Market observation report on river-sea transport

Workshop on river-sea transport, 11 September 2019

Duisburg

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01

Market Observation Report on River-Sea Transport

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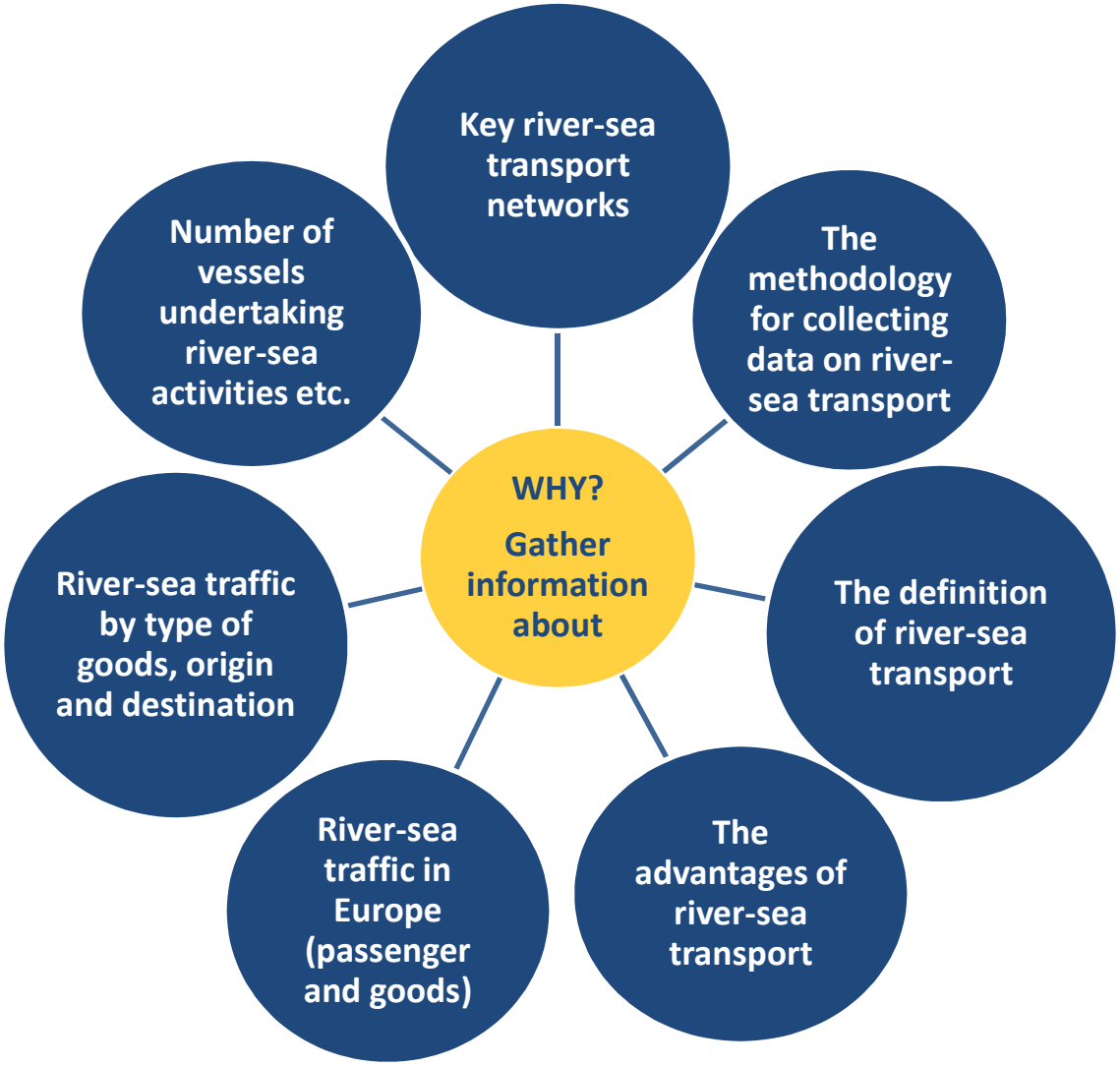
Why such a report?

- EU IWT market observation activities carried out by **CCNR** in collaboration with the **EU Commission** and **IWT industry associations** (EBU/ESO)
- In the context, CCNR tasked with the drafting of a study on **river-sea transport**.



Chapters of the report

1. Chapter 1 - Methodology and scope of the report

2. Chapter 2 - Seagoing vessels navigating on inland waterways
   a) Legal, geographical and economic aspects
   b) A country by country analysis
   c) Perspective for the future

3. Chapter 3 - The case of inland navigation vessels navigating at sea
   a) Geographical, classification and regulatory aspects
   b) Estuary traffic in Belgium
   c) Inland vessels at sea in France

02 Methodology and scope of the report

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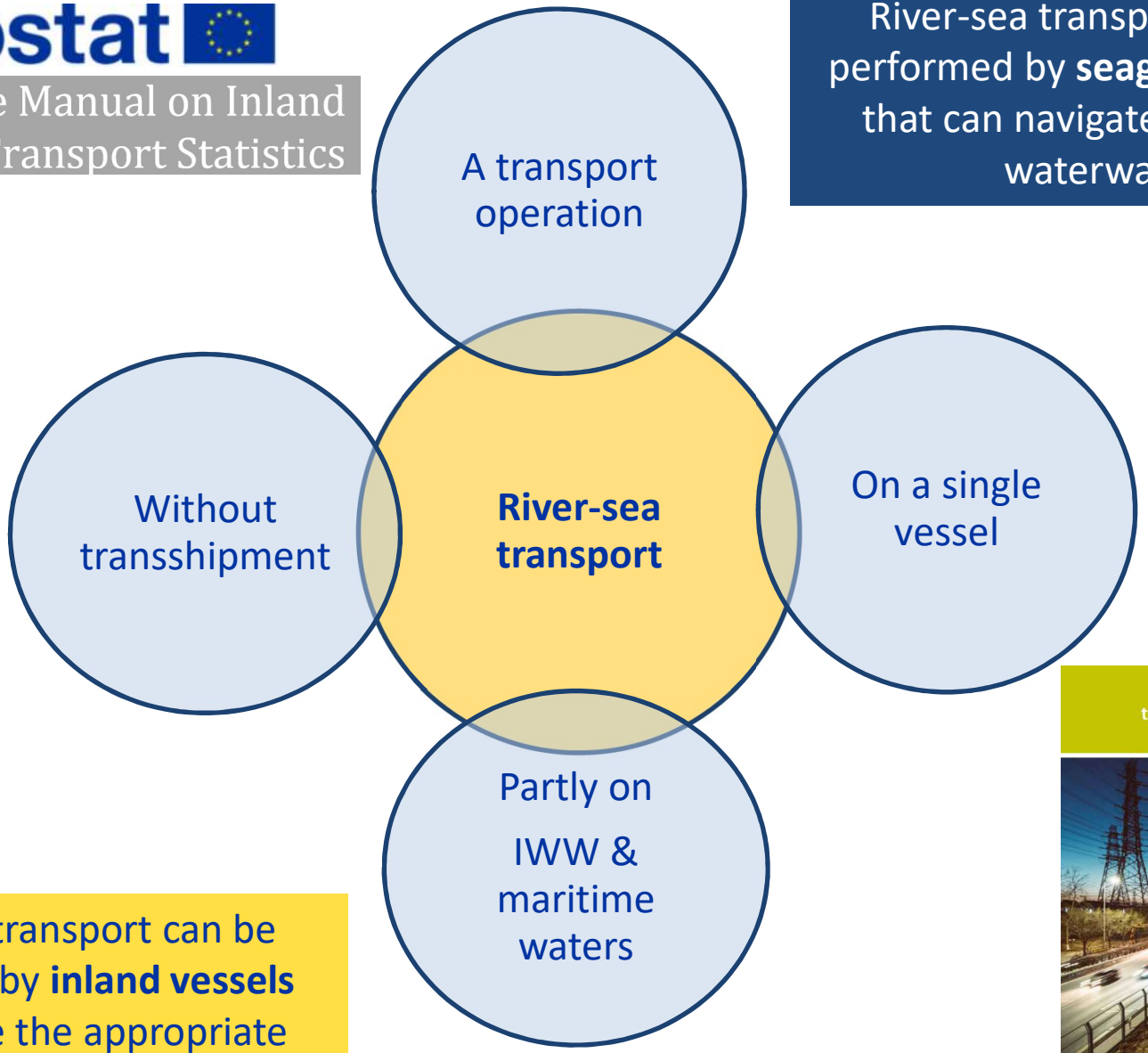
Scope of the report – definition of river-sea transport

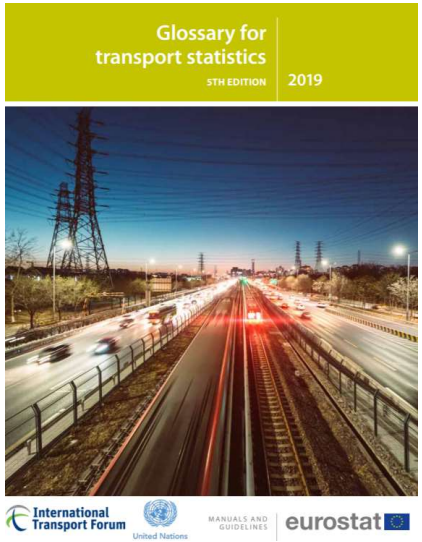
eurostat

Reference Manual on Inland Waterways Transport Statistics

River-sea transport can be performed by **seagoing vessels** that can navigate on inland waterways

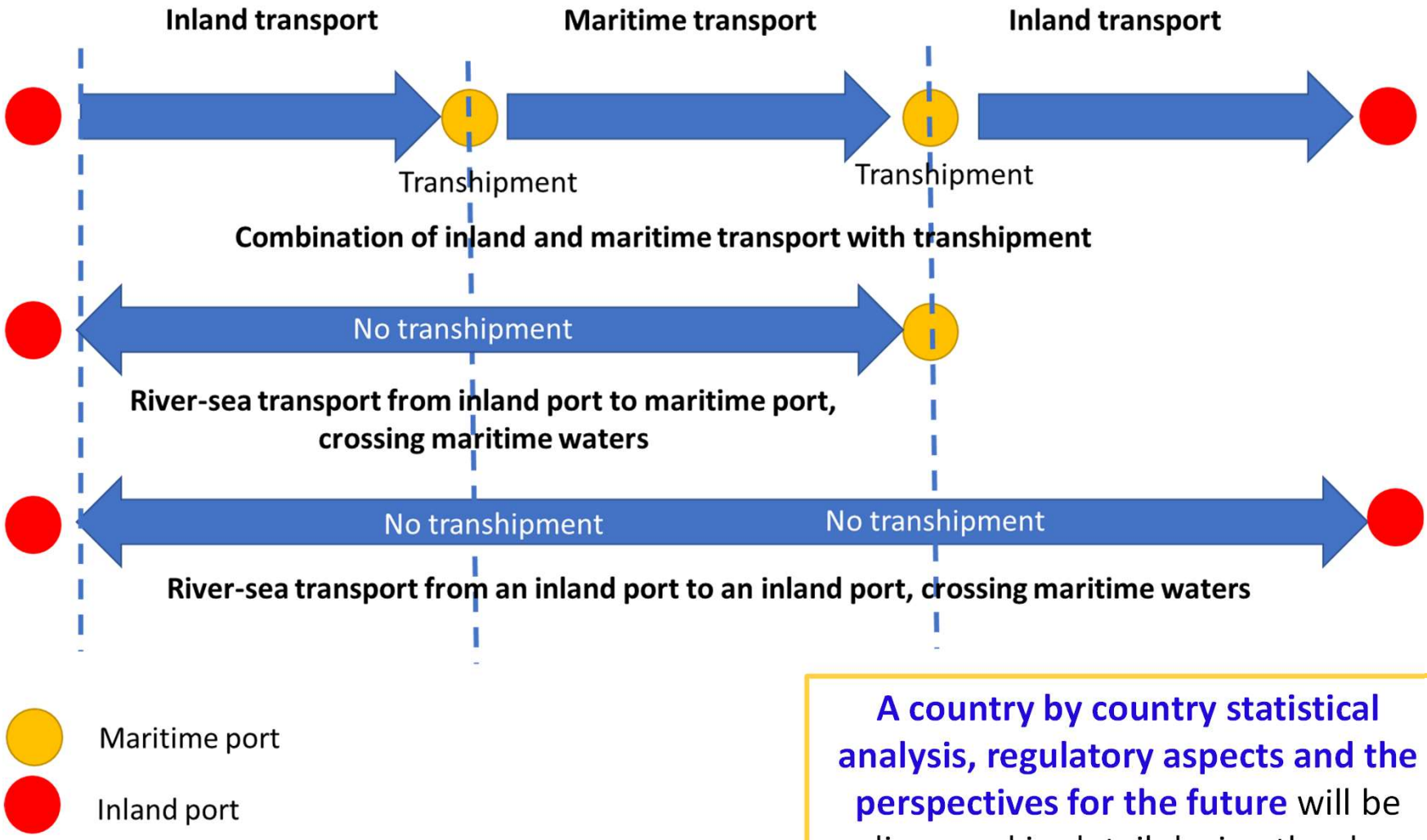


River-sea transport can be performed by **inland vessels** which have the appropriate authorization to operate at sea



The case of seagoing ships navigating on inland waterways

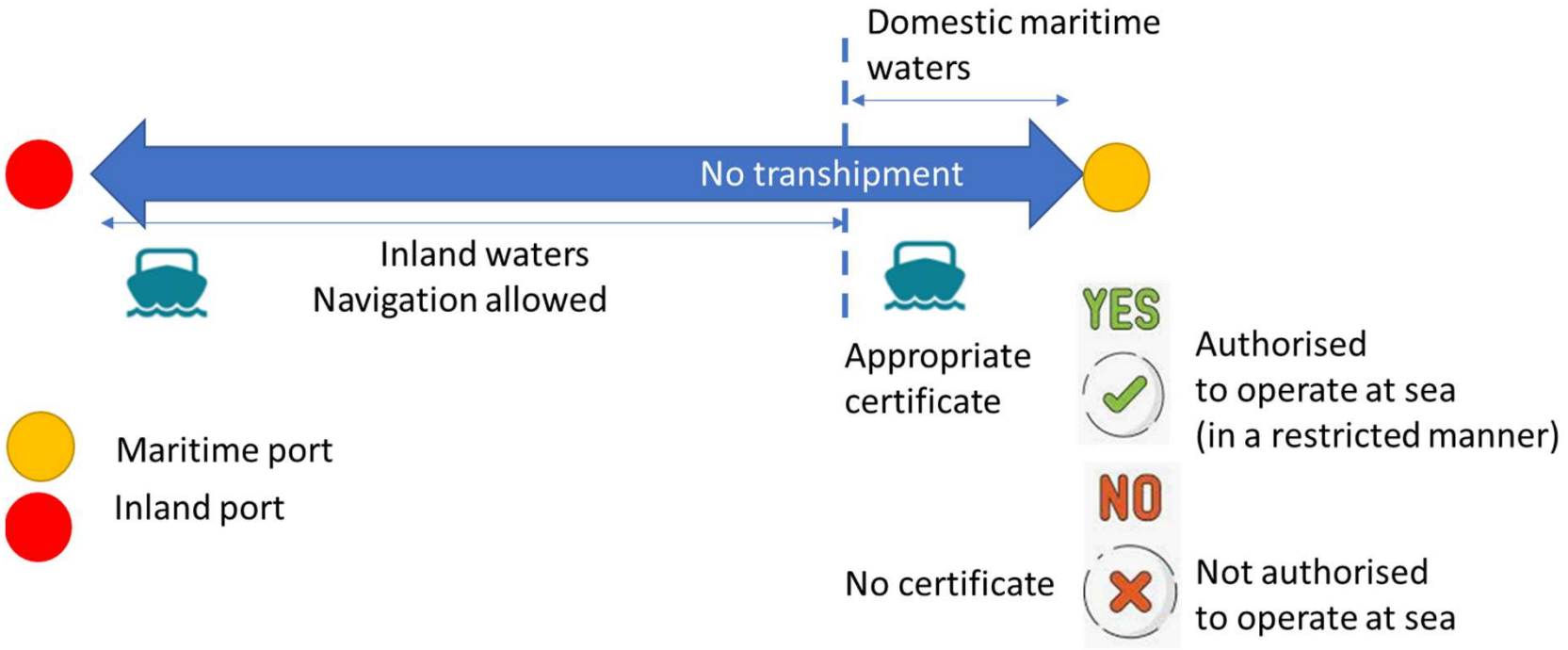
River-sea transport = maritime transport combined with inland navigation transport



A country by country statistical analysis, regulatory aspects and the perspectives for the future will be discussed in detail during the day

Inland vessels navigating at sea

Regulatory and classification aspects as well the specific case of Belgium and France will be discussed in detail during the day



Methodology used for the report

- **No centralised** data reporting in place at EU level
- Data mainly gathered directly from **national statistical offices,** other national statistical sources, stakeholders
- Different methodologies for data collection applied: **maritime vs IWT database**
- **Different methodologies for identifying** river-sea transport on a national basis

River-sea shipping committee

03 Seagoing vessels navigating on inland waterways

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a) A country by country analysis

b) Perspective for the future

3.2 River-sea transport (seagoing ship) – Overview

River-sea shipping takes place on all major rivers in Europe having a connection to open sea.

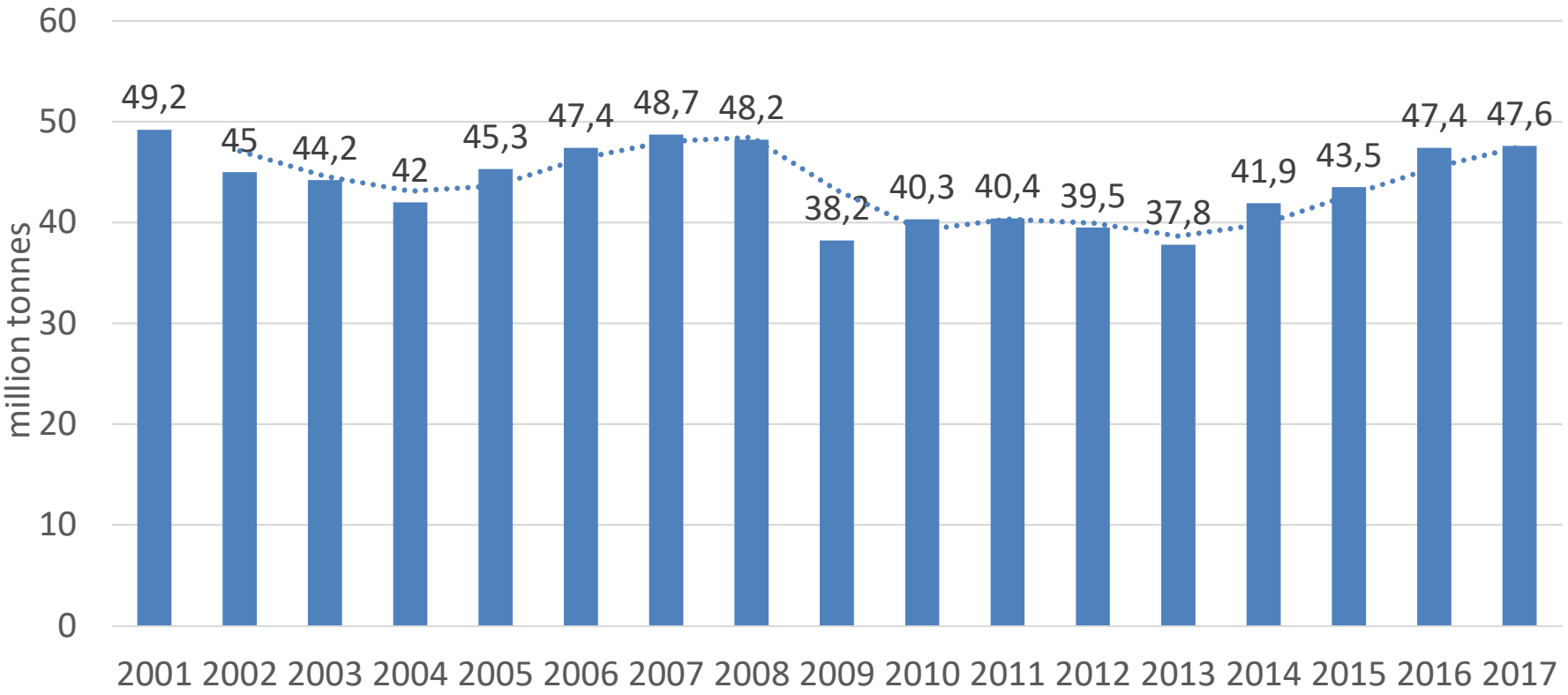
Country	Transport volume River-Sea (mio. t)	% of column 2 in river transport	Most important goods segment within river-sea-transport
Great Britain	47.6	1161 %	Crude Petroleum and petroleum products
Romania	4.5	15.2 %	Agricultural products
Belgium	1.9	1.0 %	Iron and Steel
Finland	1.3	315 %	Timber and raw minerals
Germany	0.76	0.4 %	Iron and Steel
France	0.75	1.3 %	Ores, metallurgical scraps and metal products, Agricultural products
Sweden	8.0	…	Timber and oil products

River-sea transport allows to connect the hinterland of these countries with marine basins. such as the North Sea, the Mediterranean sea the Baltic Sea.

3.3 River-sea transport (seagoing ship) – A country by country analysis

The United-Kingdom

Source: UK Department of Transport



Rivers	R-S transport volumes (mio.t)
River Thames	24,3
River Forth (estuary in the eastern half of Scotland)	8,8
Manchester Ship Canal / River Mersey	4,8

3.3 River-sea transport (seagoing ship) – A country by country analysis

The United-Kingdom - methodology

Source: UK Department of Transport, Domestic Waterborne Freight: 2017: notes and definitions (Technical note)

Inland waters traffic (by barges and seagoing vessels)

non-seagoing traffic
wholly within inland waters
(inside the Smooth Water Line or SWL)

"classical" inland waterway transport

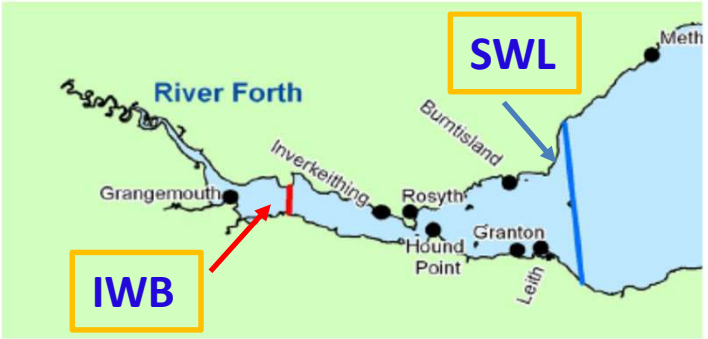
seagoing traffic (r-s-t)
crosses into inland waters from the sea

foreign traffic (≈ 80 %)
(traffic between foreign countries and UK inland ports)

coastwise traffic
(traffic between UK seaports and UK inland ports)

one port traffic
traffic between UK offshore installations and UK inland ports

Where is the boundary between "sea" and "inland waters" ? → Inland waterways boundary (IWB):
The most seaward point of any estuary, where the width of the water surface area is < 3 km at low water and < 5 km at high water



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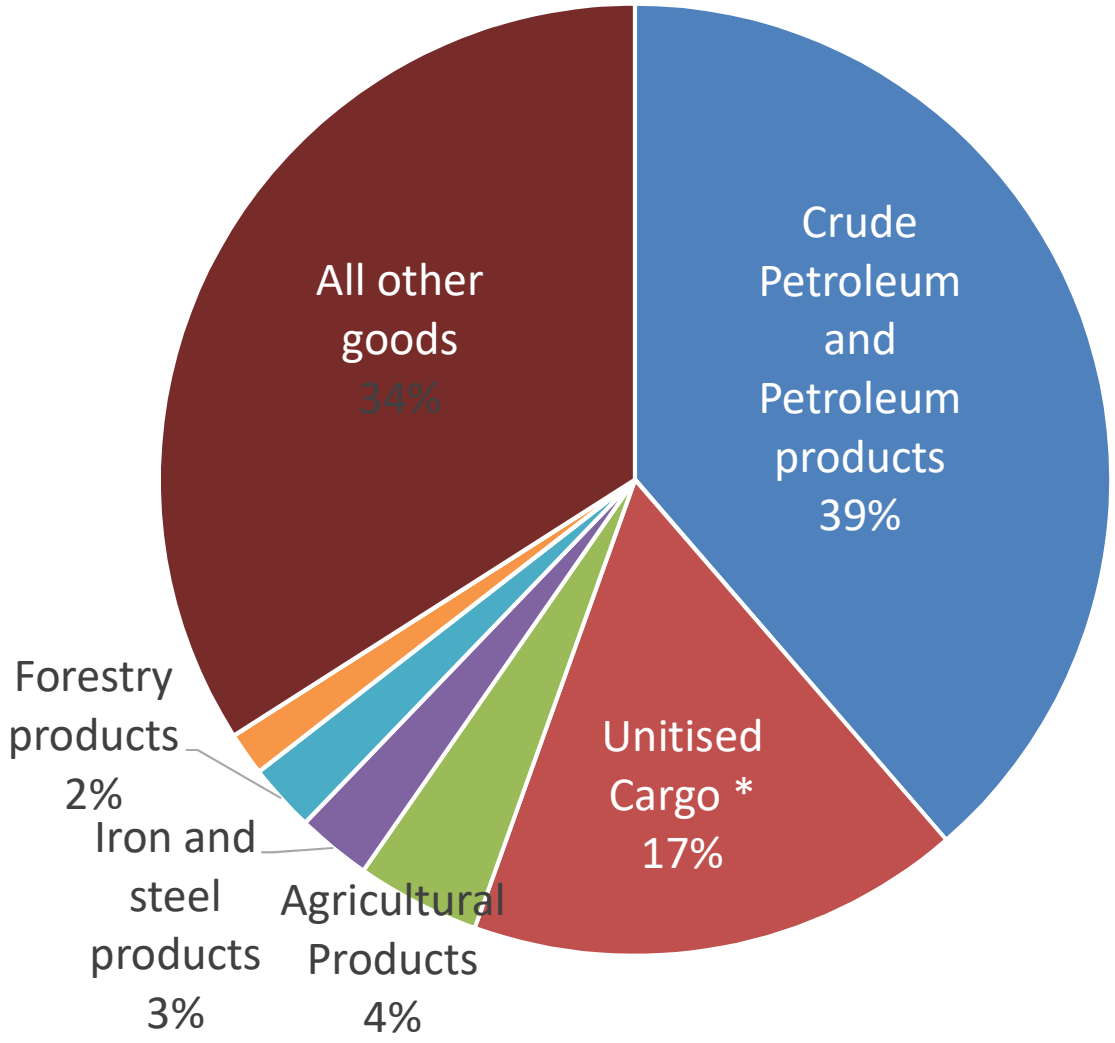


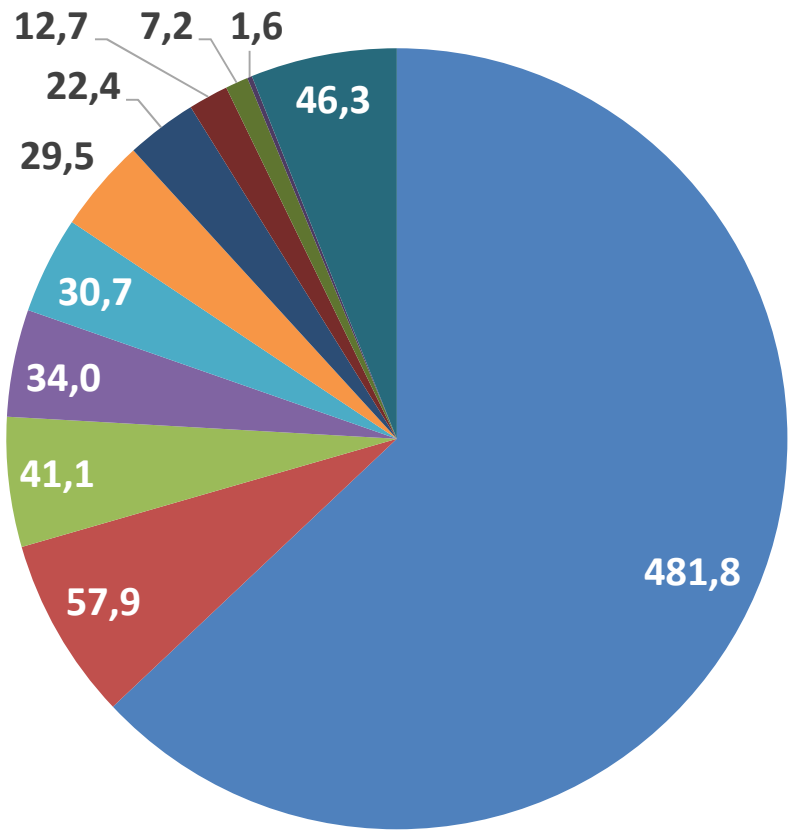
- R-S transport can be split up into three components: **foreign, coastwise and one-port traffic.**
- **Foreign traffic = 80%** of UK R-S transport in 2017.

3.3 River-sea transport (seagoing ship) – A country by country analysis

River-Sea-Transport in Germany
by type of goods (2018, in %)

Germany

Source: CCNR based on Destatis



R-S traffic defined according to **port of loading and unloading.**

Total R-S traffic in Germany in 2018: **765 000** (1,4 mio. t in 2016).

Main trading partners: **UK, Norway, Sweden**

Container traffic currently not relevant within German river-sea-transport.

3.3 River-sea transport (seagoing ship) – A country by country analysis

Germany

Source: CCNR based on Destatis

River-sea by type of transport:

- Export: **65%**
- Import: **33%**
- National: **2%**

River-Sea exports by Germany: most important routes in 2018 (in 1000 t)

Region of loading	Region of unloading	Goods segment	Volume
Düsseldorf	Great Britain	Crude Iron, steel	**270**
Düsseldorf	Great Britain	Non-ferrous metals and semi-finished products	**38**
Düsseldorf	Norway and Sweden	Crude Iron, steel	**86**
Total exports by river-sea-transport from Germany			**494**

River-sea imports to Germany less important (**252 000 tonnes**) :

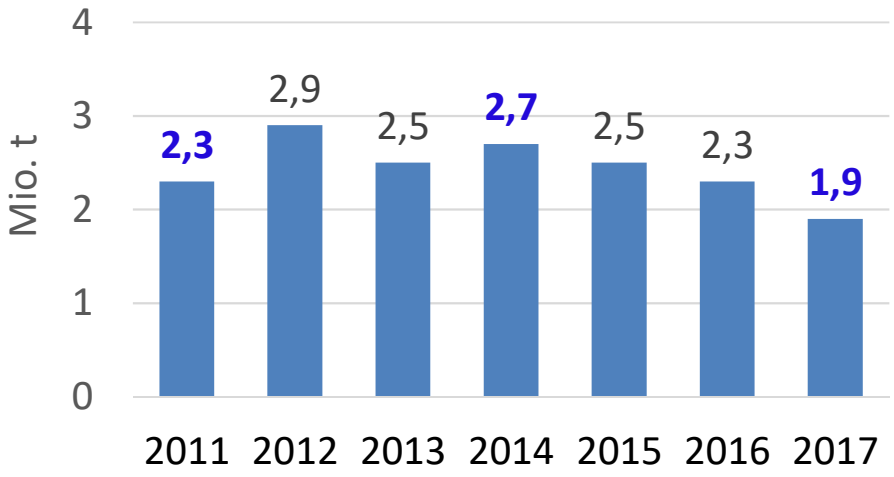
- Regions of loading: **Norway,** Lithuania, France, Great Britain …
- Goods transported: **Gaseous, liquefied/compressed petroleum products**, Stones, sands, gravel, clay, Crude Iron and steel.

3.3 River-sea transport (seagoing ship) – A country by country analysis

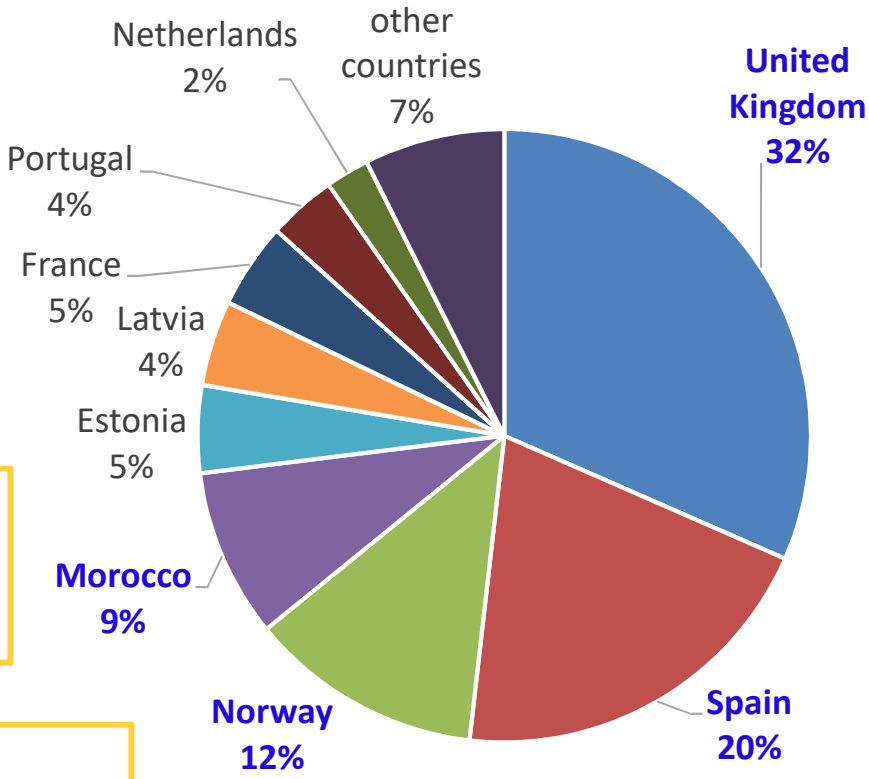
Belgium

Source: CCNR based on Stat.Bel

Evolution of River-Sea-Transport in Belgium



River-Sea transport exports and imports in Belgium by **trading partner** (2017)



R-S transport identified according to **vessel type** used for the journey and by country of **loading and unloading** of the cargo

River-sea transport **equally distributed** by type of transport and country of loading/unloading:

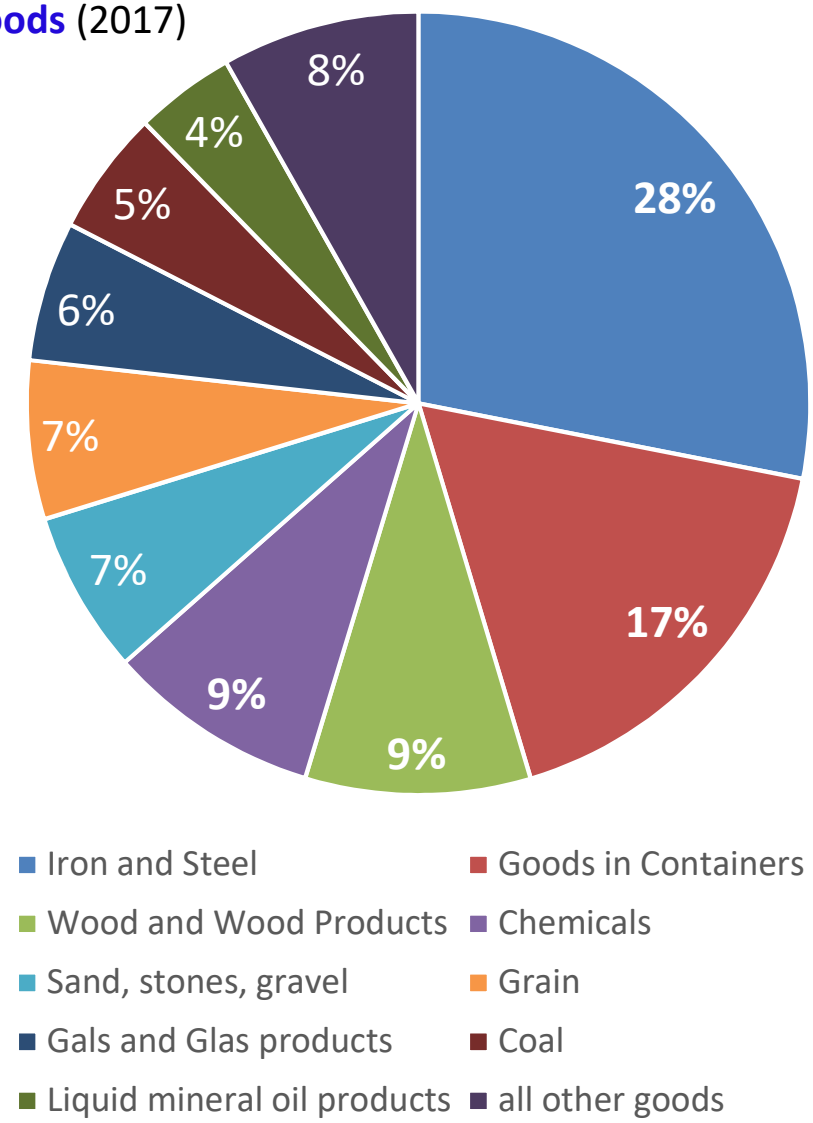
- **Export (27%) – 0.54 mio. t**
- **Import (45%) – 0.82 mio. t**
- **National (28%) – 0.55 mio. t**

3.3 River-sea transport (seagoing ship) – A country by country analysis

Belgium

Source: CCNR based on Stat.Bel

River-Sea-Transport in Belgium by **type of goods** (2017)



Main goods segment:

- **Iron and steel**
- **Goods in containers**
- Wood and wood products
- Chemicals

In Belgium, there are also inland vessels which partly cross into maritime waters, known as **estuary vessels**. However, this type of river-sea-traffic by estuary vessels is currently not identified within the IWW statistics.

3.3 River-sea transport (seagoing ship) – A country by country analysis

Romania

Source: CCNR based on Danube Commission, Romanian Statistical office, Viadonau

River-sea ports of Galati, Braila & Tulcea

Seagoing vessels, coming from the Black Sea, are able to sail upstream on the Danube to these ports

Cargo volume by seagoing vessels in river-sea ports of Galati, Tulcea and Braila

	2015	2018	Main goods segment (in 2018, in 1000 t)
Galati	1357	1320	**Metals and metal products** (27%) **Agricultural products** (22 %) **Iron ores** (14 %)
Braila	494	481	**Agricultural products** (84%)
Tulcea	9	56	**Iron ores** (89%)
Total	**1860**	**1857**	**Agricultural products** (38%) **Metals and metal products** (19%) **Wastes** (14%)

Extra-EU trade plays = important role for river-sea traffic in those ports
Mainly with countries located in the Mediterranean Sea (Northern Africa).

3.3 River-sea transport (seagoing ship) – A country by country analysis

Romania

Source: CCNR based on Danube Commission, Romanian Statistical office, Viadonau

Sulina Canal

Runs from Tulcea to the Black Sea and is mainly used by seagoing vessels.

River-Sea-Transport on Sulina-Canal linking the Black Sea with the Danube (in Mio. t)

	2014	2015	2016	2017	2018
Total	3.66	3.85	3.76	4.31	**4.44**
Danube → Black Sea	3.24	3.26	3.25	3.61	**3.67**
Black Sea → Danube	0.42	0.58	0.51	0.70	**0.77**

Danube-Black-Sea-Canal

Runs between the seaport Constanza and the Danube.
River-sea transport in 2017: **57,000 tonnes** (13.8 mio.t for total goods transport on this canal)

Volumes Sulina Canal = three Romanian river-sea ports: WHY ?

Sulina Canal also covers large **Ukrainian ports** (Izmail, Reni), and the **Moldavian port** of Giurgiulesti, cargo volumes not taken into account by the Romanian statistical institute.

3.3 River-sea transport (seagoing ship) – A country by country analysis

Inland waterways in Sweden

Lake Mälaren	**Lake Vänern**

Access to the sea via

Trollhätte canal/Göta river	**Södertälje canal**

River-sea transport in Sweden

=

Traffic from and to these inland waterway regions via these two canals

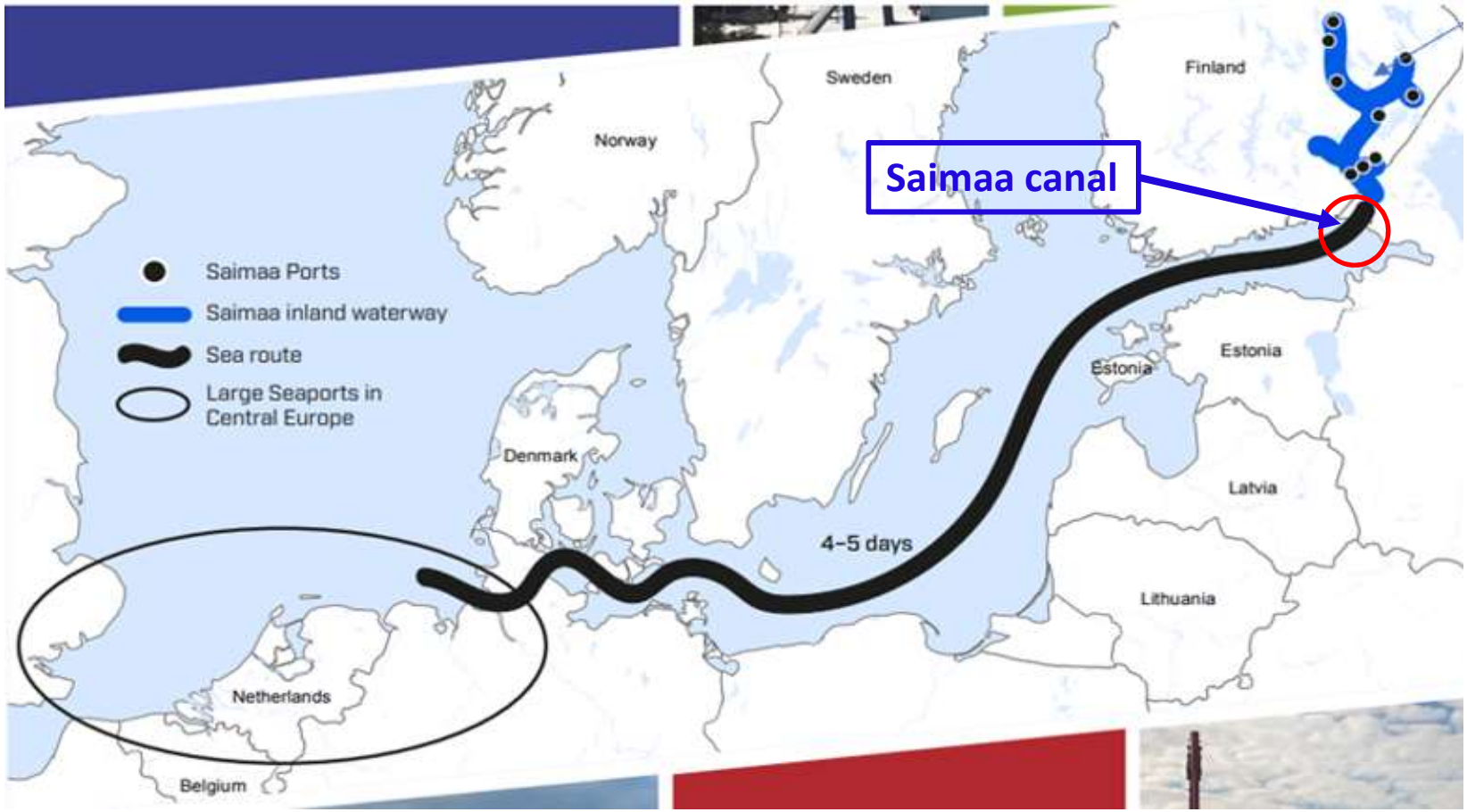
River-sea shipping in Sweden: approximately **8 million tons** annually (source: EMMA project)

Main good segments: **timber and oil products**

3.3 River-sea transport (seagoing ship) – A country by country analysis

Finland

Source: CCNR analysis based on EMMA project, Traficom

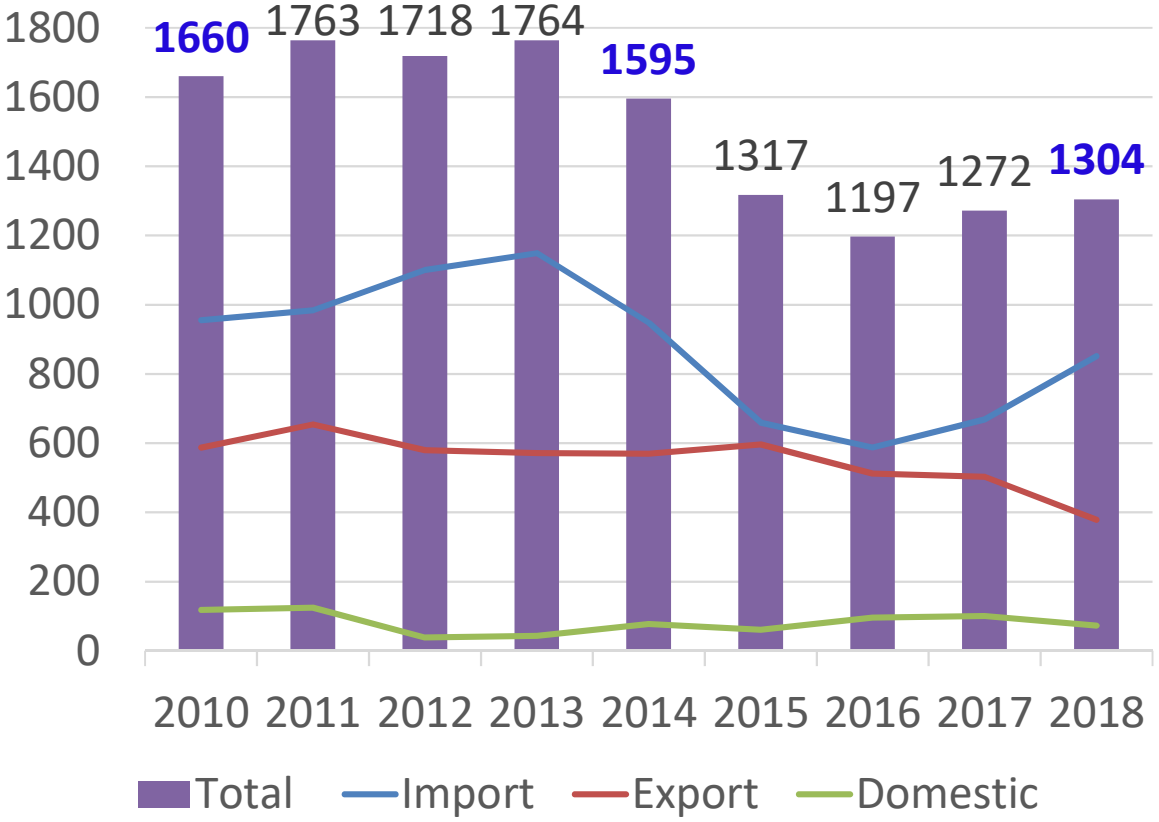


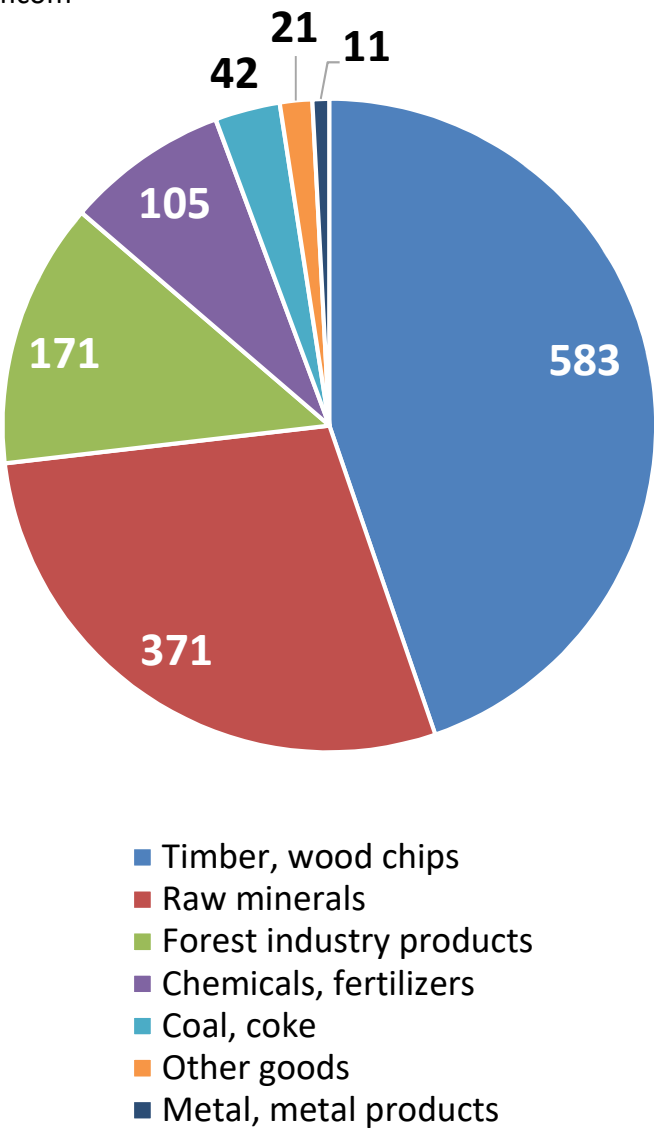
- All the traffic going through the **Saimaa canal** is river-sea transport.
- Divided in three category:
  - **Cross-border traffic** (import and export)
  - **Domestic traffic** (from national inland port to national seaport, on the cost)
  - **Timber floating** (only until 1992).

3.3 River-sea transport (seagoing ship) – A country by country analysis

Finland

Source: CCNR analysis based on EMMA project, Traficom



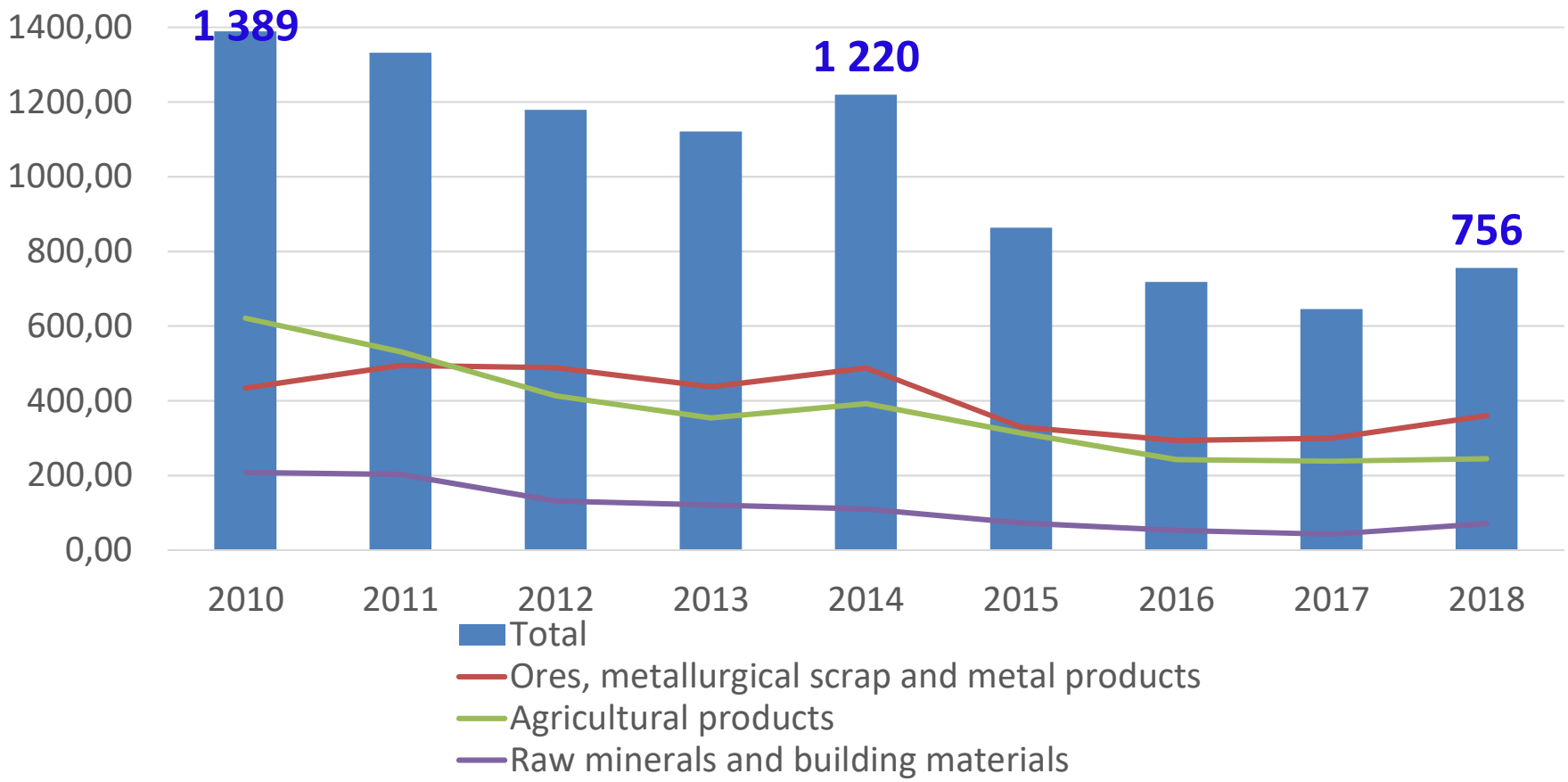


- **Main trading partners**: Russia (631 thousand tonnes), the Netherlands (241), Estonia (164), Germany (107).

3.3 River-sea transport (seagoing ship) – A country by country analysis

France

Source: CCNR based on VNF



Total exports by river-sea transport from France in 1000 t (68%)
Ores, metallurgical scrap, agribulk, metal products

515

Total imports by river-sea-transport to France in 1000 t (32%)
Metal products, raw minerals & building materials

241

3.3 River-sea transport (seagoing ship) – A country by country analysis

France

Source: CCNR based on VNF

Rhône (87%)

Goods segment: **ores, metallurgical scrap, agribulk,** metal products, raw minerals & building materials.

Trade with **Mediterranean basin** (Algeria, Turkey, Spain and Italy).

21 river-sea ships in 2018 (same as in 2013).

Flags: Antigua and Barbuda, St Vincent and Lithuania, Belize, Malta and the Netherlands.

Seine (12%)

Goods segment: **metal products**, agricultural products, fertilizer.

Trade with **Manche/Mer du Nord basin.**

45 river-sea ships in 2013 vs **20 river-sea ships in 2018**.

Flags: Antigua and Barbuda, St Vincent and Lithuania, Switzerland and Germany.

Like in Belgium, there are also **"upgraded" inland vessels** allowed to navigate at sea in some pre-identified areas.

3.4 River-sea transport (seagoing ship) – perspective for the future

Brexit

- Limited direct impact expected
- More severe indirect impact if decrease in overall transport volumes (e.g. automotive industry)
- Possible positive impact if road affected by heavier customs procedure

Investment

Investment in new fleet considered for most companies who have not recently invested.

- **WHY?** Renew ageing fleet, cope with a shortage of river-sea vessels in light of increasing demand, invest in new engines.
- **Positive factor**: facilitating access to **funding & financing** (can be too constraining currently)
- **Negative factor: high cost** new river-sea vessels

Demand and development

Positive factors

- **Environmental** considerations (continued political support towards modal shift)
- Evolution of **pilot regulations** on Rhine and in UK ports
- **Finland**: planned extension of the Saimaa canal locks
- Better aligned **Swedish** IWW regulation (implementing the Directive 2006/87) with other IWW regulations in EU

Negative factors

- lack of **predictability** (e.g. variation in freight rates) & **reliability** (delays, variation in water level)
- Possible increase of pilotage costs for river pilots

04 Inland navigation vessels navigating on maritime waters

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a) Estuary traffic in Belgium

b) Inland vessels at sea in France

4.1 Inland vessels navigating at sea - Introduction

Regulatory and classification aspects already discussed at the beginning of the day.

Can be observed mainly in **Belgium, France and Italy** and outside the EU in **India, Russia and China.**

We will focus on France and Belgium in the report

4.2 Inland vessels navigating at sea – estuary traffic in Belgium (key figures)

Port of Zeebrugge in 2018

- **2.1 Mio. t of goods** via estuary traffic at port of Zeebrugge: **58%** liquid bulk, **41%** container and **1%** ro/ro.
- **1047** estuary vessels called (+ 47 compared to 2017).
- The **estuary fleet** in Belgium = **13** (9 tankers, 1 Ro-Ro, 3 container carriers).
- **160, 000 TEU/year** in these container carriers

From Port of Zeebrugge, a limited maritime trajectory has to performed by an inland vessel to reach the mouth of the Western Scheldt estuary, giving access to the European inland navigation network.

North Sea Port in 2018

- Total volumes estuary traffic: **22,290 tonnes**
- Main partners: port of **Antwerp** (7850 tonnes) & port of **Zeebrugge** (5570 tonnes)
- 4 estuary vessels - 75 voyages
- Main goods segment: containers and cars
- Estuary traffic = stable trend

4.3 Inland vessels navigating at sea – the case of France

Two main areas where "adapted" IWT vessels can navigate at sea in France:

- **Port du Havre** area in the Seine estuary
- the **Golfe de Fos**.

Interesting solution when connection between IWWs and maritime ports not sufficient.

BUT ability for IWT vessels to navigate at sea is always dependent upon meteorological conditions ➡ impact on **reliability**.

Alterative route involving transhipment = **useful complementary option**.

Port of Le Havre

Inland vessels navigating at sea is only direct way (without transhipment) to reach the container terminal Port 2000

8 adapted IWT vessels:

- 6 container inland vessels approx. 10 000 container/year
- 2 bunker vessels.

EU co-funding of 25 million euros in 2018 to create direct inland access to Port 2000 → **may impact river-sea traffic in the Port area**

04 Next steps

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Next steps

Mid-October 2019 - Finalisation of draft report

Mid-October to beginning November – opportunity to provide comments

Until mid-November 2019 – integration of comments and finalisation of the report

Until end January 2020
– translation of the report in French, German and Dutch
– Finalisation of print and digital version of the report

ANY QUESTIONS?

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THANK YOU VERY MUCH FOR YOUR ATTENTION

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