

Market observation report on river-sea transport

**56th session of the Working Party on the Standardization of
Technical and Safety Requirements in Inland Navigation,**

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Chapters of the report

- 1. Chapter 1 - Methodology and scope of the report**
 - a) Definitions, terminology and scope of the report**
 - b) Methodology and data reporting at EU level**
- 2. Chapter 2 - Seagoing vessels navigating on inland waterways**
 - a) Overview of river-sea transport in Europe performed by seagoing ships**
 - b) Legal and economic aspects related to river-sea transport performed by seagoing ships**
 - c) River-sea goods transport in main European Union countries**
- 3. Chapter 3 - The case of inland navigation vessels navigating at sea**
 - a) Introduction and general classification rules**
 - b) Inland vessels at sea: estuary traffic in Belgium**
 - c) Inland navigation vessels allowed to navigate at sea in France**
 - d) Inland vessels “at sea”: opportunities for the future?**

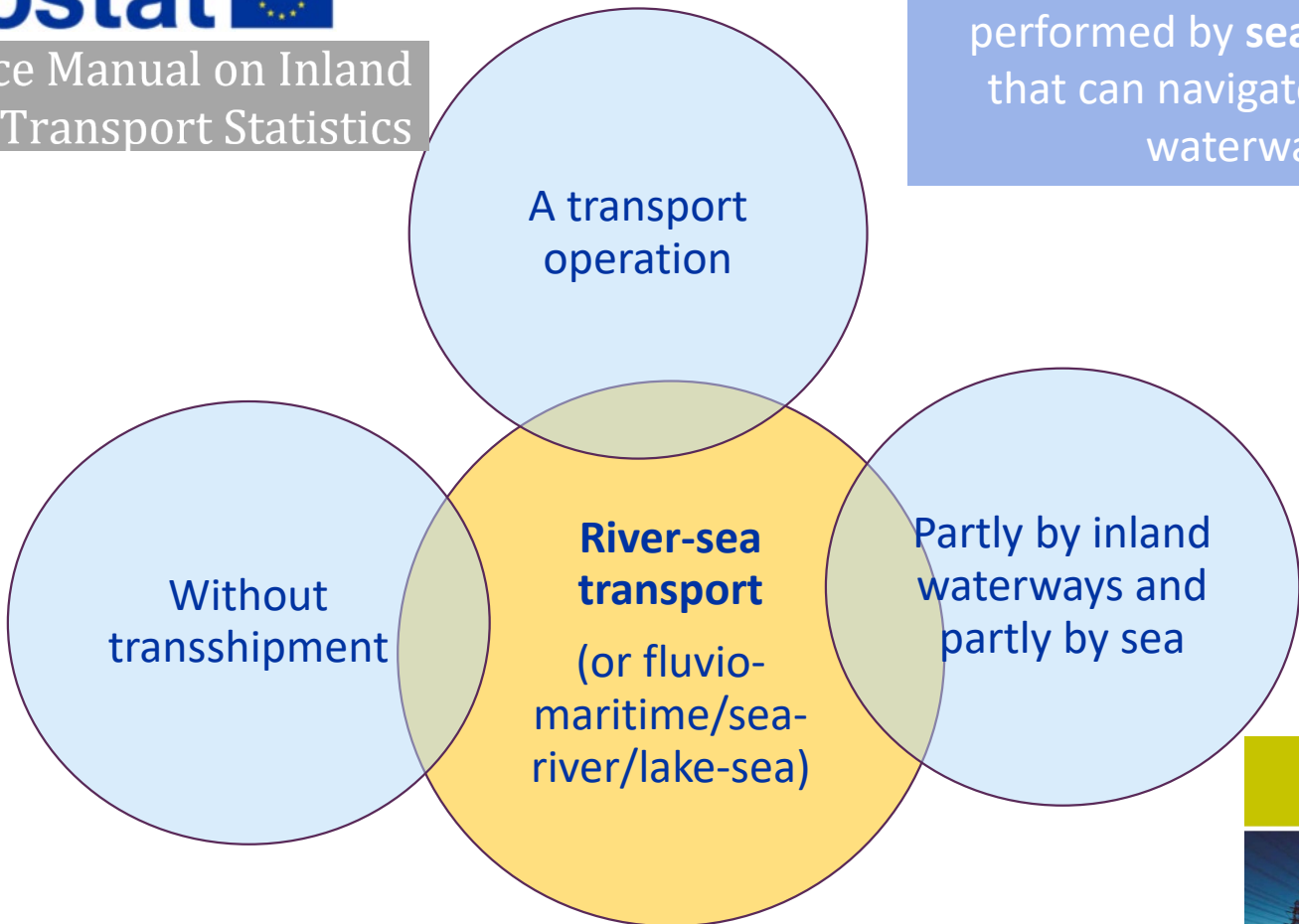
01

Methodology and scope of the report



Reference Manual on Inland
Waterways Transport Statistics

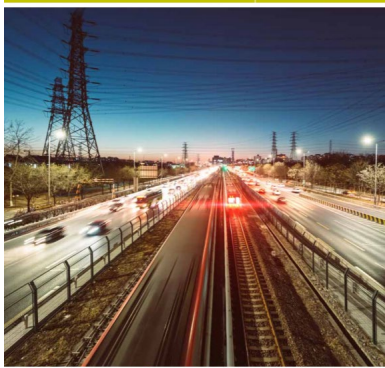
River-sea transport can be performed by **seagoing ships** that can navigate on inland waterways



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

Seagoing vessel?
Seagoing ship?
Fluvio-maritime vessel?

Glossary for
transport statistics
5TH EDITION 2019



1. a) Terminology

4.1.6 Fluvio-maritime transport

A transport operation partly by inland waterways and partly by sea, without transshipment.

It can be operated by inland waterway vessel or seagoing ships.

Eurostat ref manual IWT stats

Any inland waterway vessel undertaking such transport will need to have the appropriate authorisation permitting it to operate at sea.

Glossary transport statistics – maritime chapter

E.V-02 FLUVIO-MARITIME TRANSPORT (SEE C.V-07)

A transport operation partly by inland waterways and partly by sea, without transshipment. It can be operated by inland waterway vessel or seagoing ships.

Any inland waterway vessel undertaking such transport will need to have the appropriate authorisation permitting it to operate at sea.

Also known as Sea-river transport in Inland waterways transport chapter.

C.V-07 SEA-RIVER TRANSPORT (SEE E.V-02)

A transport operation partly by inland waterways and partly by sea, without transshipment. It can be operated by inland waterway vessel or seagoing ships.

Any inland waterway vessel undertaking such transport will need to have the appropriate authorisation permitting it to operate at sea.

Also known as fluvio-maritime transport in the Maritime chapter.

Glossary transport statistics – IWT chapter

C.II-04 FLUVIO-MARITIME (SEA-RIVER) VESSEL

Any IWT vessel designed and authorised to operate also as a sea going vessel.

Glossary transport statistics – IWT chapter 2 terminology used!

BUT IN FRENCH we usually refer to a fluvio-maritime ship (navire fluvio-maritime) which are seagoing ships adapted to navigate on inland waterways...

Fluvio-maritime transport performed by a seagoing vessel should be reported in the maritime transport statistics and not in the IWW statistics

Eurostat ref manual IWT stats, should it be seagoing ships?



1. b) Methodology used for the report

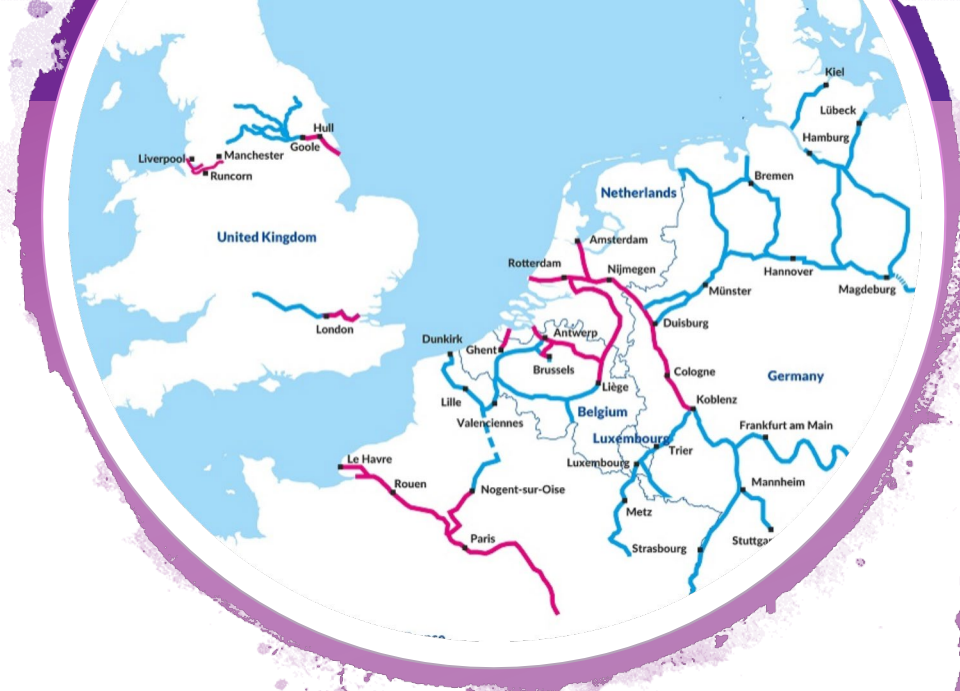


- **No centralised** data reporting in place at EU level
- Data mainly gathered directly from **national statistical offices**, other national statistical sources, stakeholders
- Different methodologies for data collection applied: **maritime vs IWT database**
- **Different methodologies for identifying**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

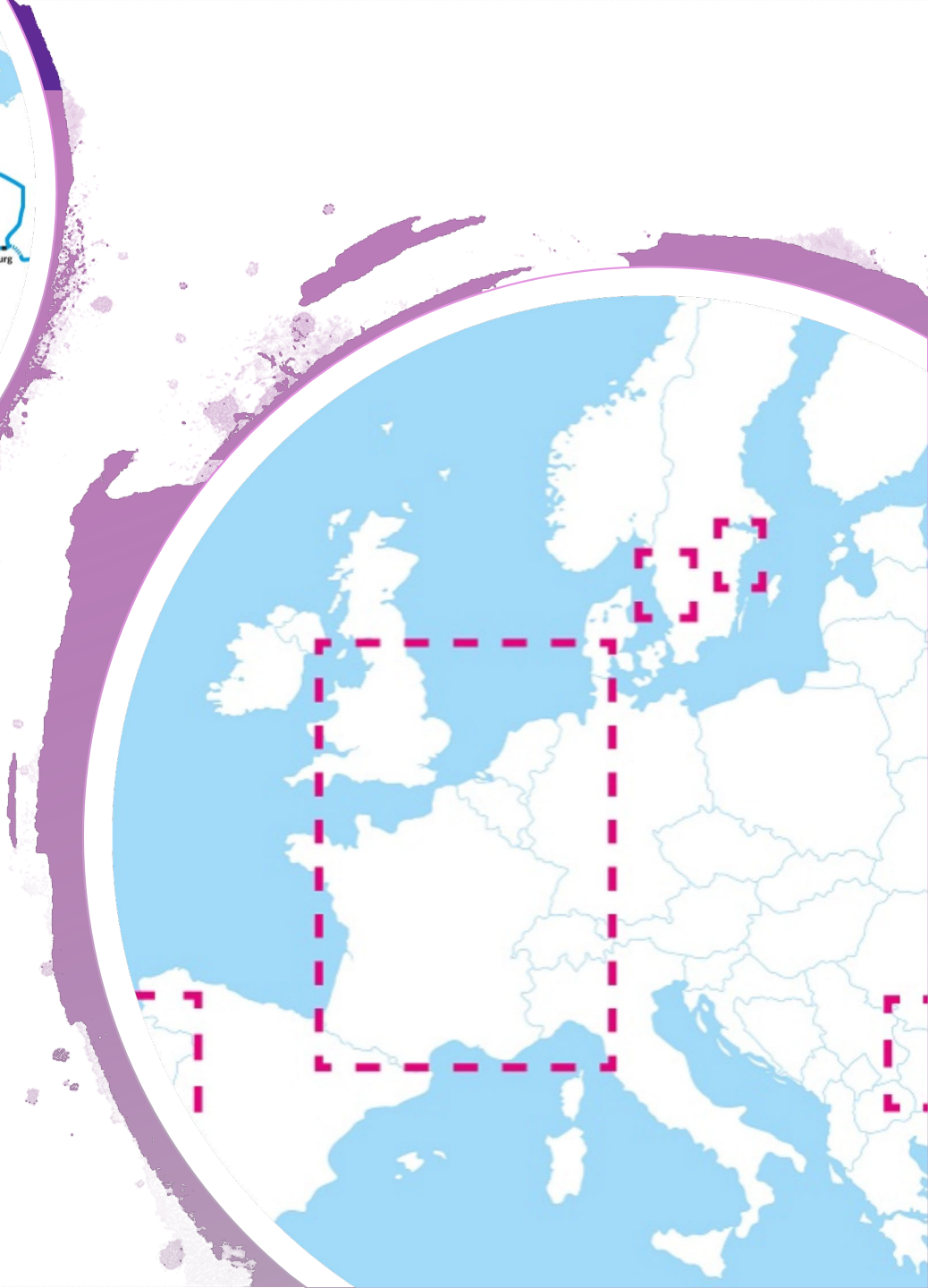


02

Seagoing vessels navigating on inland waterways



RIVER-SEA TRANSPORT IN EUROPE



2. Overview (a) and legal aspects (b)

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

Country	Transport volume River-Sea (mio. t)	Transport volumes inland waterway transport (mio. t)	Most important goods segment within river-sea-transport
Great Britain (2017)	47.6	4.1	Crude petroleum and petroleum products
Russia (2018)	25	115	Oil and Oil products, grain, coal, timber, metals, fertilizers
Sweden (2018)	6.62	0	Timber and oil products
Romania (2018)	4.50	29	Agricultural products
The Netherlands (2018)	4.48	359	Iron and Steel
Belgium (2017)	1.9	205	Iron and steel
Finland (2018)	1.3	0.4	Timber and raw minerals
Germany (2018)	0.76	198	Iron and steel
France (2018)	0.75	60	Ores, metallurgical scraps and metal products, agricultural 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.

Sources: CCNR analysis based on national statistical offices of the countries mentioned in the table, TrafikAnalys, Rijkswaterstaat, Russian Chamber of Shipping

UNITED KINGDOM



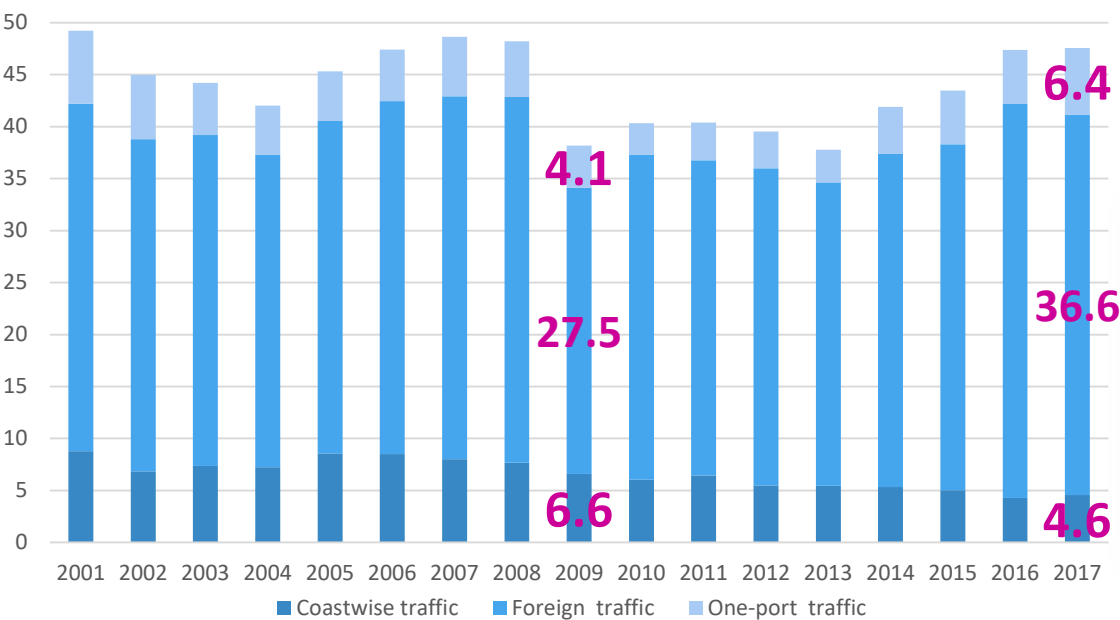
2. c) The United Kingdom

River-sea transport: all seagoing traffic crosses into inland waters. It comprises:

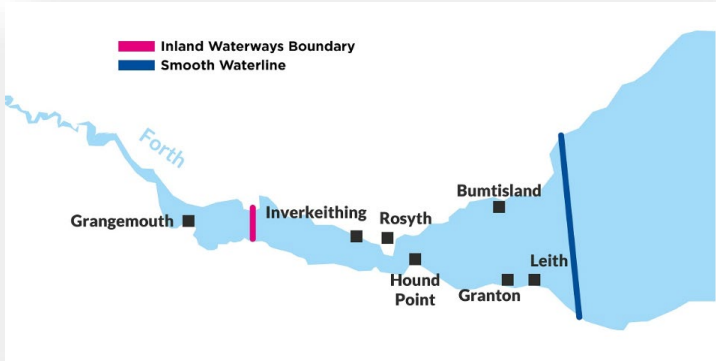
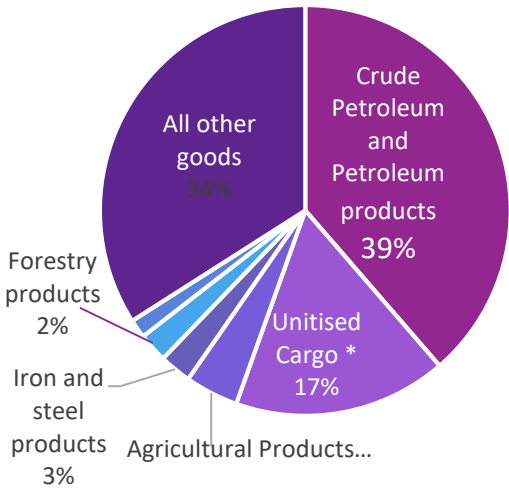
- Foreign traffic
- Coastwise traffic
- One-port trafic

R-S transport volumes in 2017 (in mio. t):

- River Thames: **24.3**
- River Forth: **8.8**
- Manchester Ship Canal / River Mersey: **4.8**



River-Sea-Transport in the UK by type of goods in 2018 (in %)



RUSSIA AND UKRAINE



Russia

Number of river-sea transport ships in 2019: 1,190

- 849 motorized
- 341 non-motorized

Trading areas: the Baltic Sea, the North Sea, the Azov-Black Sea, the Mediterranean Sea, the Caspian Sea, north and far eastern regions of Russia.

R-S transport volumes in 2018 (in mio. t): 25

Main trading partners: Germany, Sweden, the Netherlands, Denmark, Norway, Greece, France and Croatia.

R-S transport in Russia by type of goods:

- Within Russia: cereals, fertilizers, steel and wood products;
- Main export commodities: oil and oil products, grain, coal, timber, metals and fertilizers

Ukraine

Number of river-sea ships in 2019: 139 of which

- 18 motorized
- 76 non-motorized
- 25 tugs and pushers

The Kilia-Bystroe Canal, in the Danube Delta, registered 1.5 mio. t of river-sea traffic in 2017 (+ 362.1% compared to 2016)



SWEDEN



2. c) Sweden



2 classified inland waterway areas in Sweden:

The Port of Gothenburg,
the Göta Älv river and
Lake Vänern

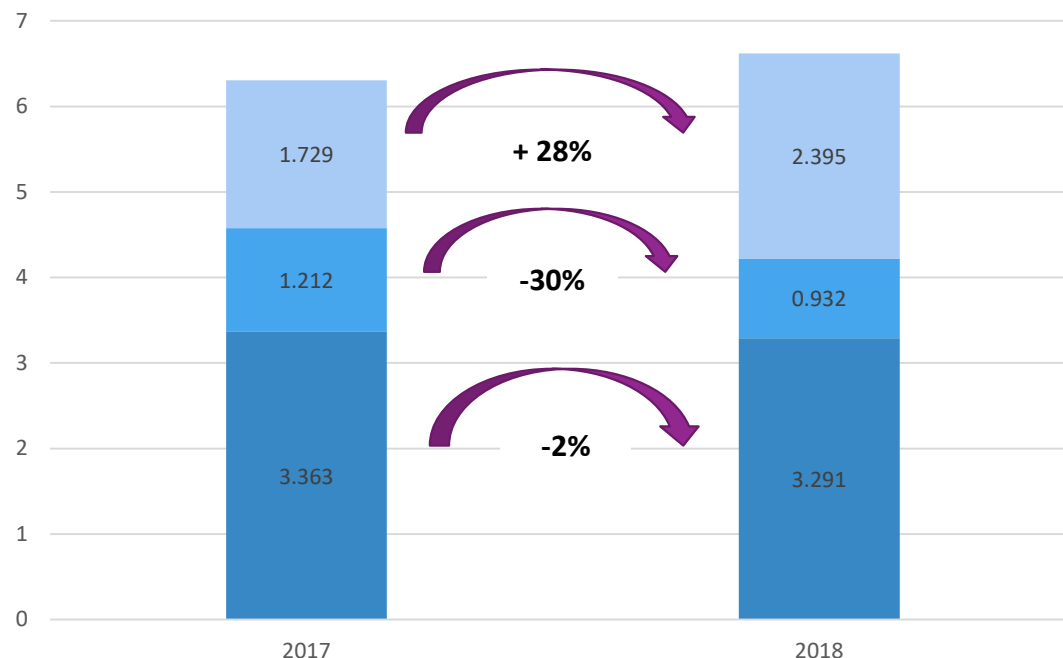
The Södertälje Canal,
Lake Mälaren and parts
of the Stockholm area



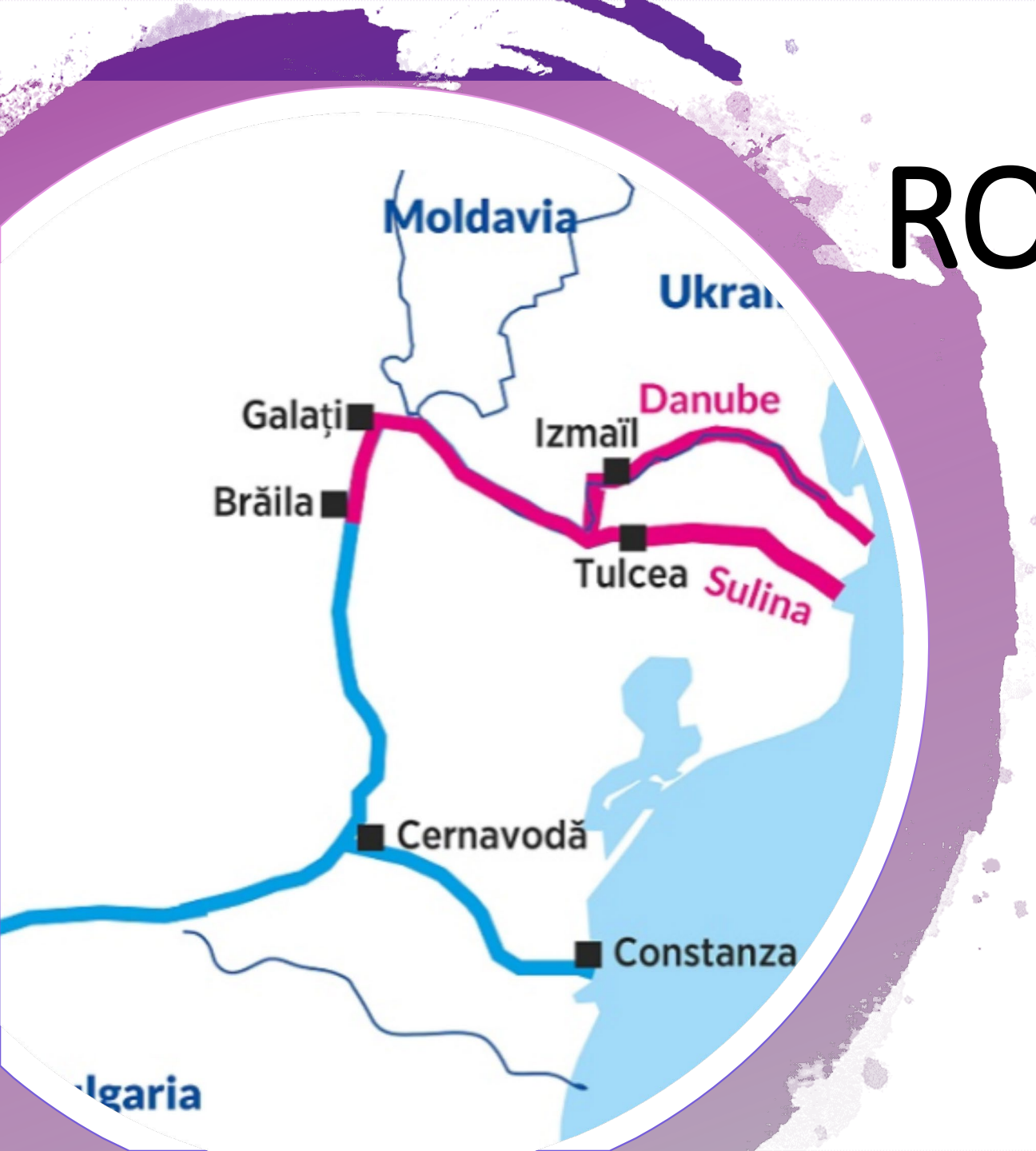
River-sea shipping in Sweden:

- **6.62 mio t.** in 2018
- Overall river-sea transport **increased by 5%** between 2017 and 2018
- Goods segments: **timber and paper products, oil products, chemicals, steel**

No detailed data regarding river-sea transport can be published, in particular related to the type of goods, the main trading partners and the ports of loading and unloading.

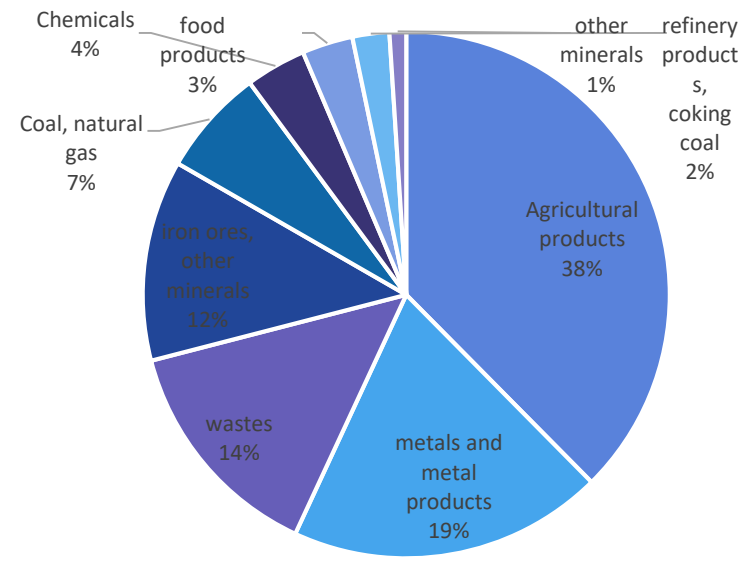


ROMANIA





River-sea ports of Galati, Braila & Tulcea



Extra-EU trade:

- important role for river-sea traffic in those ports;
- mainly with countries located in the Mediterranean Sea

Sulina Canal

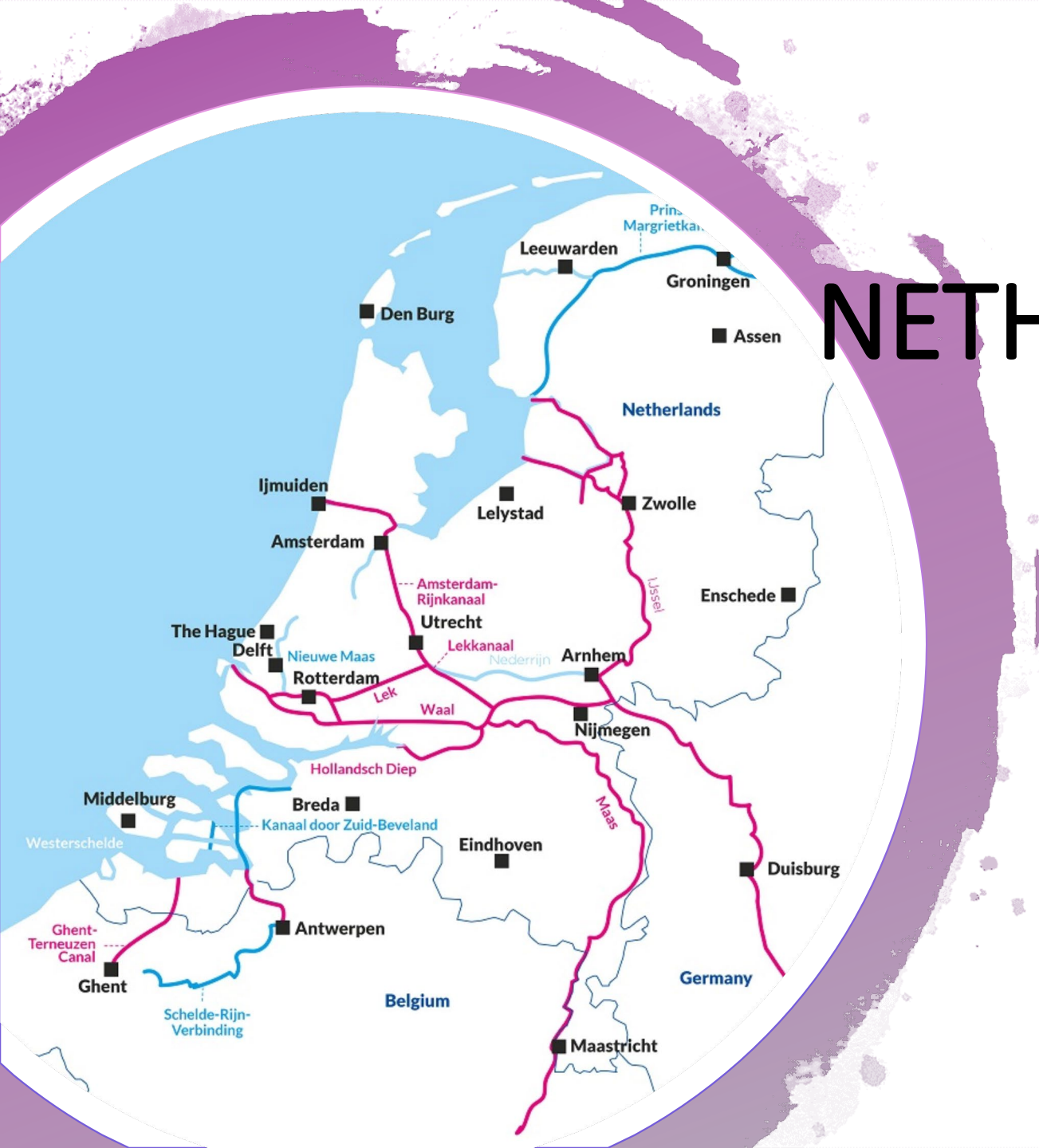
- **Runs from Tulcea to the Black Sea** and is mainly used by seagoing vessels.
- **River-Sea-Transport on Sulina-Canal** linking the Black Sea with the Danube (in mio. t):

	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 t**
- **Total amount of cargo in 2017: 13.8 mio. t**

THE NETHERLANDS





2. c) The Netherlands

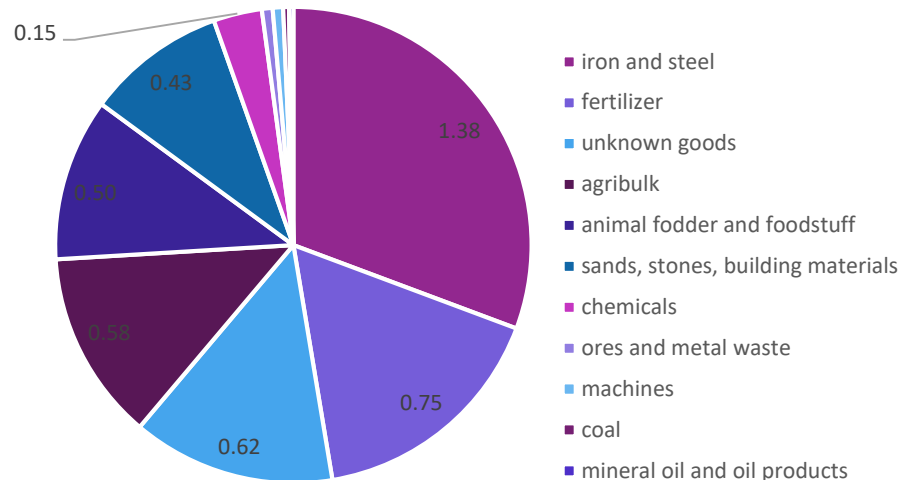
River-sea traffic: trips made by seagoing ships partly by inland waterways and partly by sea between:

- region/city of loading along an inland waterway and region of unloading along an inland or a maritime waterway/port*
- region/city of loading along a maritime waterway/port and a region/city of unloading along an inland waterway

Most important countries of loading and unloading in 2018:

- **Belgium** (Ghent is the most important port for loading and unloading)
- **UK**
- **the Netherlands**
- **Romania**

River-Sea-Transport in the Netherlands by type of goods in 2018 (in mio. t):



Total volume of R-S transport in 2018 (in mio. t): 4.48

R-S T by type of transport in 2018:

- Transit traffic: **68.6%**
- Import traffic: **14.7%**
- Export traffic: **11.5%**
- National traffic: **5.2%**

BELGIUM





2. c) Belgium

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

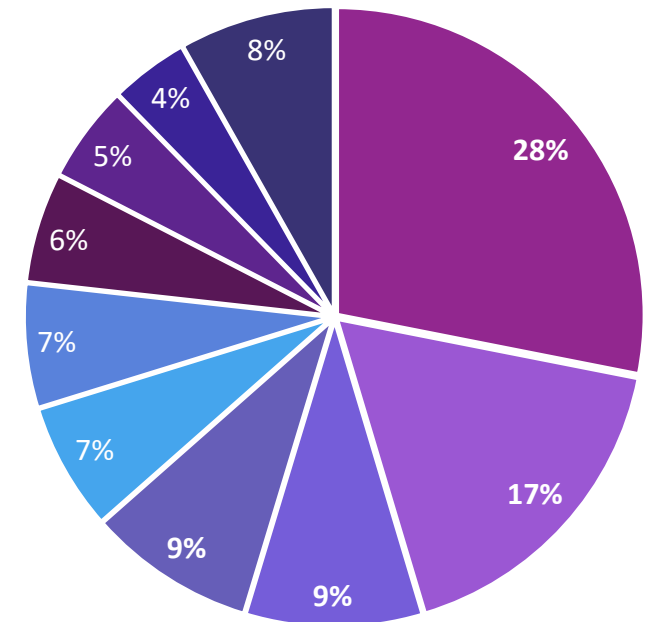
R-S transport by type of transport in 2017 (in mio. t):

- Export: **0.52**
- Import: **0.82**
- National: **0.55**

In Belgium, there are also **estuary vessels**: inland vessels which partly cross into maritime waters (not identified within the IWW statistics).

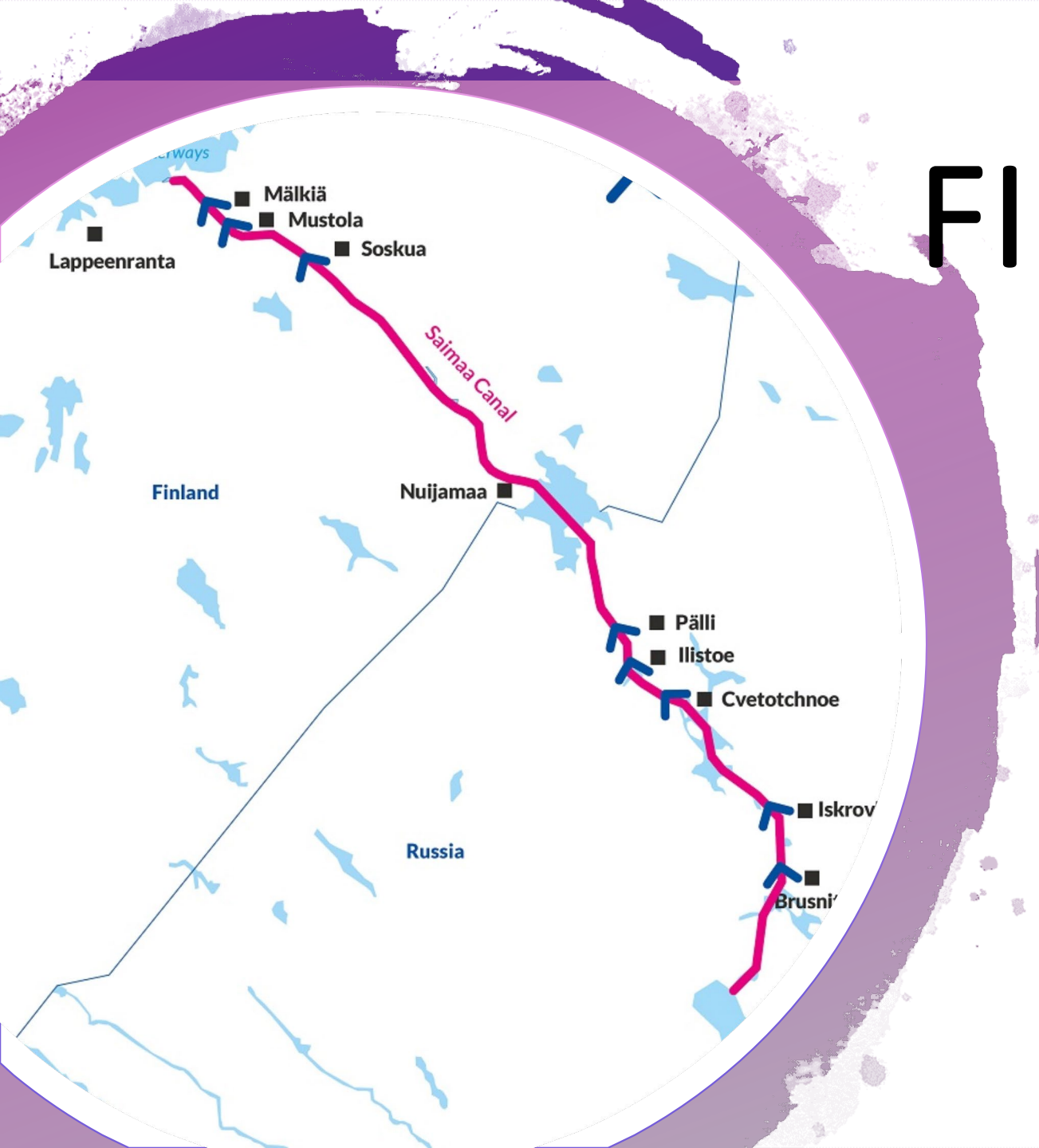
Main trading partners: the UK, Spain, Norway and Morocco.

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



- | | |
|-------------------------------|-----------------------|
| ■ Iron and Steel | ■ Goods in Containers |
| ■ Wood and Wood Products | ■ Chemicals |
| ■ Sand, stones, gravel | ■ Grain |
| ■ Gals and Glas products | ■ Coal |
| ■ Liquid mineral oil products | ■ all other goods |

FINLAND



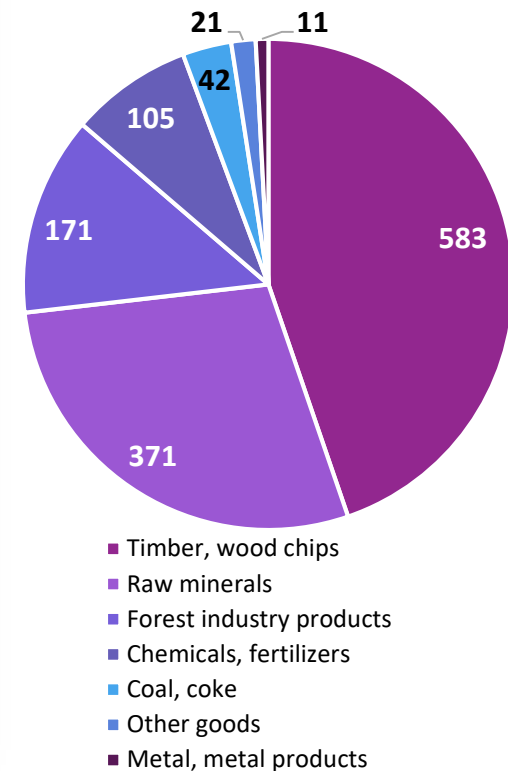
2. c) Finland

○ Saimaa ports ■ Saimaa inland waterways
 — Sea route ■ ■ Large seaports in Central Europe

Source: The Saimaa inland waterway, EMMA project, Traficom



River-sea transport in Finland by type of goods in 2018 (in 1,000 t):



- R-S-T: all traffic going through **Saimaa canal**
- Divided in **3 categories**:
 - **Cross-border traffic** (import and export = **94%**);
 - **Domestic traffic** (from national inland port to national seaport, on the coast);
 - **Timber floating** (only until 1992).

- **Global trend of R-S T:**
 - **Increase from 1971 to 2004**
 - **Decrease until 2016** (2009 = lowest volumes, financial crisis)
 - **Increase between 2016 and 2018**
- **Main trading partners: RUS, NL, EE, DE**

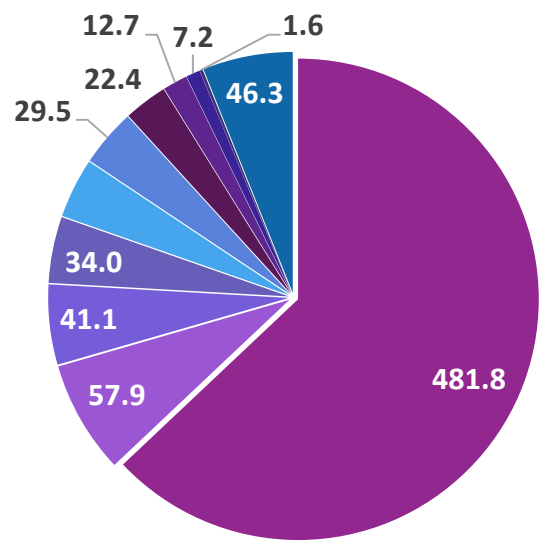


GERMANY





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



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

River-sea by type of transport in 2018:

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

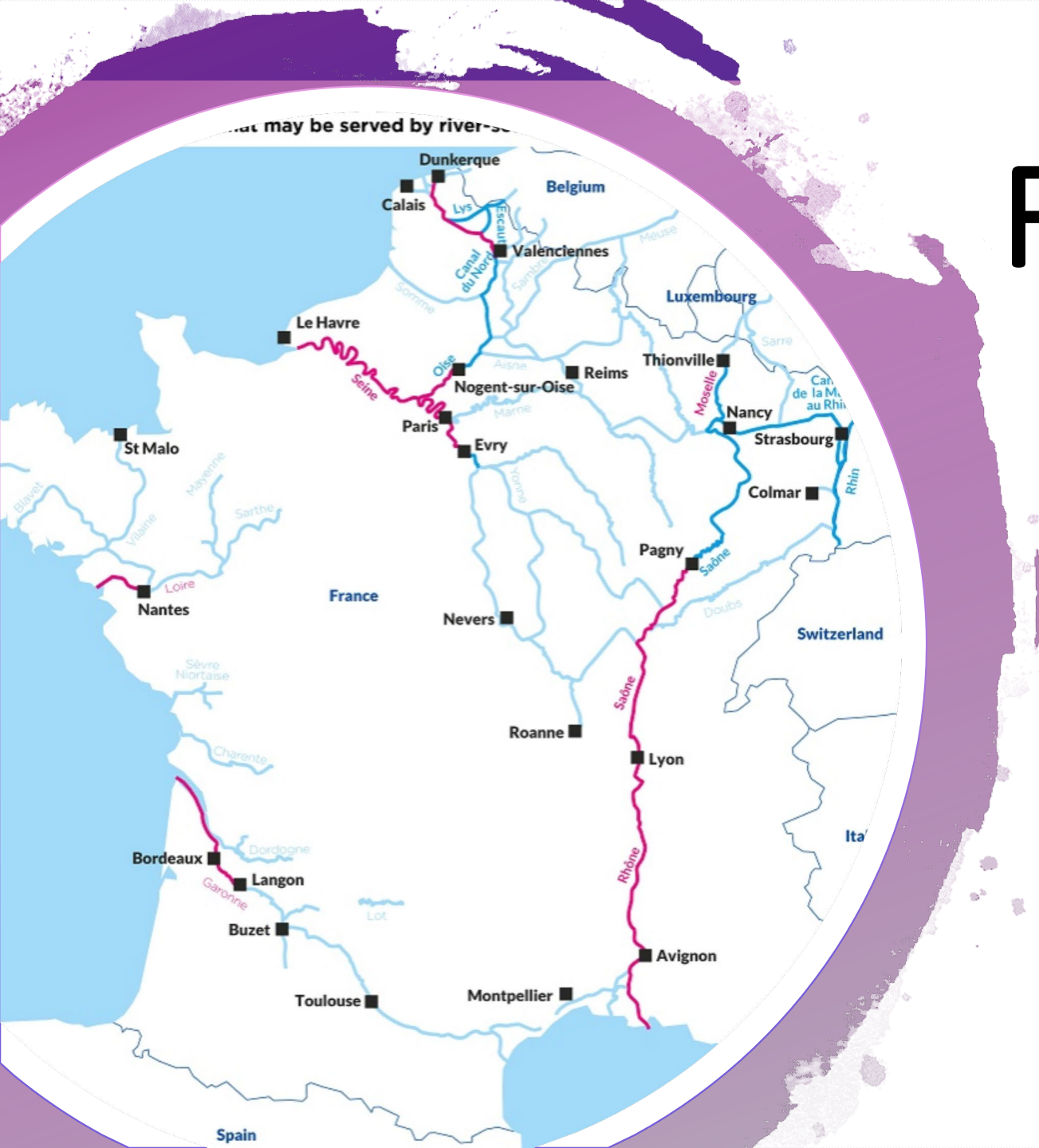
Trading partners (import): Norway, Lithuania, France, Great-Britain

- Pig Iron and Steel
- Gaseous, liquefied or compressed petroleum products
- Non-ferrous metals and semi-finished products thereof
- Stones, sands, gravel, clay
- Products of plant origin
- Salt and sodium chloride; seawater
- Chemical raw materials
- Waste and secondary raw materials
- Cereals
- Tubes and hollow sections
- Other goods

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

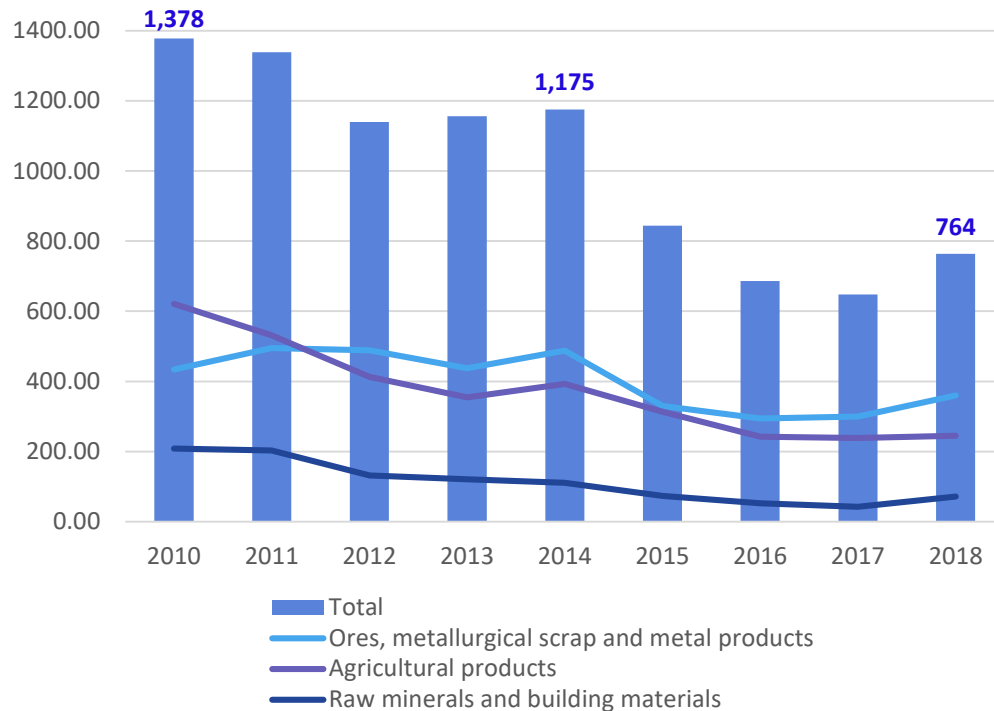
Region loading	Region of unloading	Goods segment	Volume
Düsseldorf	Great Britain	Crude Iron, steel	270
Düsseldorf	Great Britain	Non-ferrous metals and semi-finished products	38
Düsseldorf	Norway and Sweden	Crude Iron, steel	86
Total exports by river-sea-transport from Germany			494

FRANCE





2. c) France



Total exports by river-sea transport from France in 2018 (in 1000 t): 510

- Ores and metallurgical scrap
- Agribulk
- Metal products

Total imports by river-sea-transport to France in 2018 (in 1000 t): 243

- Metal products
- Raw minerals & building materials
- Fertilizers

Rhône

- **Goods segments:** ores, metallurgical scrap, agribulk, metal products, raw minerals & building materials.
- **Trade with Mediterranean basin**
- **21 river-sea ships in 2018**
- **Flags:** Antigua and Barbuda, Belize, Lithuania, Malta, the Netherlands and St Vincent.

Seine

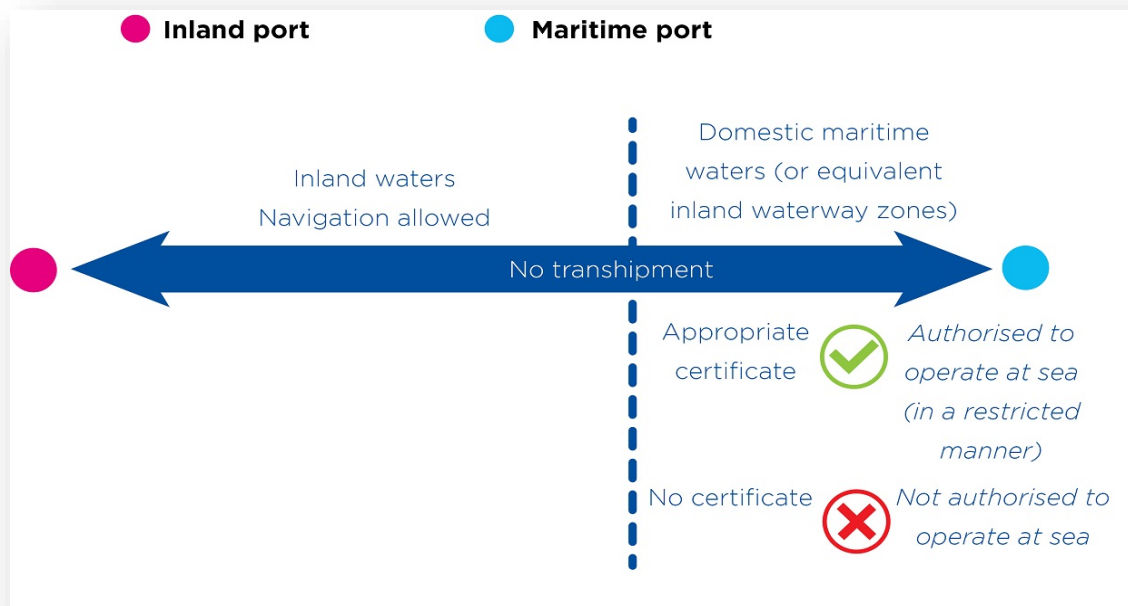
- **Goods segments:** metal products, agricultural products, fertilizer
- **Trade with Manche/Mer du Nord basin.**
- **20 river-sea ships in 2018.**
- **Flags:** the Netherlands, St Vincent, Antigua and Barbuda, Lithuania and the Bahamas.

03

Inland navigation vessels navigating on maritime waters

3. a) Introduction and general classification rules

Most common case of river-sea transport performed by an inland navigation vessel



Can be observed mainly in **BE, FR, IT** and outside the EU in **India, Russia and China**

No harmonisation in the requirements for inland vessels to navigate at sea

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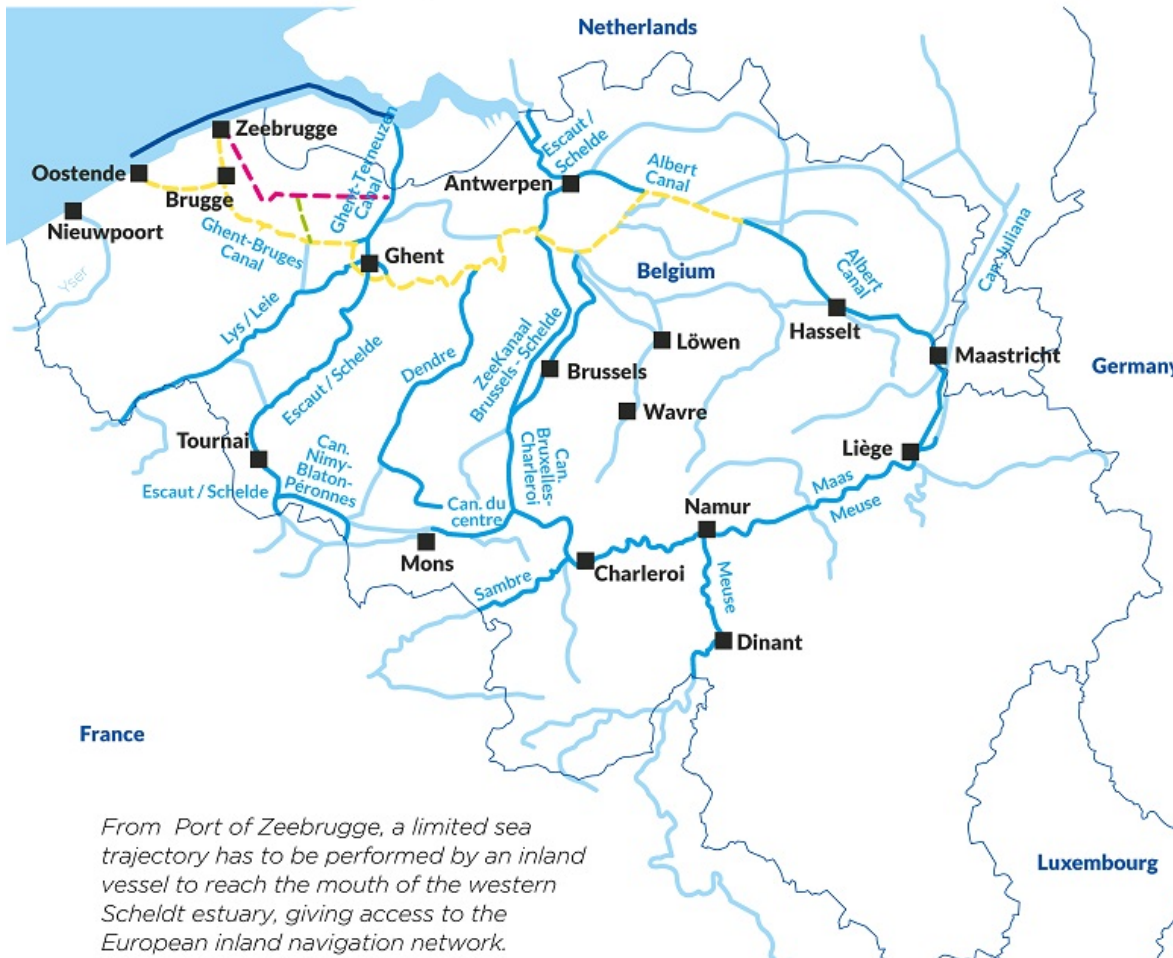
Inland vessels are not allowed to navigate at sea in several EU countries



Directive 2016/1629: calls Member States to better harmonise the conditions for the issuing of supplementary Union inland navigation certificates for operations of inland vessels in zones 1 and 2.



- ■ ■ Connections to inland waterways: long voyage, Class IV only
- ■ ■ Projects for new inland waterway connection: never realised
- Sea trajectory to western Scheldt mouth (15 nm - nautical miles)



BELGIUM

3. b) Inland vessels navigating at sea – Estuary traffic in Belgium

Estuary traffic: performed by estuary vessels holding a certificate allowing them to navigate at sea (non-international voyage)

Royal Decree of 2007: enforces set of regulations allowing an inland vessel to navigate at sea between Belgian coastal ports.

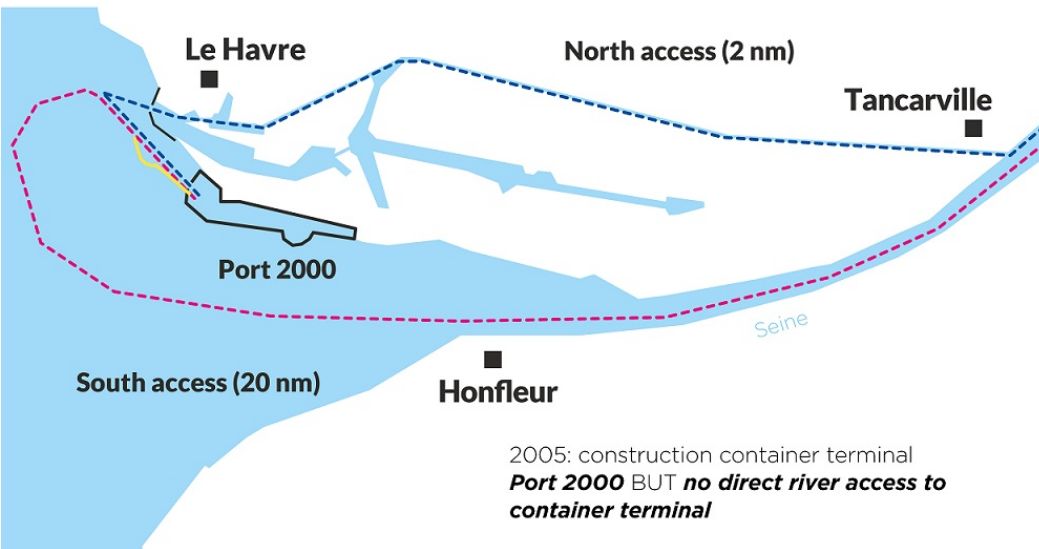
- **The estuary fleet in Belgium:** 12 (8 tankers, 1 Ro-Ro, 3 container carriers)
- The container vessels carry **160, 000 TEU/year**
- **Age (average):**
 - Tankers: 12
 - Ro-Ro: 15
 - Containers: 12
- **Building dates:** between 2003 and 2011

Port of Zeebrugge in 2018

- **2.1 Mio. t of goods** via estuary traffic at port of Zeebrugge:
 - **58%** liquid bulk
 - **41%** container
 - **1%** ro/ro.
- **1047** estuary vessels called (+47 compared to 2017).



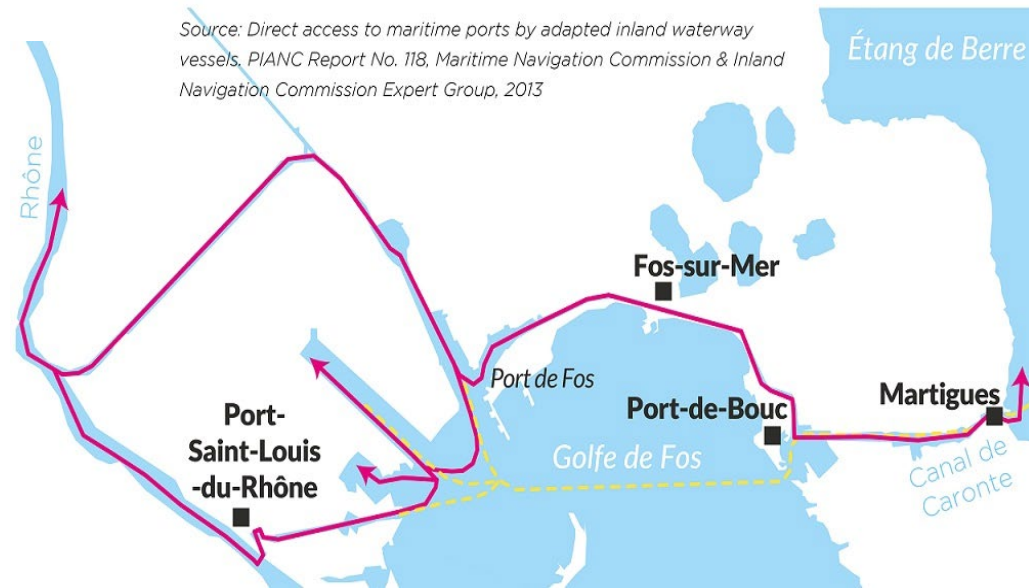
- Alternative connections: Sea trajectories to historic port of Le Havre (north access)
OR
- Sea trajectories to mouth of river Seine (S)
- Future developments (2022): Creation of direct river access with the building of a new dike (accès fluvial direct = "chatière")



FRANCE

- Existing inland connection to river Rhône in the Golfe de Fos area from Martigues and the Etang de Berre
- Sea trajectory alternative

Source: Direct access to maritime ports by adapted inland waterway vessels, PIANC Report No. 118, Maritime Navigation Commission & Inland Navigation Commission Expert Group, 2013



3. c) 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**.

Possibility extended to other areas in France following the **adoption of a national regulation in October 2018** (inland vessels must meet requirements to obtain the appropriate authorisation depending on the relevant route)

Why? 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**.

Alternative route involving transshipment = **useful complementary option**.

Port of Le Havre

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

8 adapted IWT vessels:

- 6 container inland vessels amounting to 137,500 TEU in 2016
- 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**

ANY QUESTIONS?



THANK YOU VERY MUCH FOR YOUR ATTENTION

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5.1 Eurostat interpretation of legal definitions

The legal basis clearly indicates that the type of vessel used is one of the key elements for selecting the traffic to report. In particular if a seagoing vessel is used, the transportation has to be reported only if the traffic is performed wholly in navigable inland waterways.

In other words:

- ✿ If an **inland waterways vessel, including fluvio-maritime vessels**, makes a journey partly at sea, it should be reported in inland waterways statistics.
- ✿ If a **seagoing vessel** makes a journey entirely on navigable inland waterways, it should be reported in inland waterways statistics
- ✿ If a **seagoing vessel** makes a journey partly on navigable inland waterways, it should be reported in maritime statistics.
- ✿ If an **inland waterways vessel, including fluvio-maritime vessels**, makes a journey entirely at sea, it is not covered by the definitions.



5.2 Fluvio-maritime transport

During Maritime Working Group meeting on 21-22 May 2014, Eurostat presented recommendation about how fluvio-maritime should be reported, whether in inland waterways or maritime, or both. This recommendation was agreed by the Maritime Working Group and should be applied for the maritime data collection (and is already applied by most of countries).

The recommendation is:

1. All fluvio-maritime transport should be reported in the maritime transport statistics (as required by Directive 2009/42).
2. Fluvio-maritime transport should also be reported in the inland waterways statistics by the country in which the inland waterways part of the journey is undertaken (as required by Regulation 425/2007).

These recommendations were discussed in the meeting of the Working Group on Inland Waterways Transport Statistics on 5-6 September 2015. A number of objections were raised to the proposal as it stood and Eurostat agreed to reconsider and redraft the proposal to take account of the views expressed.

Eurostat's latest recommendations are as follows:

- ✿ **Fluvio-maritime** transport performed by an IWW vessel should be reported in the IWW statistics and **not in** the maritime statistics
- ✿ **Fluvio-maritime** transport performed by a seagoing vessel should be reported in the maritime transport statistics and **not in** the IWW statistics
- ✿ If type of vessel information is unavailable in the source data, related information (such as port of loading/ unloading) could be used to determine whether the fluvio-maritime transport is likely to be carried out by IWW or seagoing vessels
- ✿ If necessary, in order to compile relevant and coherent IWW statistics at national level, specific cases of fluvio-maritime transport performed by seagoing vessels could be included in both the maritime and the IWW data reported to Eurostat. However, any such deviations from the main recommendations in points 1 and 2 should be clearly communicated to Eurostat in order to be specified in the metadata of the IWW statistics