
ADB
Second
High Level Workshop on
Inland Waterway Transport
15-16 July 2013 | Manila, Philippines
IWT Networks – The Rhine Waterway
Hans van der Werf, Secretary General ,
Central Commission for the Navigation of the Rhine (CCNR)

Summary

1. Historical development of the Navigation of the Rhine
2. Types of investments
3. The Rhine and IWT in the European transport network
4. CCNR - its functions for promoting IWT and the WWINN initiative

1. Historical development of the Navigation of the Rhine

History, values and missions of the CCNR

The Congress of Vienna

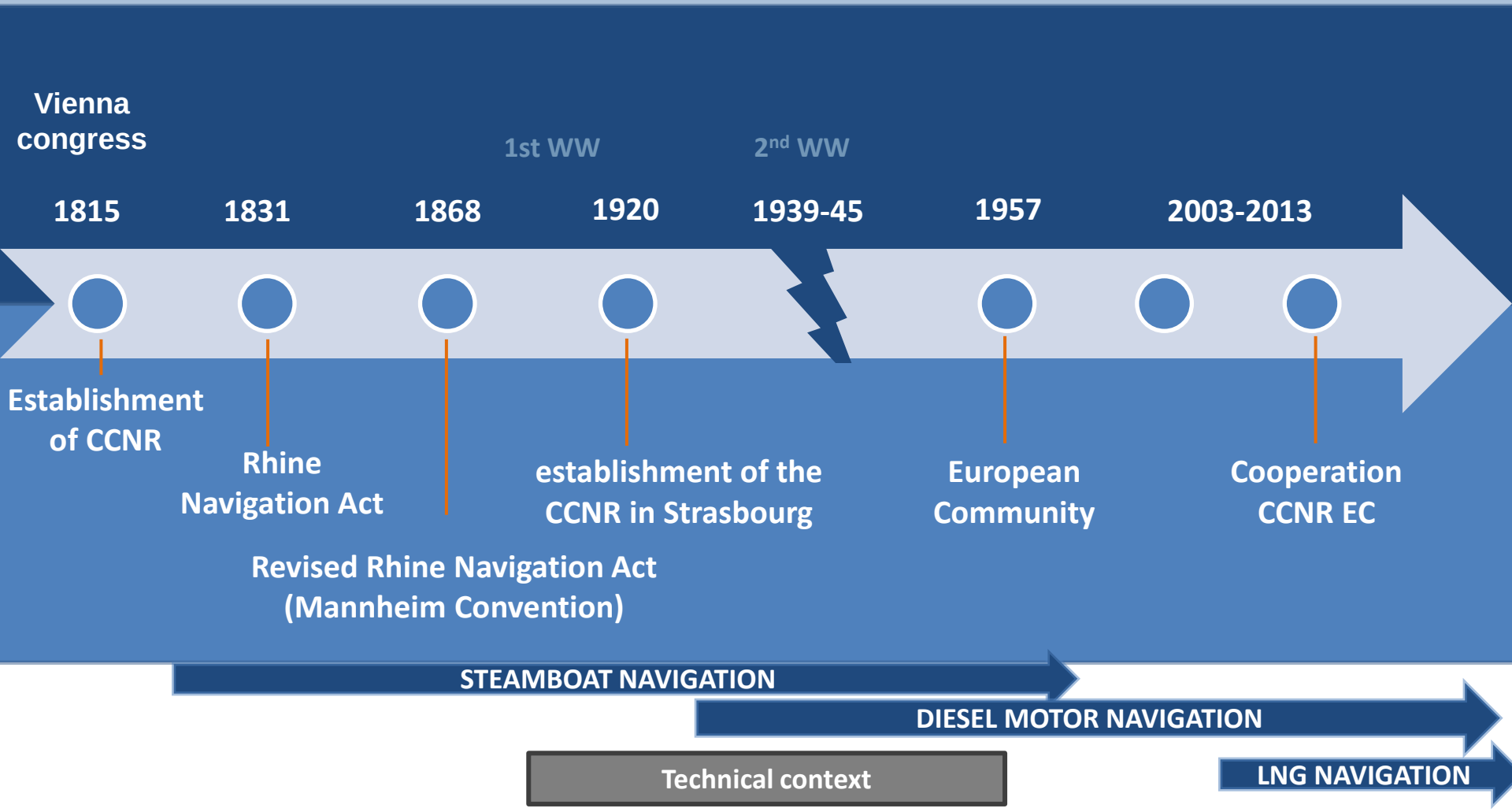
The “Rhine Palace”

- Created in 1815 at the Congress of Vienna
- Headquarters : “ Rhine Palace” in Strasbourg (France)
- 5 member States (BE, NL, CH, FR, DE)
- Missions:
  - ✓ Freedom of navigation on the Rhine
    - ✓ Free market access
    - ✓ Free pricing
    - ✓ No levies or duties
  - ✓ Prosperity of navigation on the Rhine & high level of safety

    (Since 1868 and the Mannheim Act)
  - ✓ Common safety and environmental standards

1. Historical development of the Navigation of the Rhine

Political context in Europe



1. Historical development of the Navigation of the Rhine

1815 – 1868

Vienna congress

Industrial revolution & international trade boom
Beginning of the railway competition

1815 — Historical context in Europe — 1868

CCNR actions' focus

- Focus on abolishment of tolls and duties
- Beginning of the regulation of the Rhine

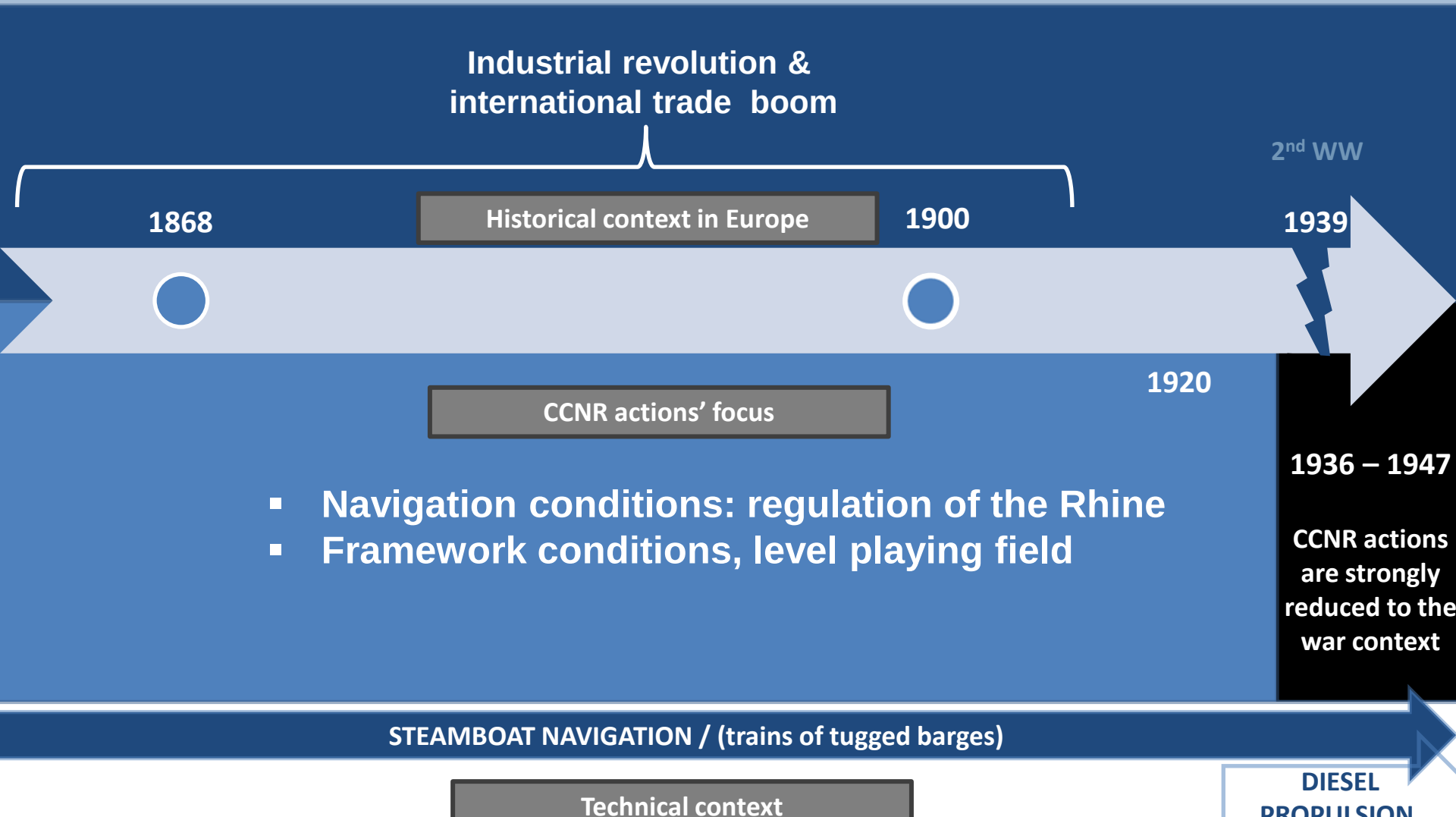
STEAMBOAT NAVIGATION

NAVIGATION UNDER SAIL

Technical context

1. Historical development of the Navigation of the Rhine

1850' – 1950'



1. Historical development of the Navigation of the Rhine

1950' – 2000'

post war boom

Historical context in Europe

Beginning of EU transport policy

oil crisis

strengthening of globalisation

1950 1960 1973 1979 2000

CCNR actions' foc

- unity of the legal regime on the
- Free market conditions
- Simplifying customs formalities
- Working conditions and social

From 1970-2000 the European IWT market has been progressively liberalized:

- Free access,
- Free pricing,
- Equal treatment,
- Framework conditions (technical, manning)

in a context of a restructuring of the fleet (scrapping scheme)

STEAMBOAT NAVIGATION

PUSHBOAT CONCEPT

DIESEL PROPULSION

Technical context

1. Historical development of the Navigation of the Rhine

2000 – towards future

Historical context in Europe

Development of the EU

Towards a sustainable development

2000

Stepping up of globalisation

2013

2018

Liberalization of the IWT market in the EU

CCNR actions' focus

- European extension of inland navigation
  - Harmonization
  - Cooperation with other river basins (Danu
  - Cooperation with the EU
- Extended interest in environmental issu

Launch of the initiative

2018 vision

for sustainable inland navigation

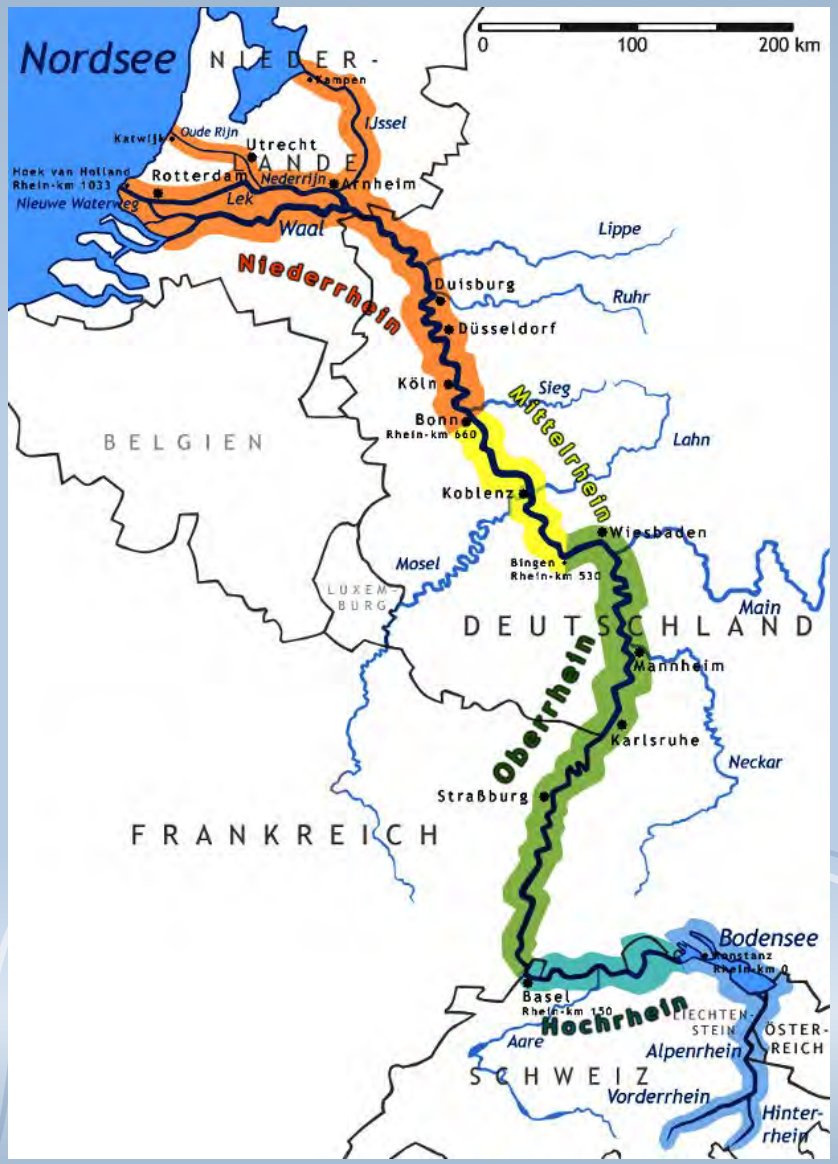
PUSHBOAT CONCEPT

DIESEL PROPULSION

Technical context

LNG NAVIGATION

2. Types of investments



	Regulation of the fairway (through canalization)
Lower Rhine	1850 - 1900
Middle Rhine	1880 - 1970
Upper Rhine	a) 1800 - 1880 b) 1920 - 1970
High Rhine	*Not navigable*

2. Types of investments

Summary of the main waterway improvements of the Rhine

Germany

1800 : *upper Rhine*

- *Ports of Mannhein, Ludwigshafen, Karlsruhe*

1850 : *lower Rhine - Ruhr area*

- STEEL INDUSTRY
- COAL MINING

1890 : *upper Rhine - Mannheim/Ludwigshafen area*

- CHEMICAL INDUSTRY

1910 : *lower Rhine - Bonn/Cologne*

- PETROCHEMICAL INDUSTRY

France – Switzerland – Germany

1920 : *upper Rhine*

- HYDROPOWER AND LOGISTICS
- CANALIZATION OF THE UPPER RHINE

Switzerland

2. Types of investments

Summary of the main waterway improvements of the Rhine

France

1890 : *upper Rhine*

→ Development of the Port of Strasbourg

Netherlands

1850 : *lower Rhine and Delta*

- HINTERLAND CONNECTIONS

→ Deepening of the Dutch branches of the Rhine (Waal)

→ Direct access of the Rhine to the North sea (Rotterdam)

1900 -1920 -1950 -1970: *delta*

- SEA PORT DEVELOPMENT

→Extension of the Port of Rotterdam: Europort, Maasvlakte I and II

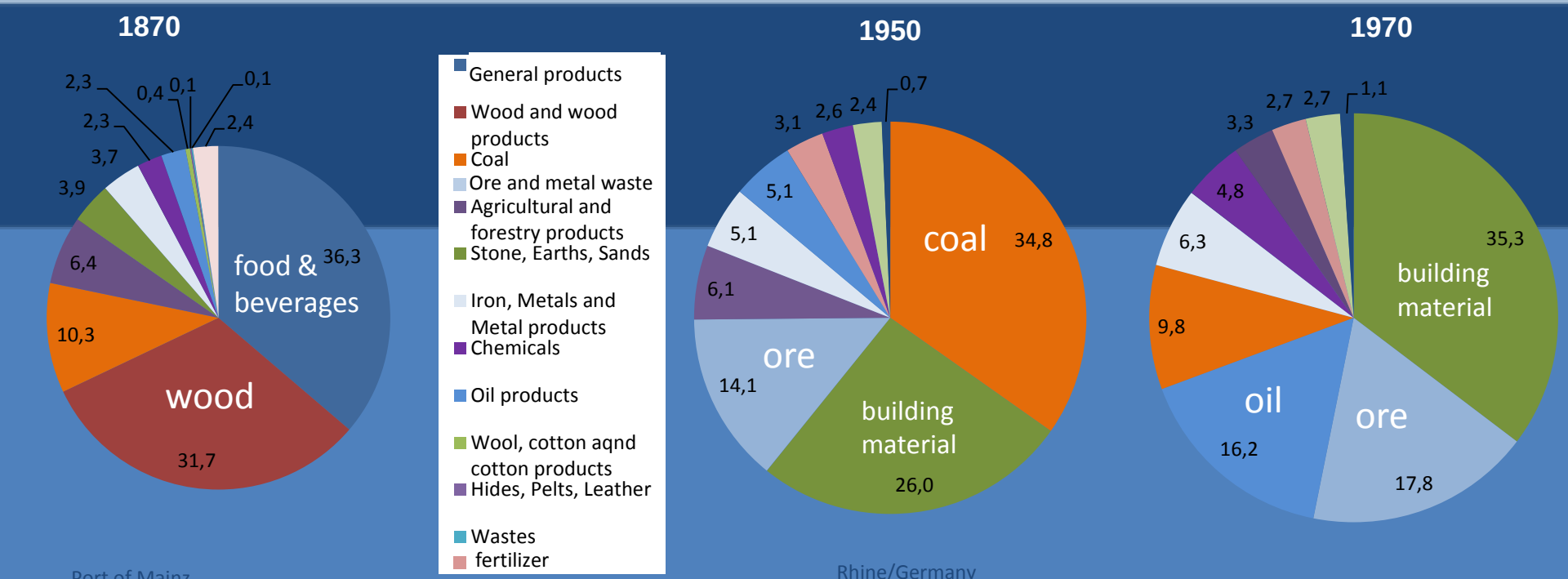
1960 : *delta region*

- SEA PORT DEVELOPMENT

→ Rhine-Scheldt connection (Rotterdam-Antwerp)

3. The Rhine and IWT in the European transport network

Distribution of goods



STEAMBOAT NAVIGATION

DIESEL MOTOR NAVIGATION

Technical context

LNG NAVIGATION

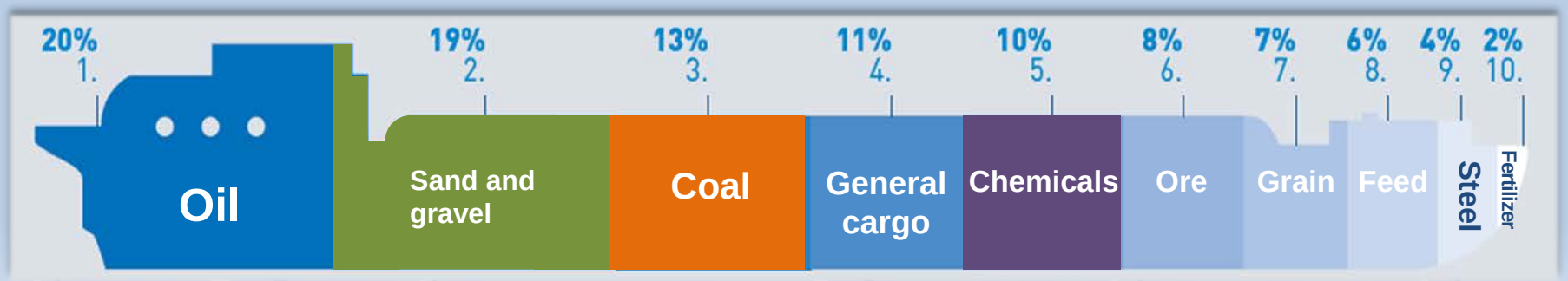
3. The Rhine and IWT in the European transport network

Characteristics and connectivity of the Rhine traffic in Europe

The Rhine constitutes the backbone of inland navigation in Europe – a navigable waterway of vital importance to the European economy

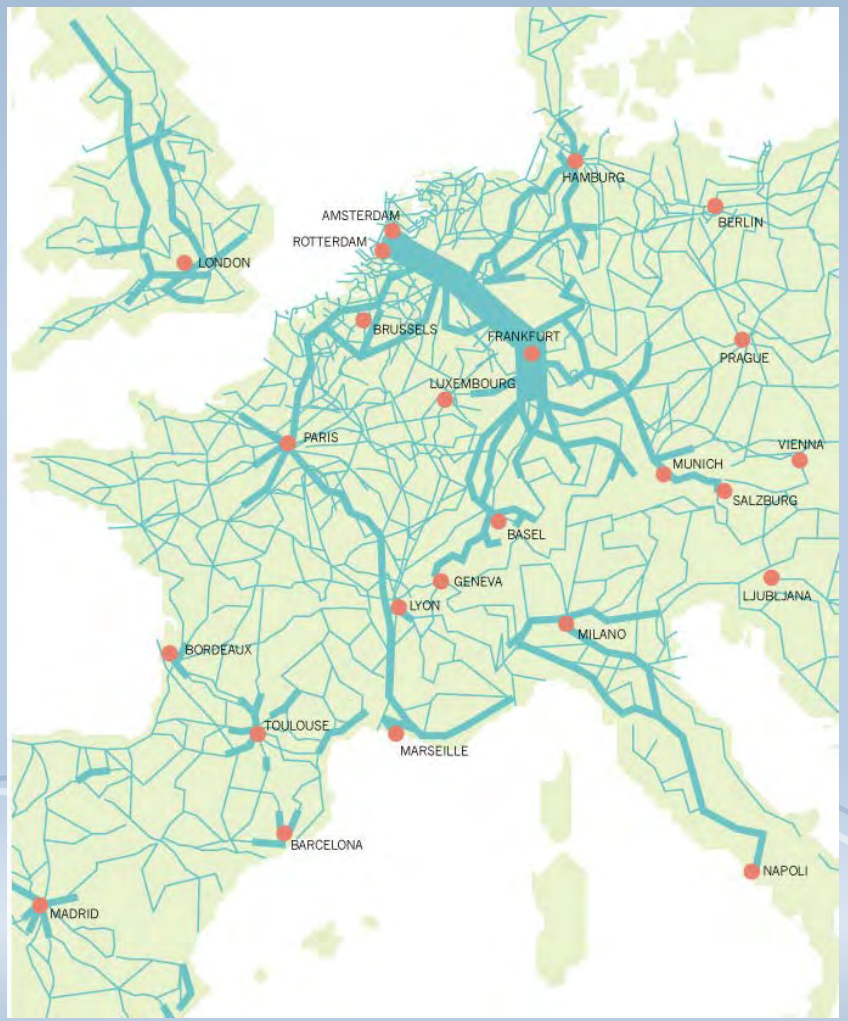
330 Mio. t in transit per year on the Rhine

TYPE OF GOODS CARRIED ON THE RHINE



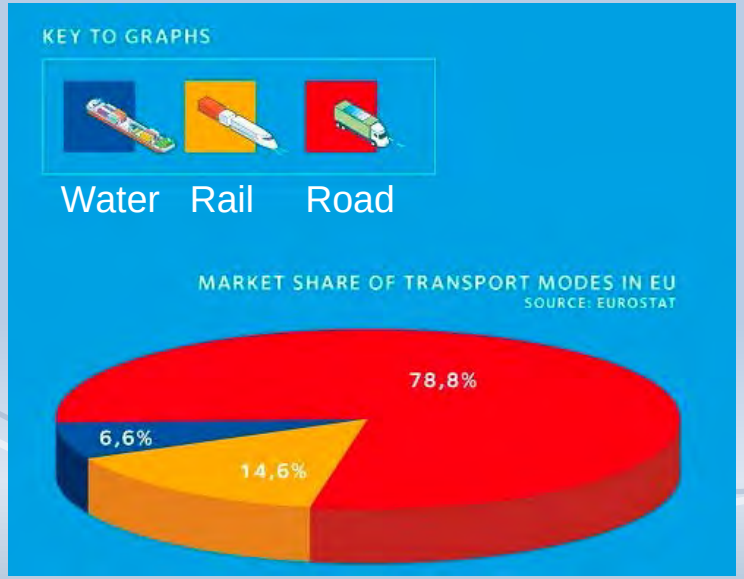
3. The Rhine and IWT in the European transport network

Inter-modality and navigation on the Rhine



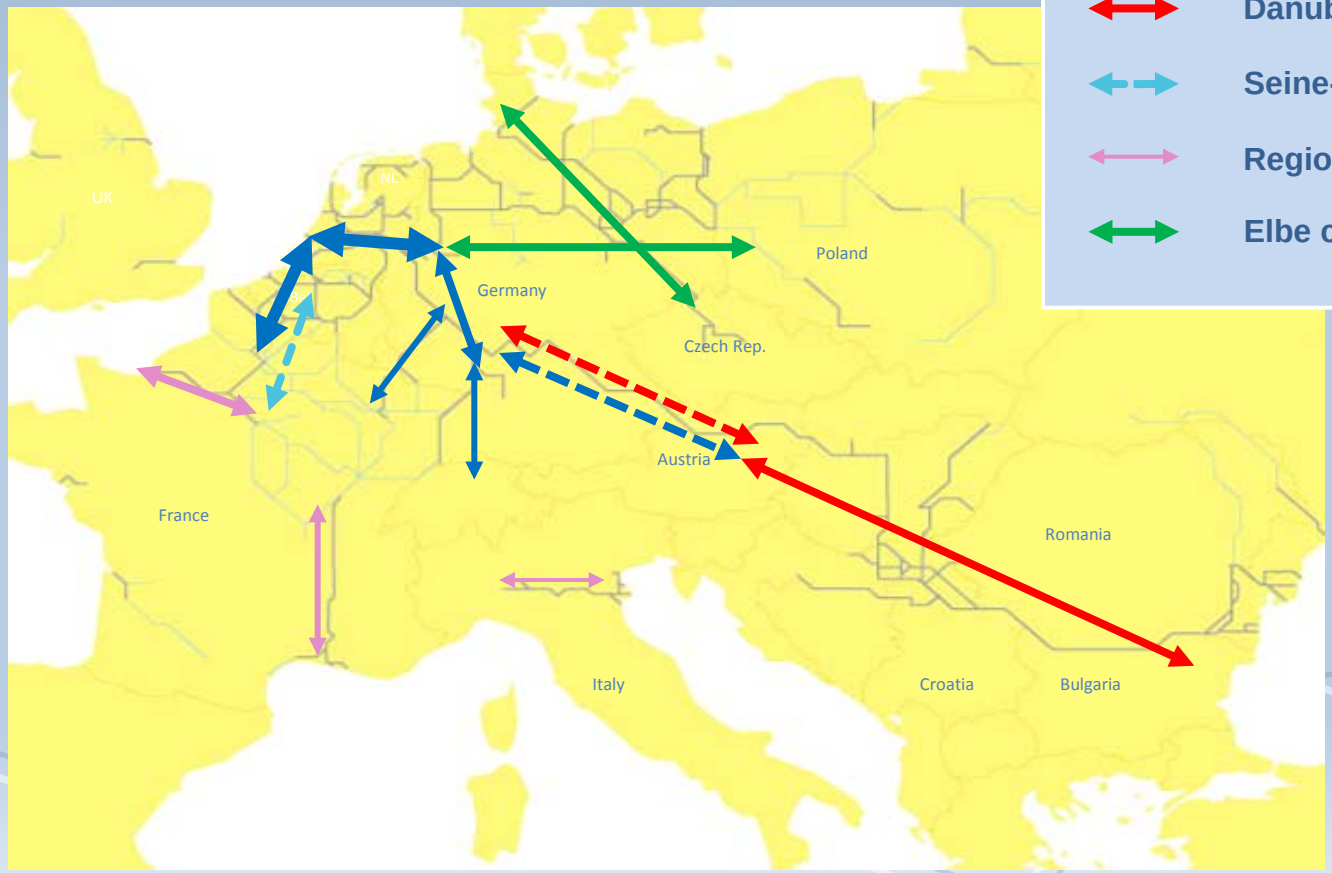
Freight flows within Europe (road, rail, water and pipelines)

The Rhine is in the hearth of the European transport flows and is well connected to the other transport modes. Inland **Navigation** in Europe **represents 6,6%** of the transport modes market shares.



3. The Rhine and IWT in the European transport network

The different European Corridors



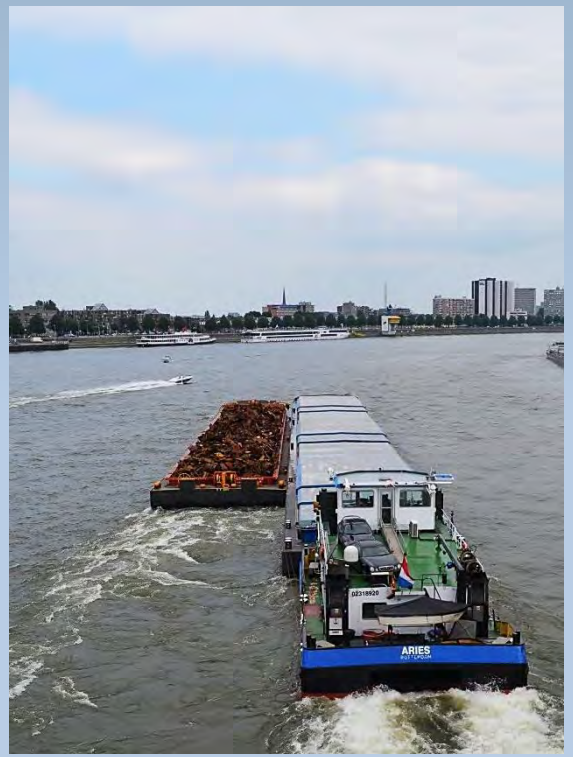
3. The Rhine and IWT in the European transport network

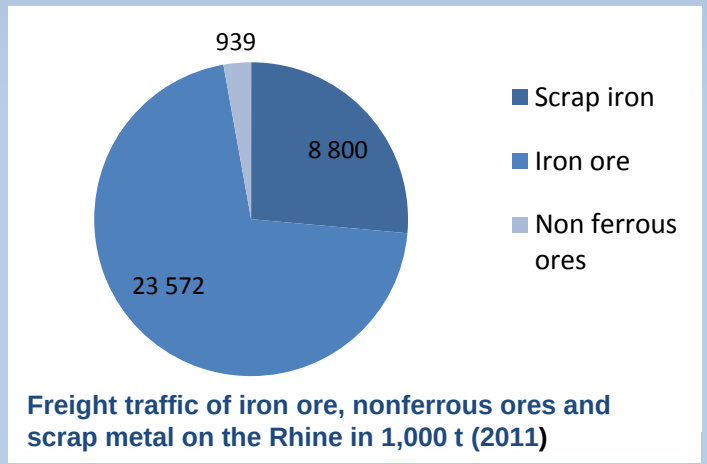
IWT Traffic intensity in Europe

3. The Rhine and IWT in the European transport network

Transport of raw materials for the steel industry

The transportation of iron ore, nonferrous ores and scrap metal reached a total volume of 33.3 million t in 2011.
Quantitatively, the bulk of this market segment is accounted for iron ore (23.5 million t), which is used as the primary product in steel production.





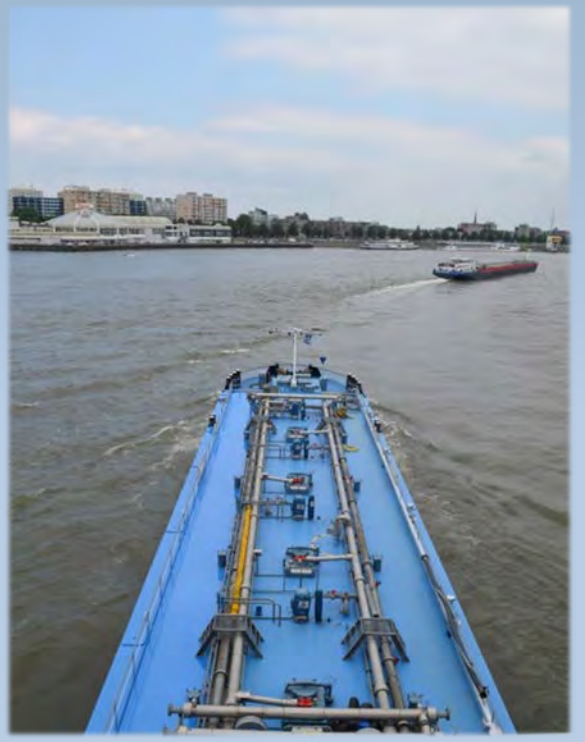
Freight traffic of iron ore, nonferrous ores and scrap metal on the Rhine in 1,000 t (2011)

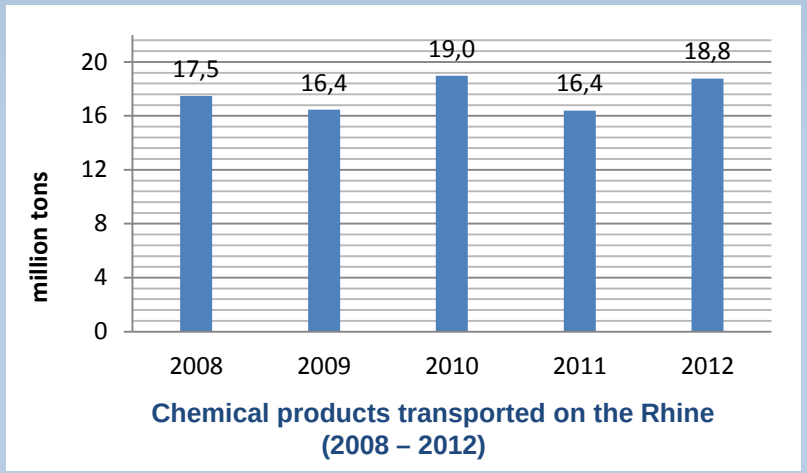
Main ports

3. The Rhine and IWT in the European transport network

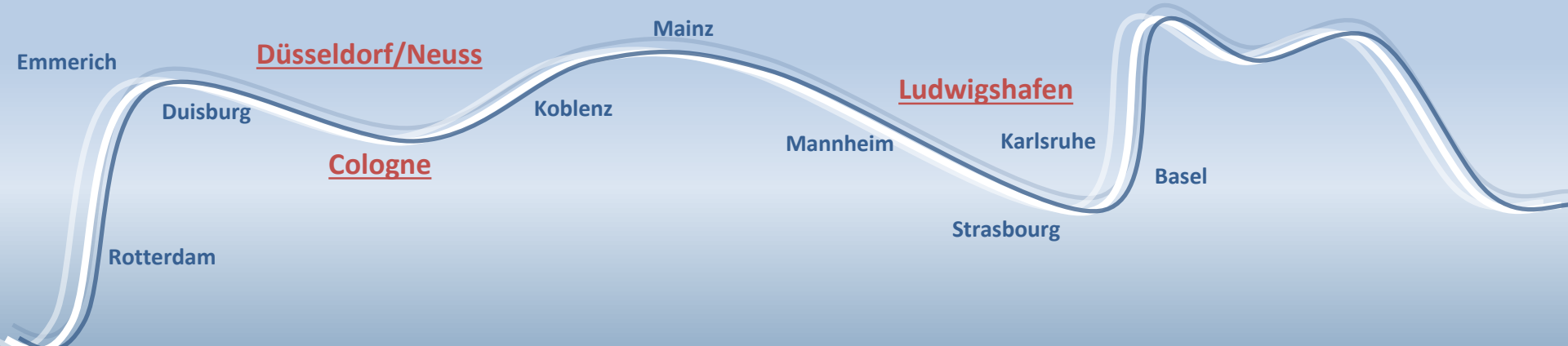
Transport of the chemical industry

The German chemical industry largely runs the tanker transport demand on the Rhine with more than 15 million tons transported by year. The transport of fertilizers plays also in important role. Production is anticipated to grow by 2.5% until 2020.





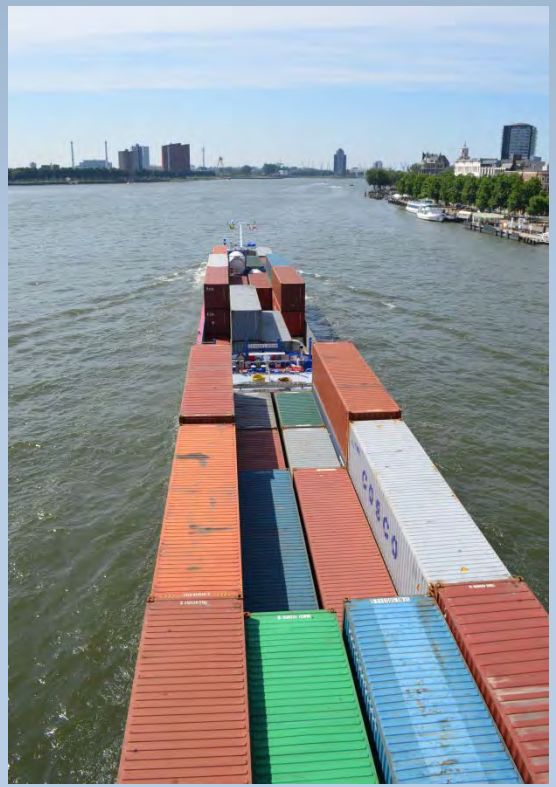
Main ports



3. The Rhine and IWT in the European transport network

Container transport on the Rhine

The traffic of containers present an important potential for inland navigation and experienced in the last years a significant growth, within 10 years **growth of 90%.**



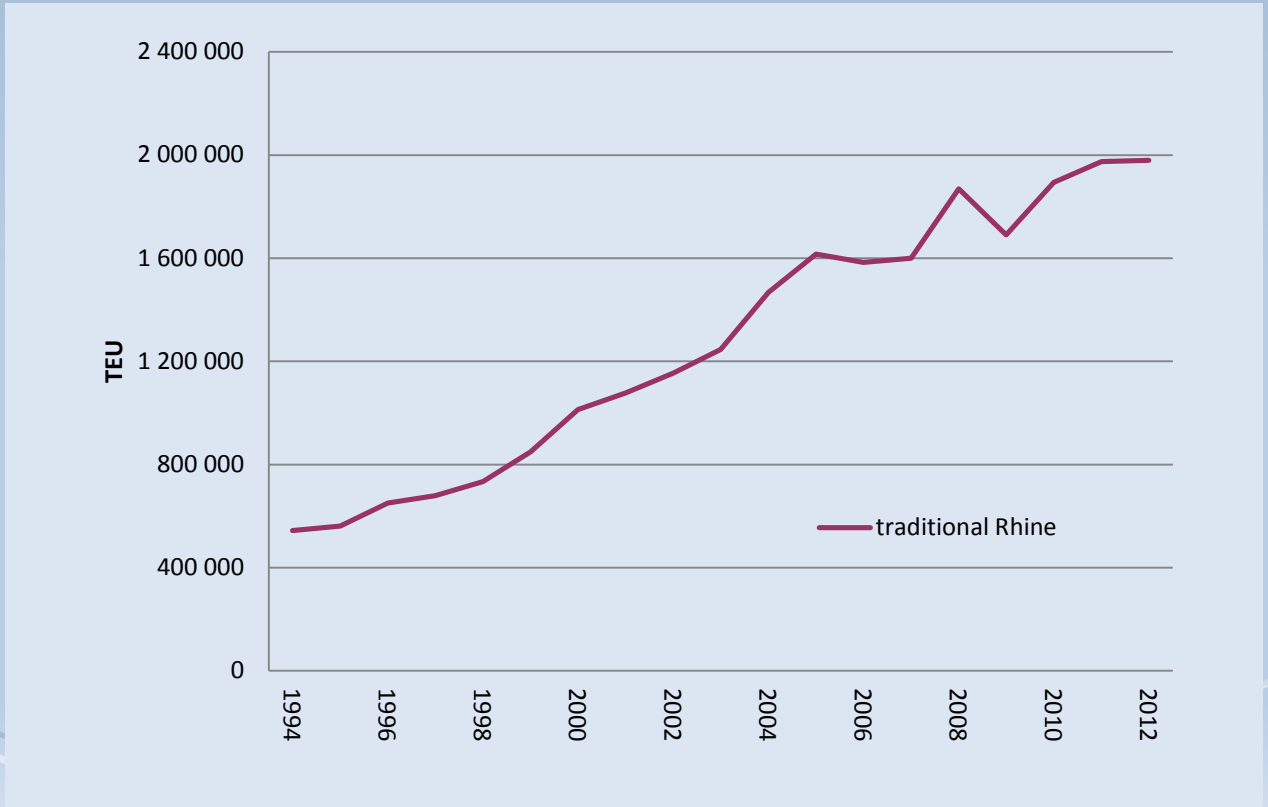
Container traffic on the Rhine in 2012

Number of container	TEU	Container cargo volume (tons)
1.292.532 Container	1.980.223 TEU	14.709.070 tons

Main ports

3. The Rhine and IWT in the European transport network

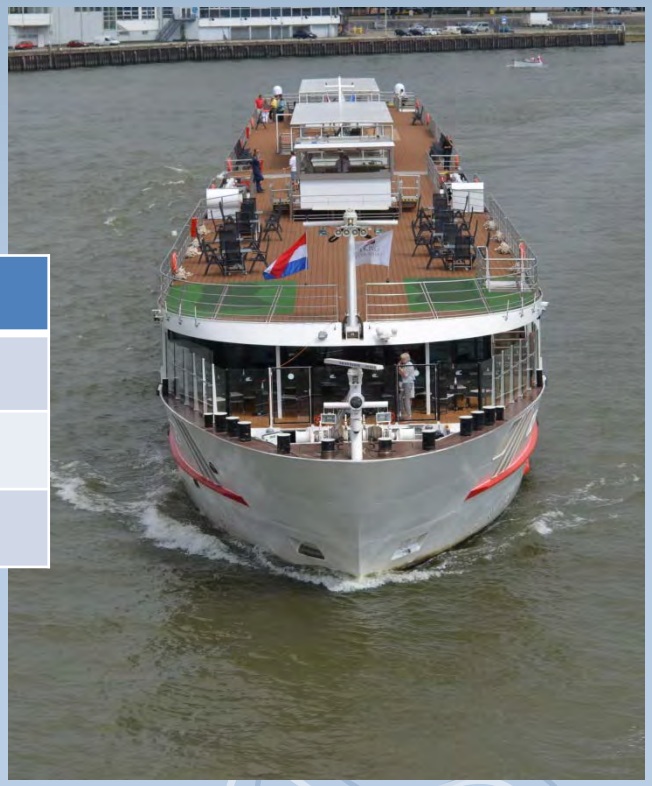
Container transport on the Rhine - 1994 - 2012



3. The Rhine and IWT in the European transport network

Passenger transport market

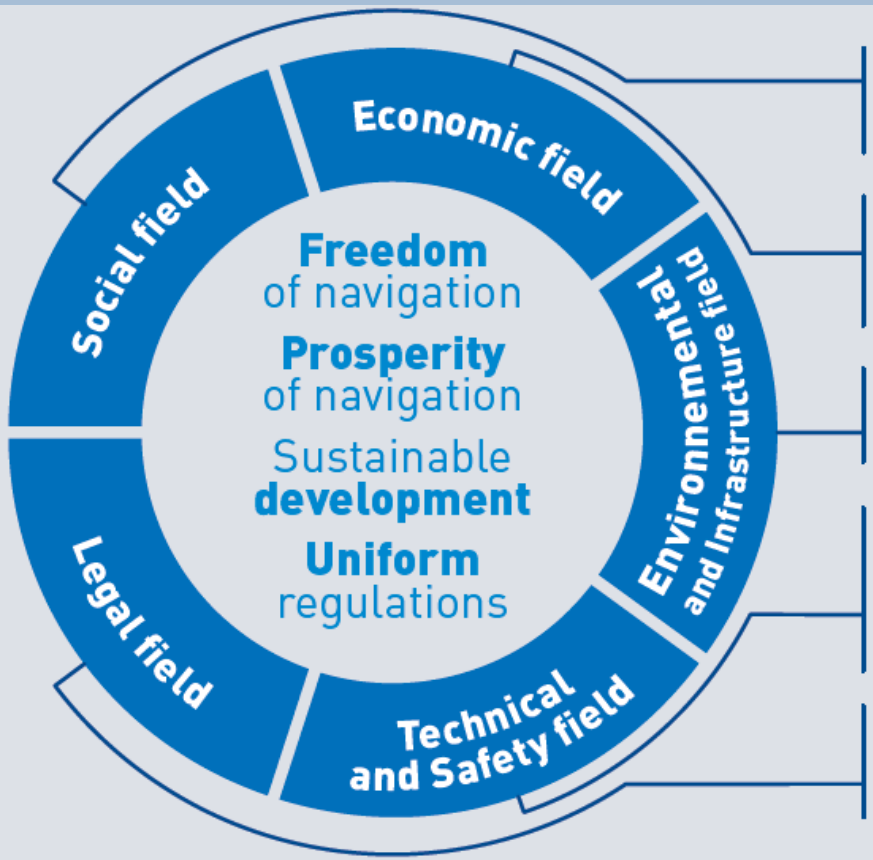
Day trip Shipping		River cruises	
number of…		number of…	
Ships	Passengers	Ships	Passengers
1.560	30 million/a	260	1,2 million*/a



* Estimate
Countries: Western Europe
(Germany, France, Netherlands, Belgium, Switzerland)

4. CCNR - its functions for promoting IWT and the WWINN initiative

Current areas of activity of the CCNR



- Regulations on crews
- Central administration of social security for Rhine boatmen

- Observation of the inland navigation market
- Themed studies
- Prospective analytical work
- Economic congresses

- Environment-friendly profile of inland navigation
- Agreement of waste disposal (CDNI)

- Police regulations
- Vessel inspection regulations
- Boatmasters' licences
- Agreement on the transport of dangerous goods (ADN)

- Harmonisation of river law
- Appeals chamber
- CLNI and CMNI conventions

4. CCNR - its functions for promoting IWT and the WWINN initiative

CCNR Committees

Technical and environmental

RV | MD | RP | IEN

JWG | RIS

ADN | ISGINTT | CDNI

social | **legal** | **economical**

STF | DF | PRE | ECO | BUD/Admin

CC

CASS

Chambre des Appels

Summary

1. **Wide time horizon necessary**
   - 50 years

2. **Infrastructural development in a policy mix of strategic goals :**
   - Industry development and mining
     - large scale and reliable fairways
   - Energy policy
     - hydropower and secure supplies
   - Commerce and intercontinental trade
     - including: role of the seaports
   - Distribution and supply
     - density of the agglomerations
   - Competitive modal strategy
     - in particular: rail and IWT

Summary

3. Geo-political context to be made instrumental to the infrastructural development

- Communities of interest to be identified
  - diversification and wide spread
- Strategic alliances to be established
  - political stability
- Provide for a platform for international consolidation of agreements
  - sound legal basis

4. Public financing to be made the back bone of the infrastructural development

- No duties and levies on the transport
  - article 3 of the Mannheim Convention
- Interdependencies between waterway infrastructure and ports
  - inland and maritime

5. Development of highly preforming shipping activities together with the infrastructural development

- Framework conditions
  - safety, environment, social security
- Market oriented

About the WWINN initiative

WORLD WIDE INLAND NAVIGATION NETWORK

- **Worldwide recognition and promotion of the transport mode**
- **Exposure and monitoring of the common values of IWT in the various river basins :**
  - Large available capacities
  - Environmentally friendly and ecological
  - Safe and reliable mode of transport

Other inland navigation authorities elsewhere in the world are encouraged to join the initiative!

WWINN's members

WWINN gathers the following authorities:

- The USACE Institute for Water Resources
- The Mekong River Commission
- The Inland Waterways Authority of India (IWAI)
- The Brazilian Ministry of Transport
- Pan-European Transport Corridor VII
- The Danube Commission
- The Moselle Commission
- The Sava Commission
- The Central Commission for the Navigation of the Rhine (CCNR)

- **Sharing of**
  - technology of the fleet
  - economies of scale for the equipment suppliers
  - modal integration methodologies
  - experience in developing navigation personal's skills
  - strategies for infrastructural development
- **platform for exchange on technical and operational matters**

Thank you for your attention!

Please be most welcome to visite the CCNR in Strasbourg

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