

- ◆ Service all over the year and under all weather conditions
- ◆ Ships have to follow length and width requirements as well as draft and height restrictions
- ◆ Ships to have ice class to fulfill the requirements on the Baltic Sea
- ◆ Use of a network to other partners and/or mode of transports





# SWOT ANALYSIS OF RIVER-SEA-SHIPPING OPPORTUNITIES

## Strong Points

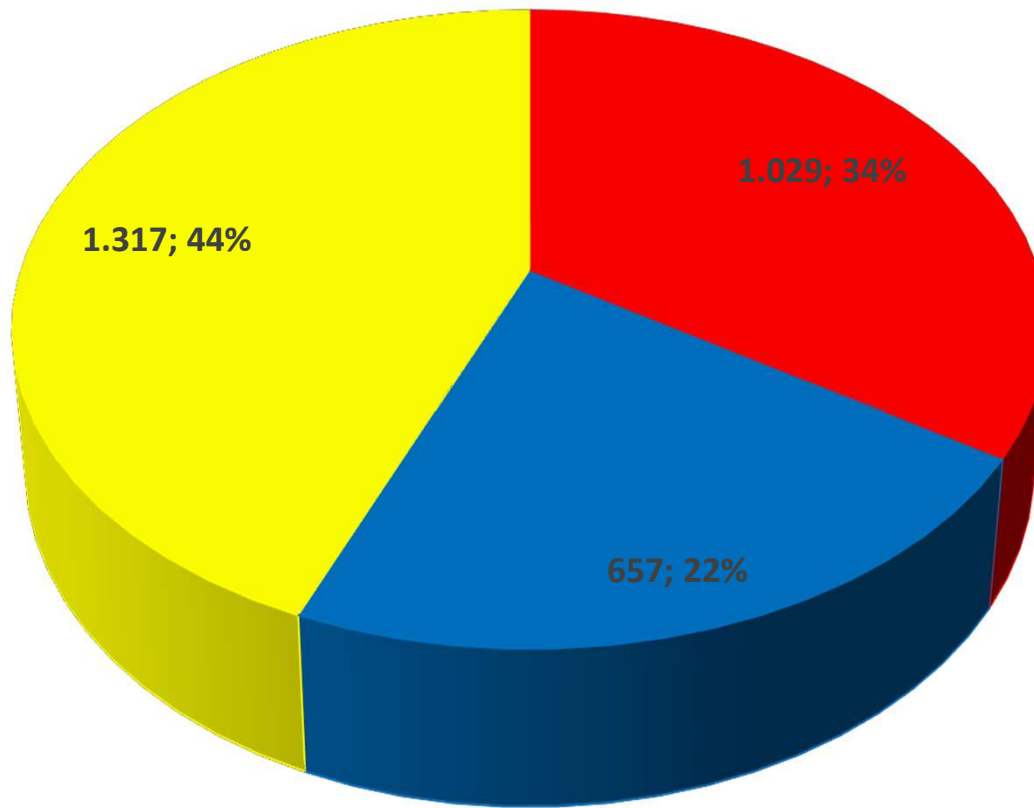
- Competitive service of higher economical efficiency and cost savings in transportation of goods from place of origin to final destination. No transshipment of cargoes for customers with the location on rivers. Short transport time.
- Combination of Short Sea Shipping and Inland Navigation. Optimal delivery routes.
- The availability of a wide range of vessels of different sizes and capacity.
- New innovated types of river-sea ships.
- Project transportation of oversized and heavy cargo and equipment.
- High quality of transport. Reduction of damages during the transport.
- High safety standard/ requirements of navigation.
- Implementation of logistic chains.
- Sustainable record in terms of low emission and energy efficiency.
- Well-trained, qualified personnel.

## Weak Points

- Restriction on navigation areas, seasons, weather conditions, low water and ice conditions. Water level variations challenges the predictability of transport. Just-in-time principle hard to maintain with high variations in accessibility of river ports.
- Age structure of river-sea fleet
- Restrictions of technical parameters of ships by the rivers, canals, locks and bridges.
- Compliance with international convention SOLAS 74, MARPOL, BWM, etc. and national legislation. Harmonization of legal requirements is necessary.
- High costs for newbuildings.
- Limitation on the rivers challenging when it comes to scale of economics. Exceeding 2.500-3.000 mts hard without seagoing capabilities.
- Terms and conditions - seagoing transportation differs from barge terms - leaving vacuum of responsibility in the transport chain.
- Language: English not commonly accepted on the rivers.

## SWOT ANALYSIS OF RIVER-SEA-SHIPPING - OPPORTUNITIES

Age of fleet: 1.500 - 7.000 dwt in Europe



Ships under 15 years



16 - 25 years



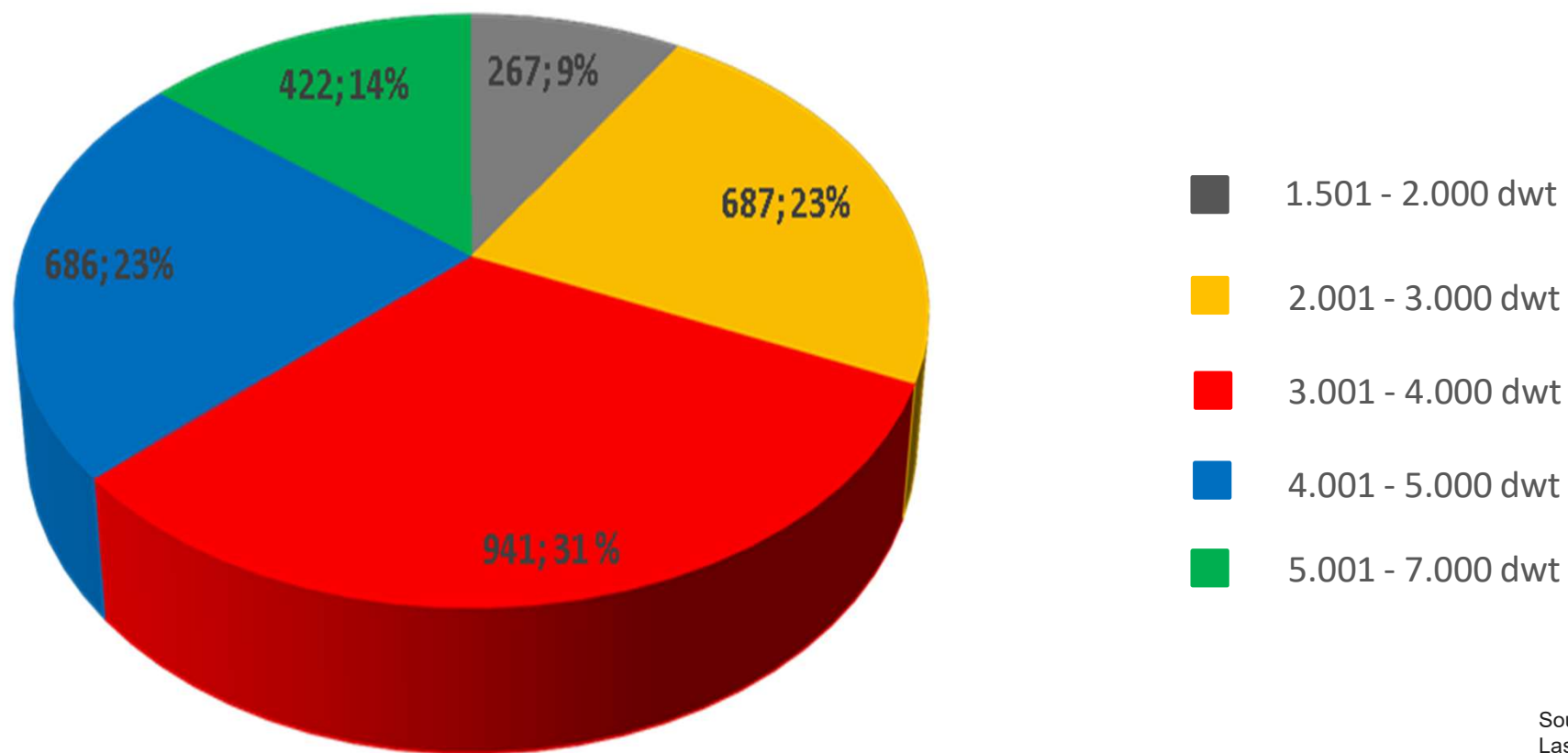
Ships older than 25 Jahre



Source: Lloyd's List  
Last Update: 12.07.2018

## SWOT ANALYSIS OF RIVER-SEA-SHIPPING - OPPORTUNITIES

Existing fleet: 1.500 - 7.000 dwt in Europe



# SWOT ANALYSIS OF RIVER-SEA-SHIPPING CHALLENGES

## Strong Points

- Development of new markets (geographically), f.i. South America, Africa
- Development of „the Big European Circle“
- Development of container transport
- Best conditions for project cargo

## Weak Points

- River infrastructure (bottlenecks, bridge clearance, locks downgrading)
- Climate changes (f.i. low water situation).
- Very strong competitive pressure based on continuous crisis in shipping market
- Ever growing competition with land modes of transport.
- Increase of ecological requirements.
- Financial and credit policy.
- Legal regulations and administrative barriers.
- Legal aspects less clear than "ordinary" sea shipping.
- Lack of knowledge. Poor information of river-navigation, ports and facilities available. Also for certification process limited information, somewhat limited knowledge within class societies.
- Less "real" logistical knowledge on charterers' side. Less understanding of the risks and benefits of river transport. Low acceptance of variety in cost (due to i.e. water level).



**THANK YOU FOR YOUR  
KIND ATTENTION**

**Ralf Uebachs**

General Manager  
Rhenus Maritime Services GmbH