The evolution of the modal split share of inland waterway transport in EU countries, the role of geography, and a case study on a multimodal port project

Workshop 'Integration of inland water transport in multimodal transport and logistics chains'

Wednesday, 6th November 2019

UNECE, Geneva

CCNR
CENTRAL COMMISSION FOR THE NAVIGATION OF THE RHINE

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Outline

1. Share of countries' TKM in total inland waterway transport in the EU
2. IWW modal split share evolution per goods segment and country
3. Geography and infrastructure as key conditions for the integration of IWT into multimodal logistics chains
4. Successful multimodal projects in port logistics – the case of Port de Liège

01 Share of countries' TKM in total inland waterway transport in the EU

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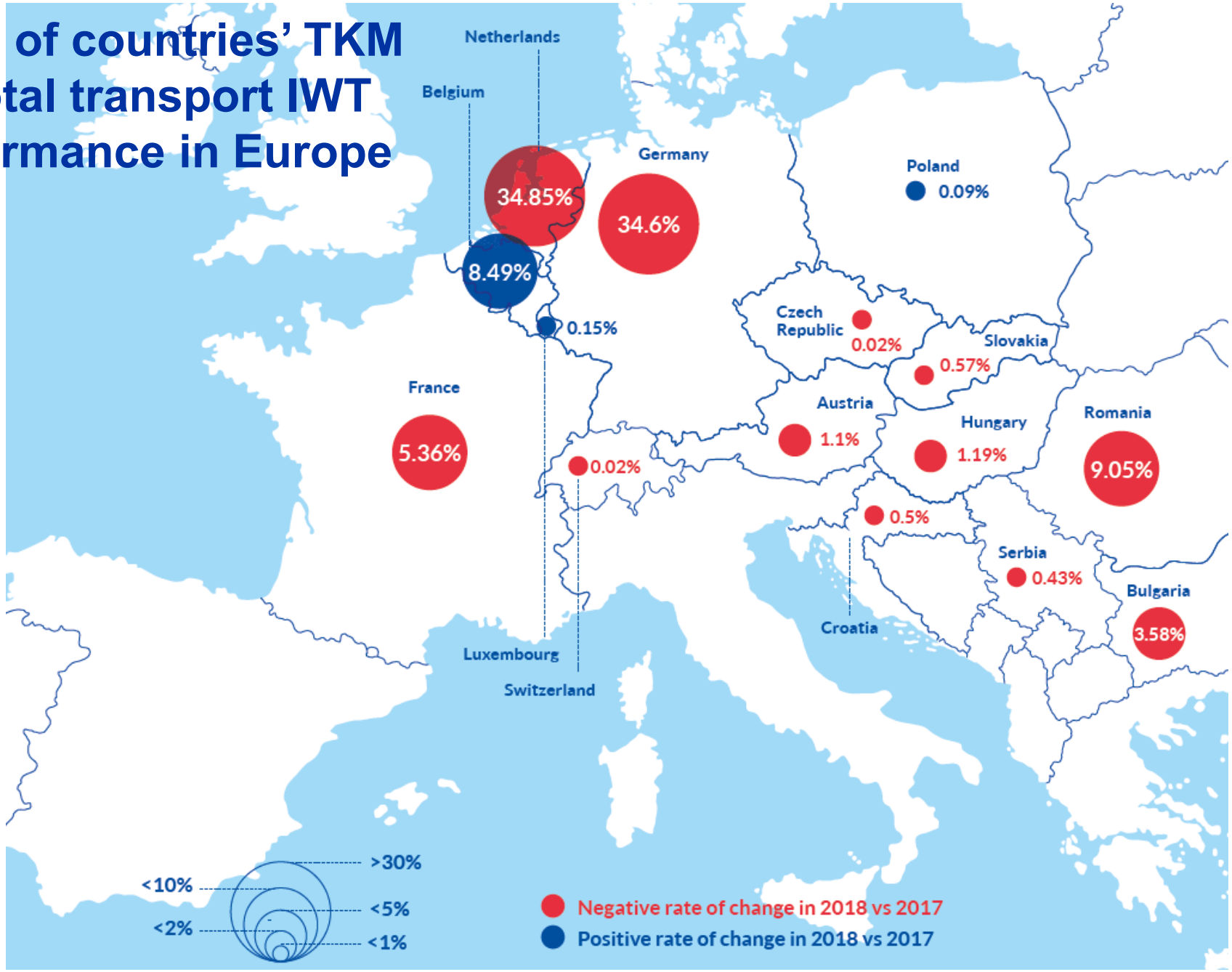
Share of countries' TKM in total transport IWT performance in Europe



02 IWW modal split share evolution per goods segment and country in the EU

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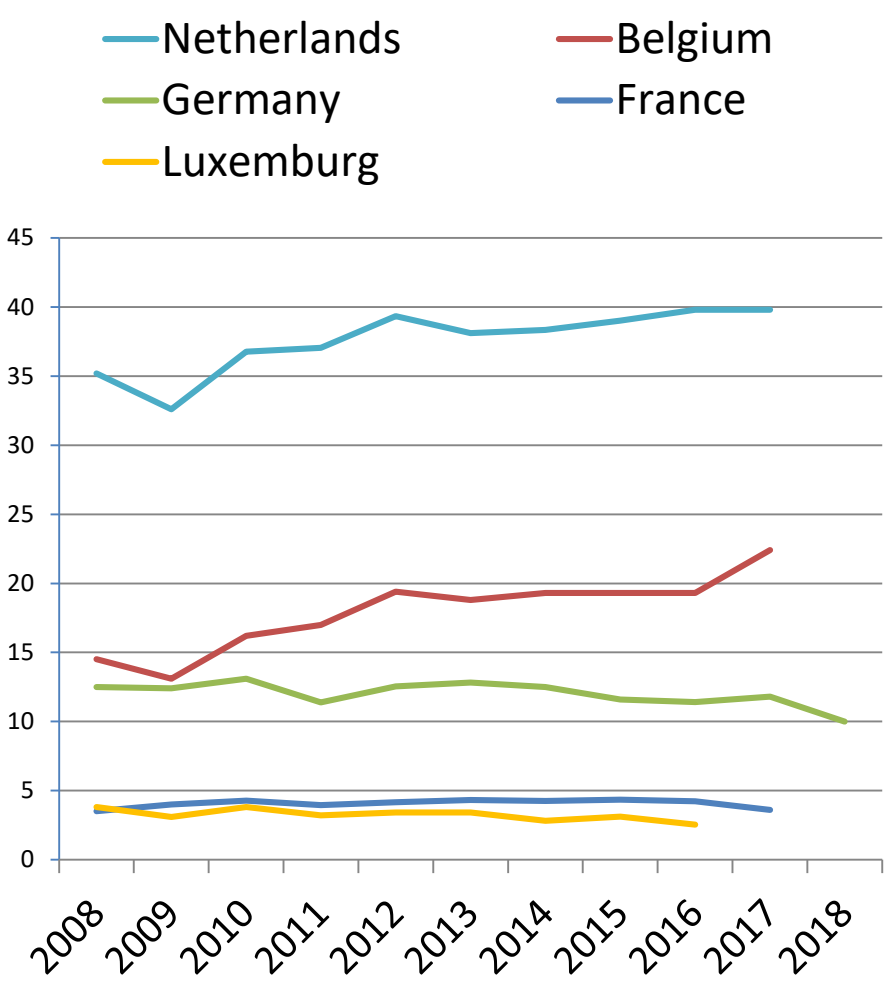
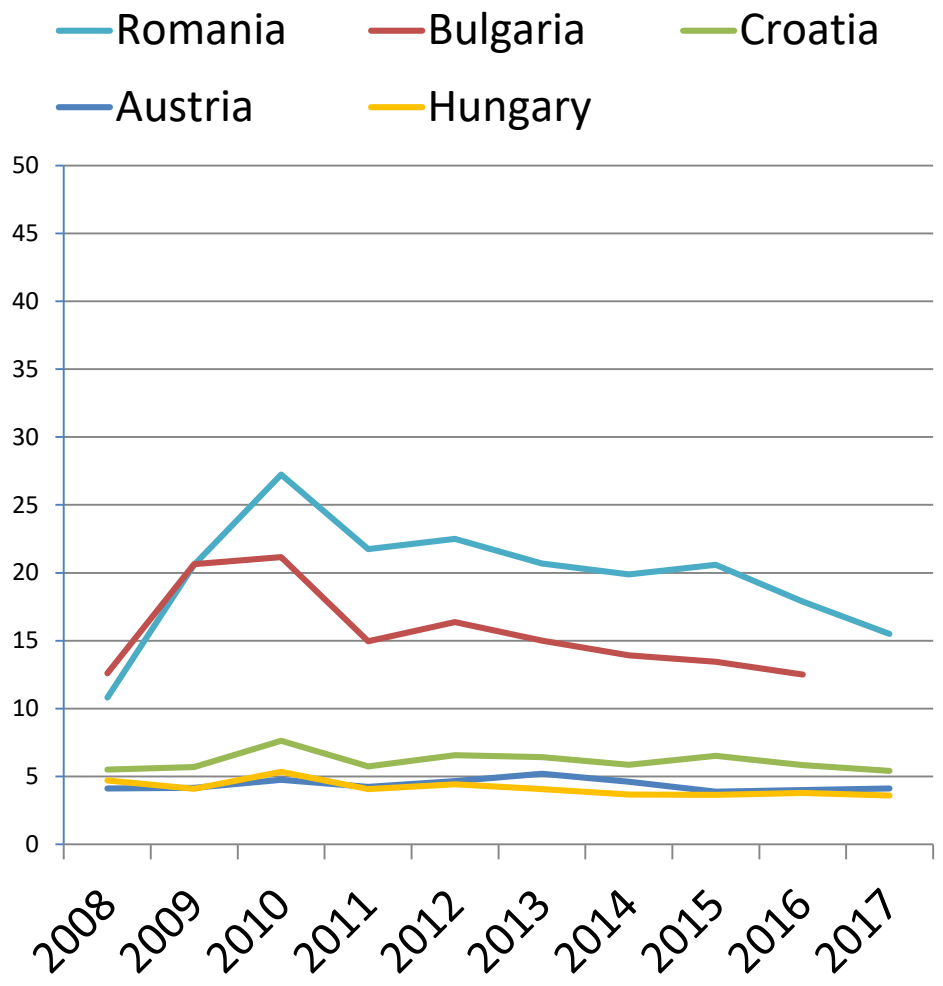
IWW Modal split share in Rhine and Danube countries

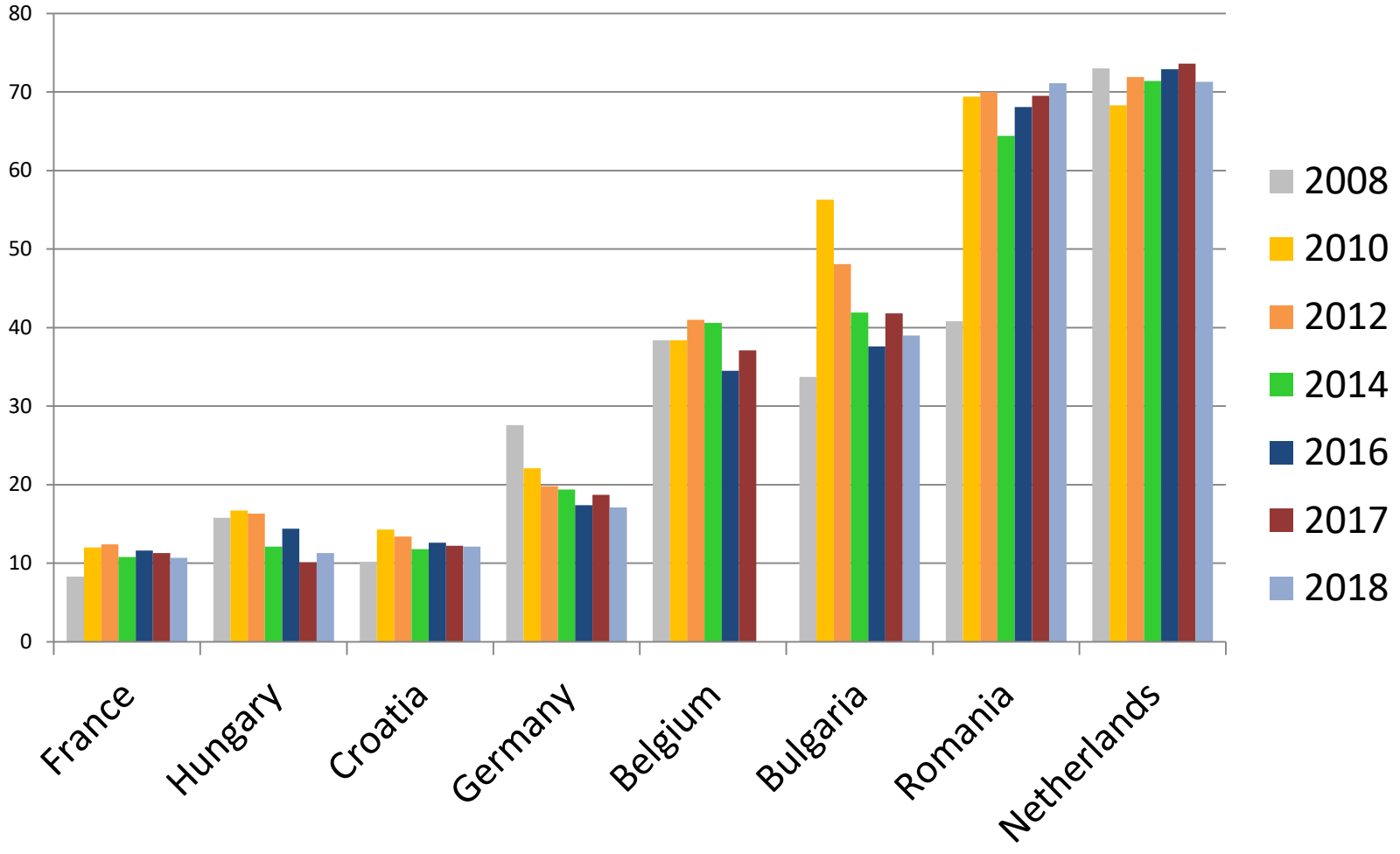
(%, based on tonne-kilometres of road, rail and IWW)





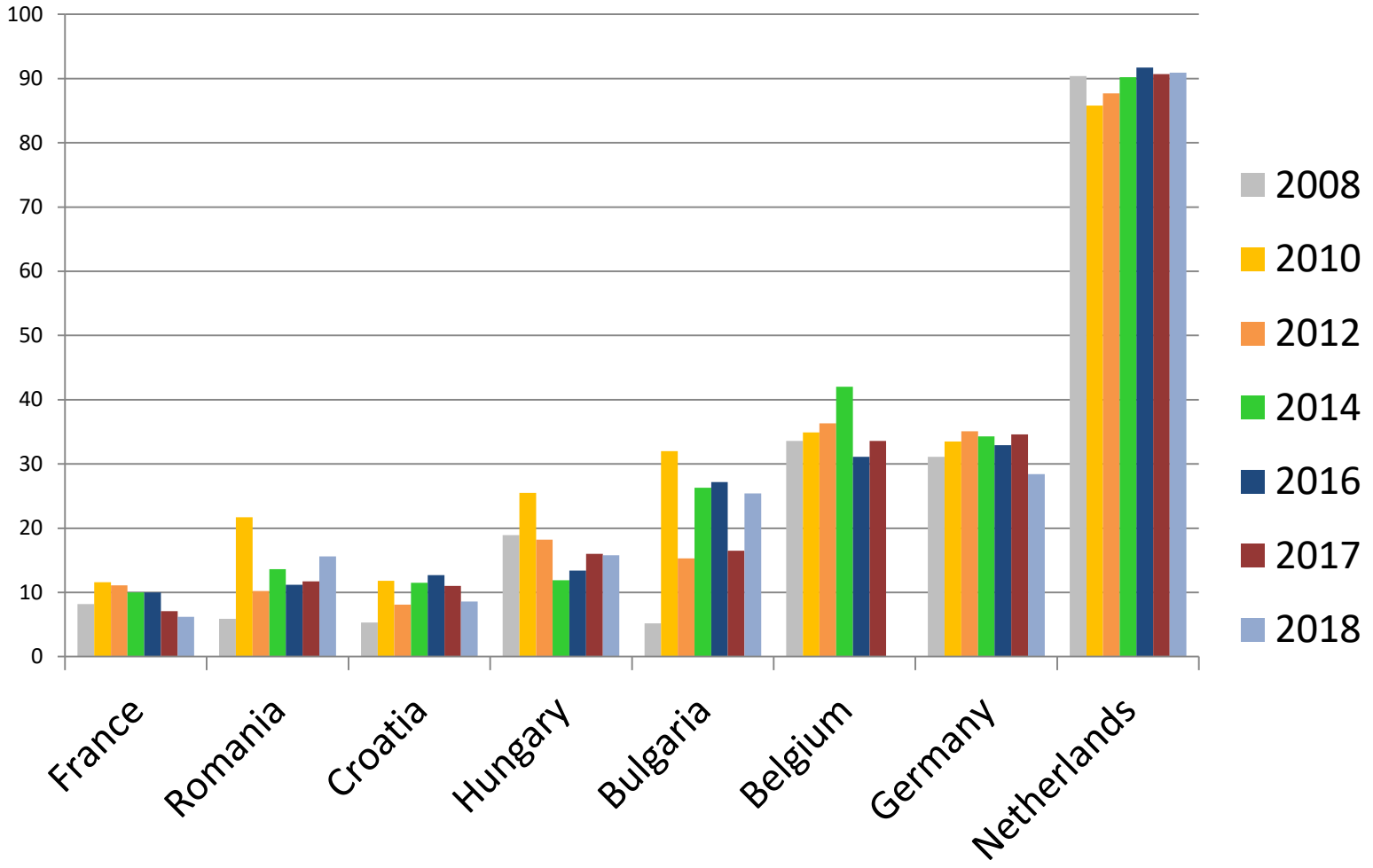
Source: Eurostat [iww_go_atygo], [road_go_ta_tg], [rail_go_grpgood], CCNR analysis

IWW Modal split share for ores, sands stones, gravel (%)



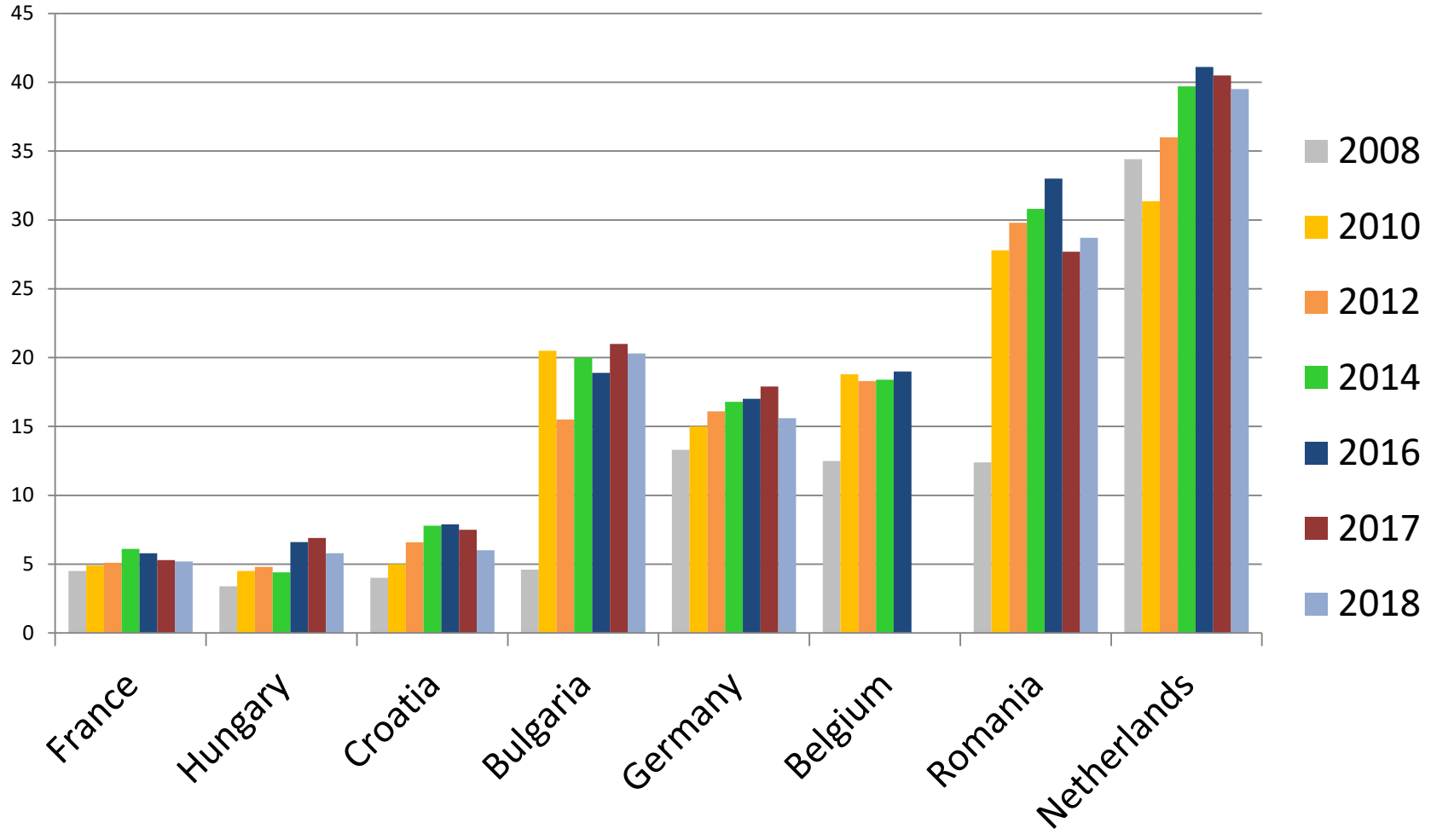
Source: Eurostat [iww_go_atygo], [road_go_ta_tg], [rail_go_grpgood], CCNR analysis

IWW Modal split share for refined petroleum products (%)



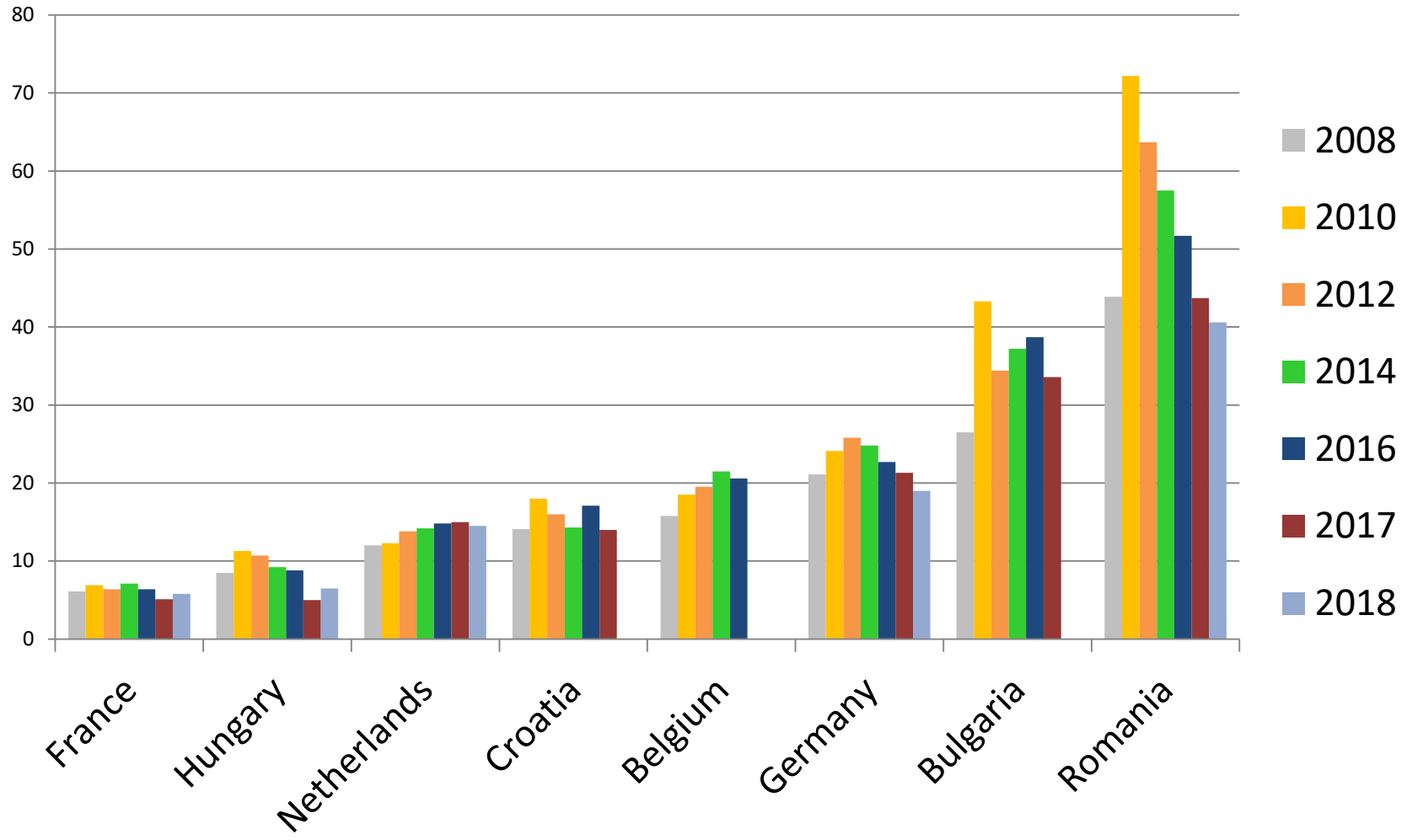
Source: Eurostat [iww_go_atygo], [road_go_ta_tg], [rail_go_grpgood], CCNR analysis

IWW Modal split share for chemicals (%)



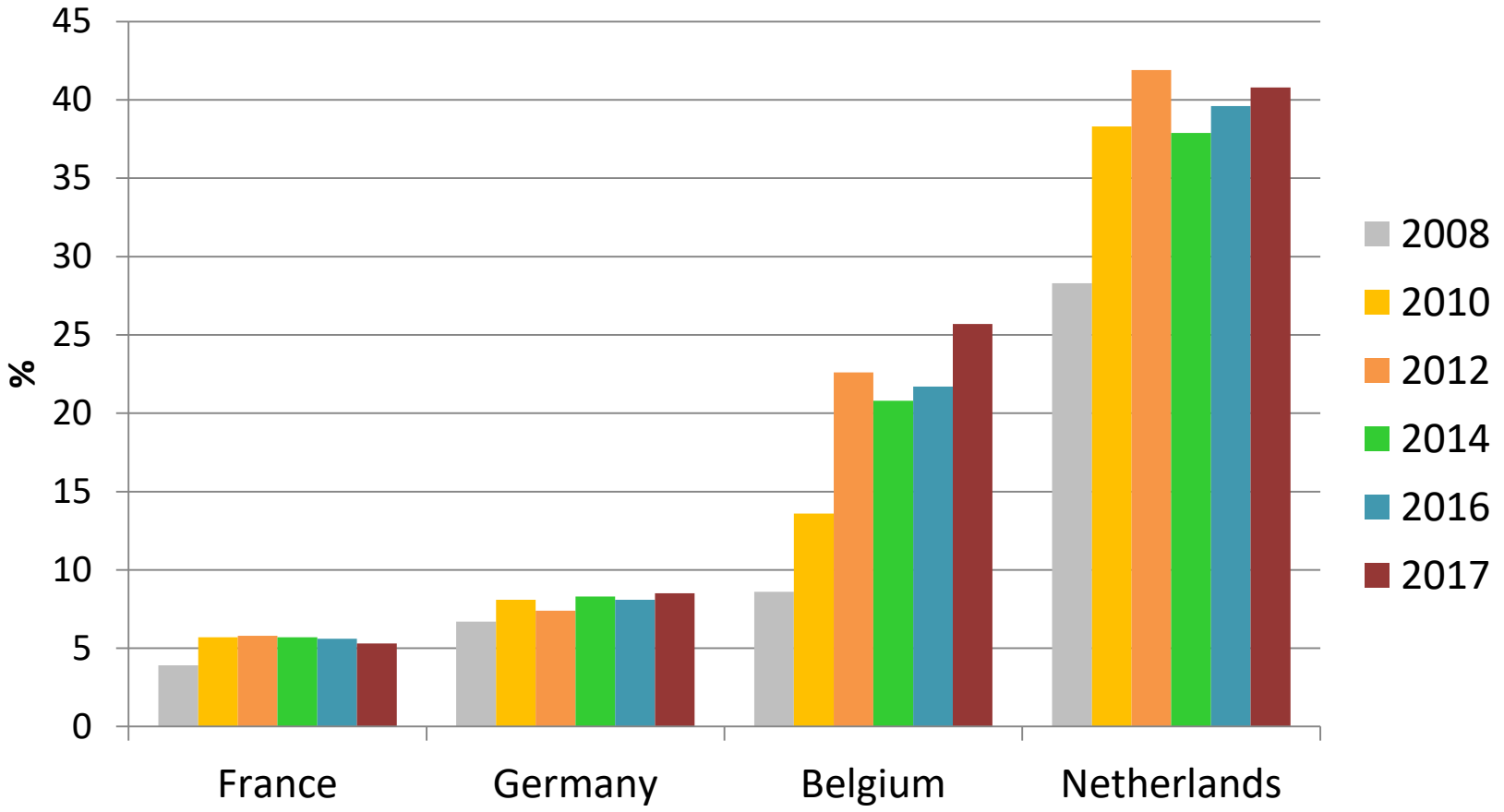
Source: Eurostat [iww_go_atygo], [road_go_ta_tg], [rail_go_grpgood], CCNR analysis

IWW Modal split share for agricultural products (%)



Source: Eurostat [iww_go_atygo], [road_go_ta_tg], [rail_go_grpgood], CCNR analysis

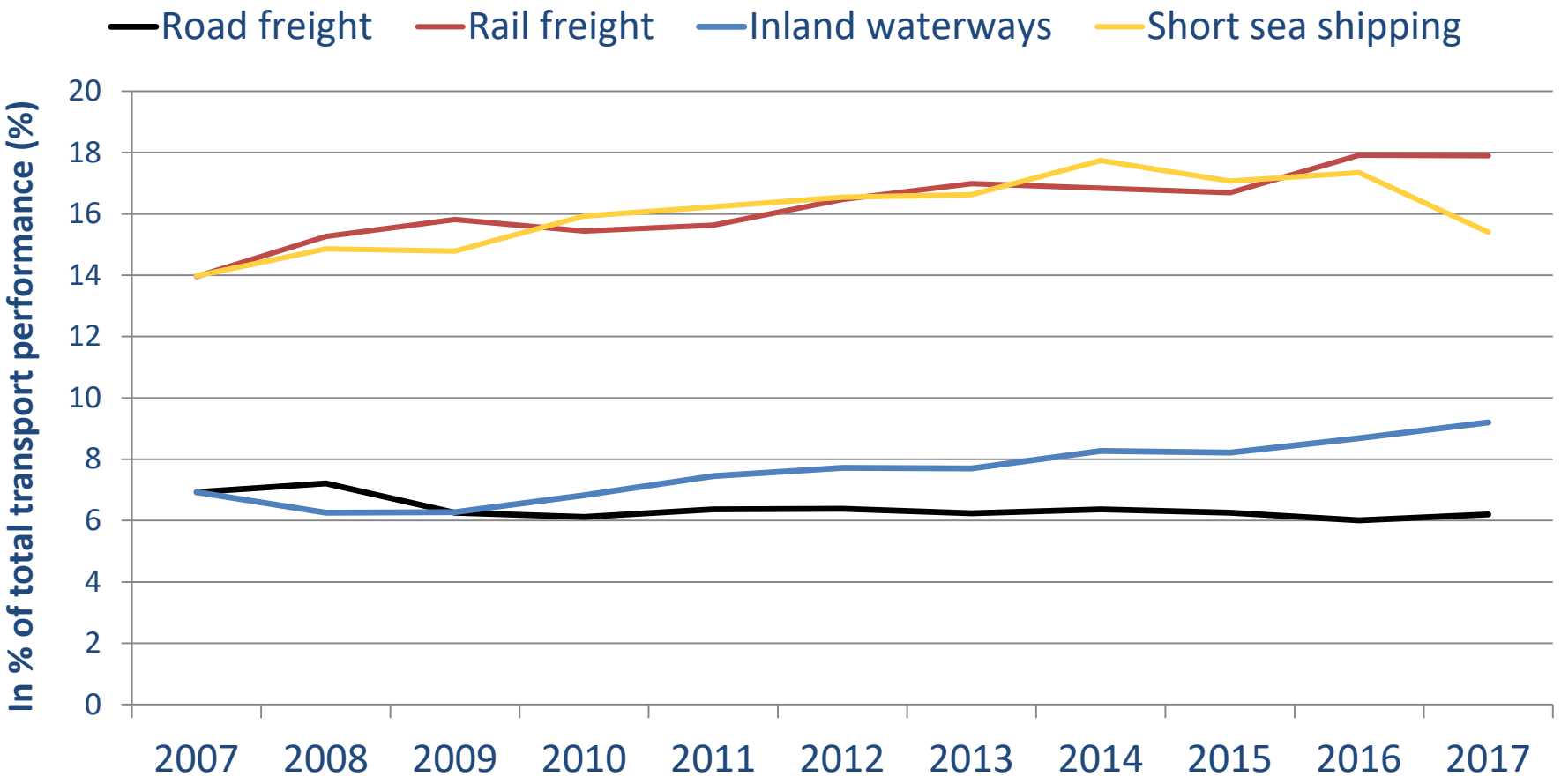
IWW Modal split share for container transport



Source: Eurostat [iww_go_atygo], [road_go_ta_tg], [rail_go_grpgood], CCNR analysis

Increasing containerization – a condition for the further integration of IWT into logistical chains

Share of containers in total goods transport by mode of transport 2007-2017 (% of total tkm)



Source: Eurostat [tran_im_umod]

03 Geography and infrastructure as key conditions for the integration of IWT into multimodal logistical chains

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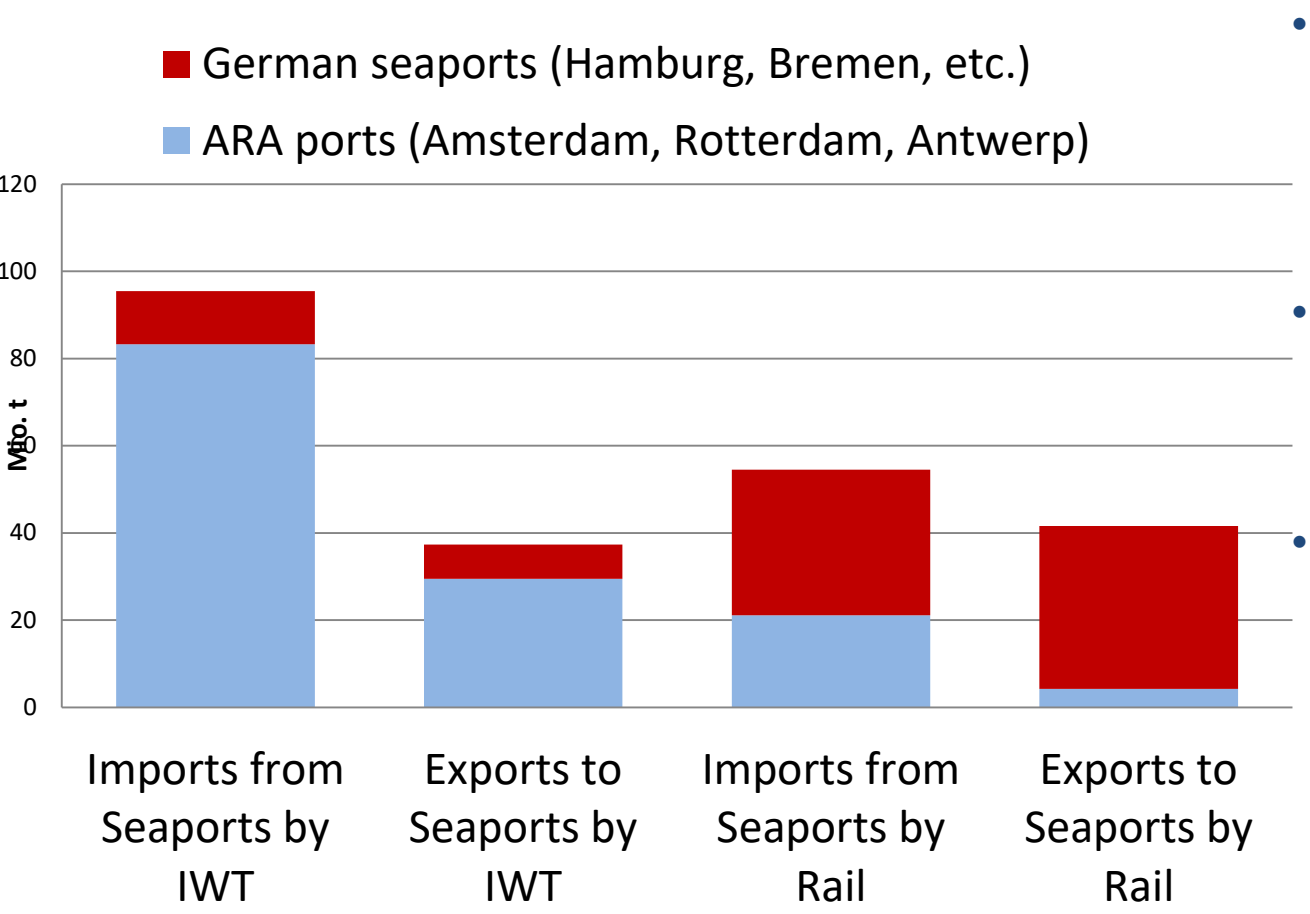
Seaport hinterland traffic by rail and inland waterways for Germany, Switzerland and Austria



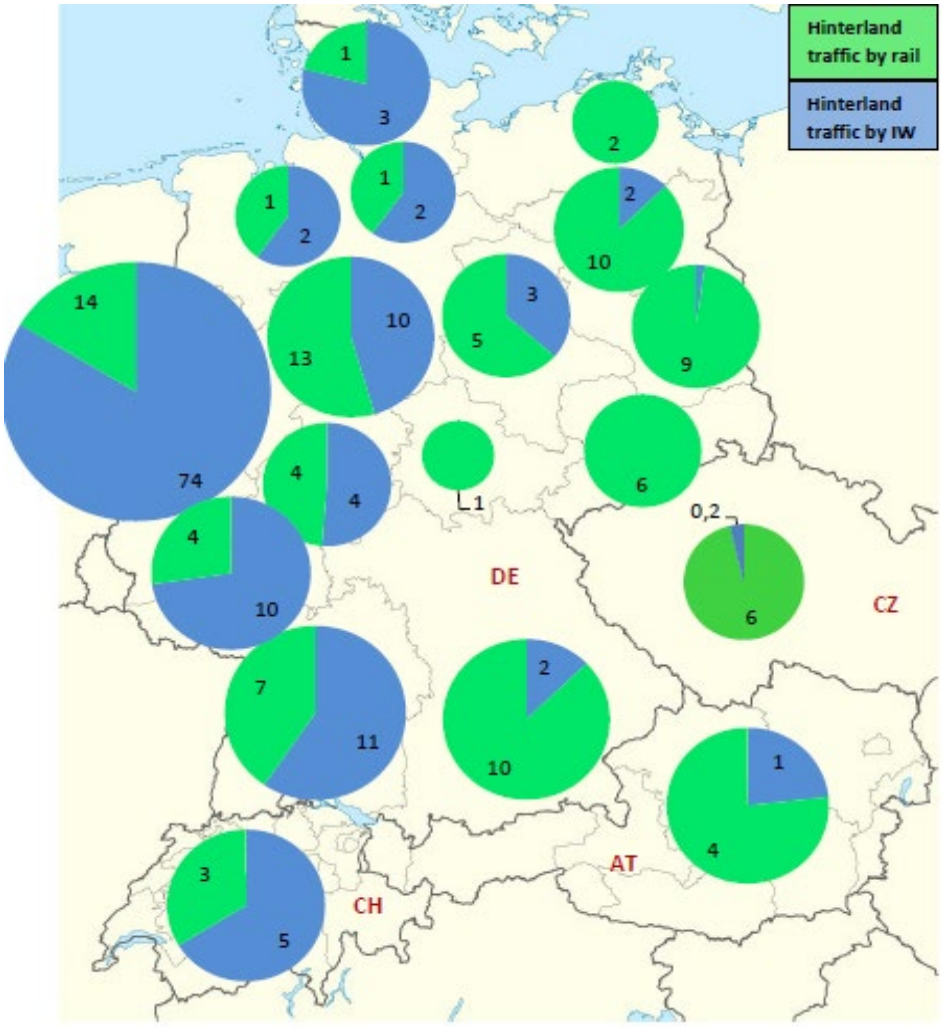
- Seaport hinterland traffic coming from or going to German seaports is rail-orientated.
- Seaport hinterland traffic coming from or going to ARA ports is IWT-orientated
- Reason: The Rhine offers much better navigation conditions than the Elbe river.

➡ Without infrastructure works, it is difficult to integrate IWT further into logistical chains !

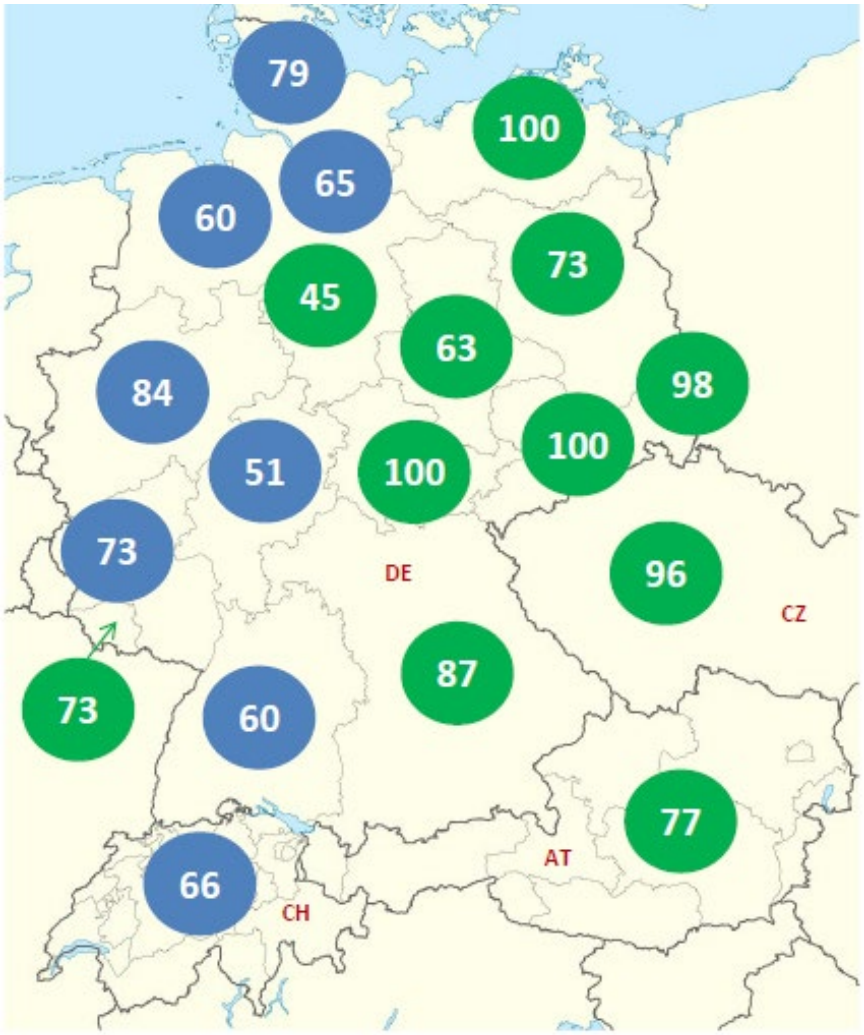
Source: Destatis and analysis CCNR

Seaport hinterland traffic by rail and inland waterways (IW) for German federal states, Austria, Switzerland and the Czech Republic

in Mio. t



in %



Source: CCNR analysis based on Destatis

04 Successful multimodal projects in port logistics: The case of Port de Liège

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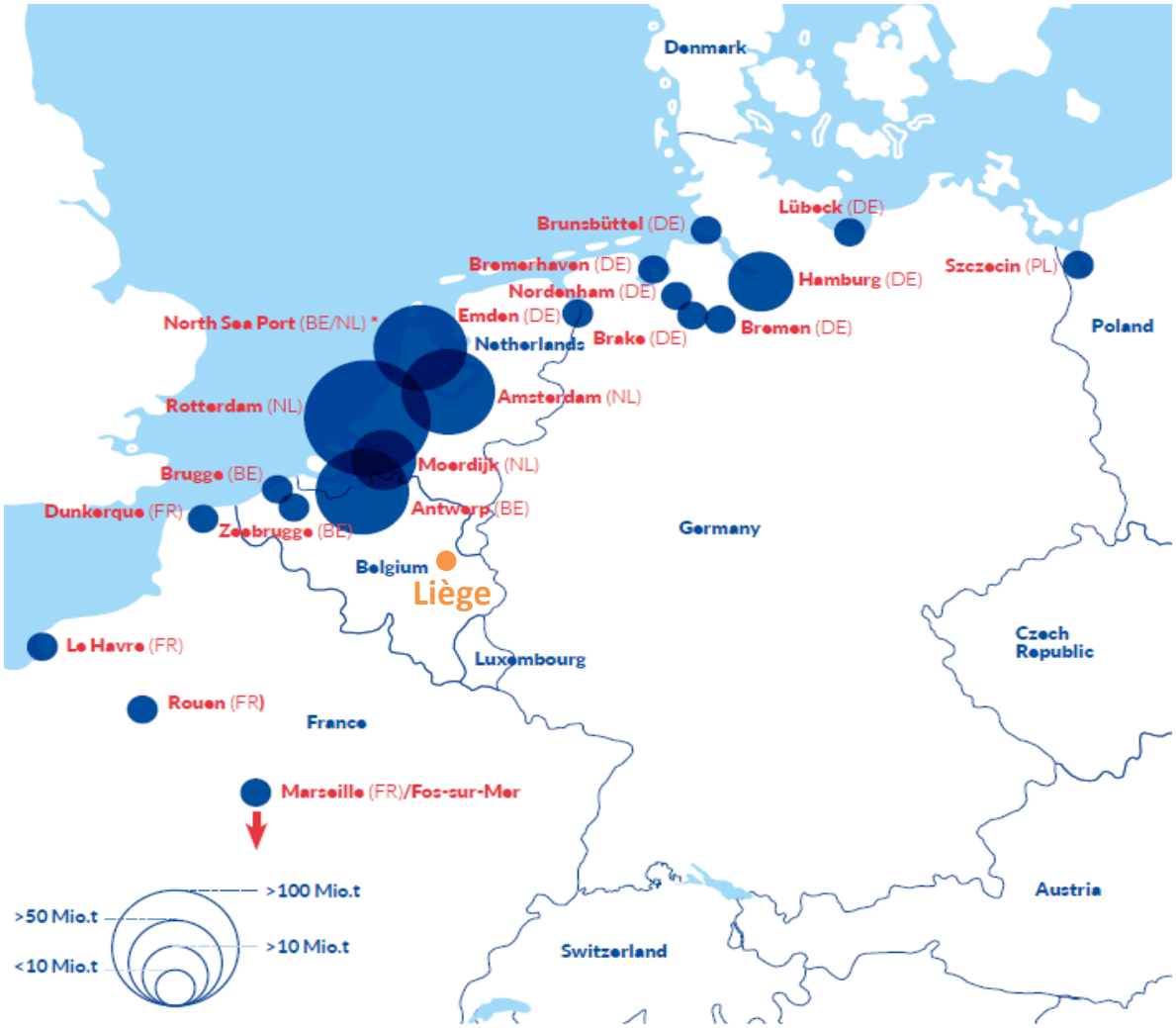
Main seaports in Western Europe with considerable inland waterway traffic, and port of Liège

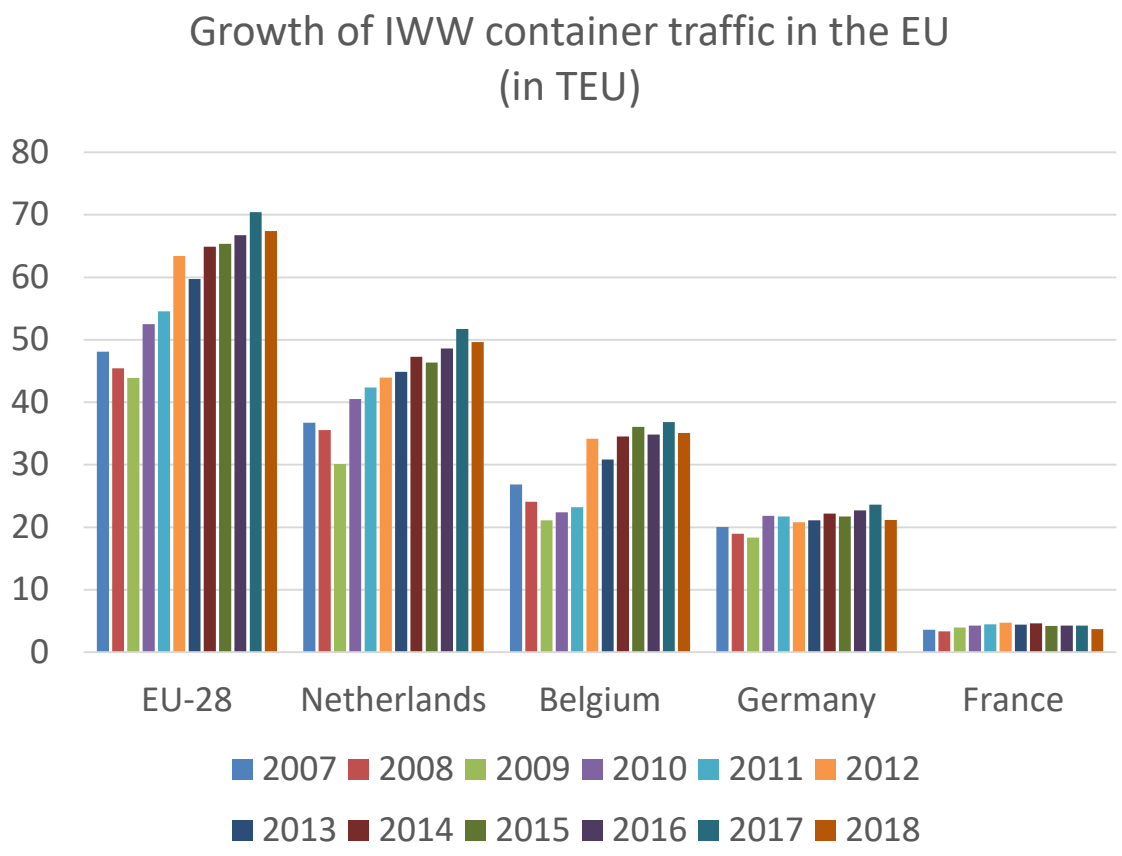


Source: Port Statistics, Eurostat [iww_go-aport], Panteia, CBS.

*North Sea Port is the name of the port formed by the cross-border merger between Zeeland Seaports (Flushing, Borsele and Terneuzen) in the Netherlands and Ghent Port Company in Belgium, signed on 8 December 2017. The cross-border merger port started to operate on 1st January 2018.

- Liège is the third largest inland port in the EU.
- It is located in a strategic geographical area in the heart of the hinterland of four major North Sea seaports:
  - Antwerp (BE),
  - Zeebrugge (BE),
  - Rotterdam (NL),
  - Dunkerque (FR),
- in a region with a market of possible consumers of 56 million people.

Container traffic and multimodality in the port of Liège



- As **container traffic is expected to grow at EU level**, the port developed the idea for a new trimodal container terminal to be able to **absorb this potential** for more container traffic in the long run.
- The project aims at attracting new companies interested in the multimodal nature of the new platform, which allows them to benefit from a range of **river, road and rail** transport services in the same place.

Source: Eurostat [iww_go_actygo], CCNR report on multimodality and Port de Liège

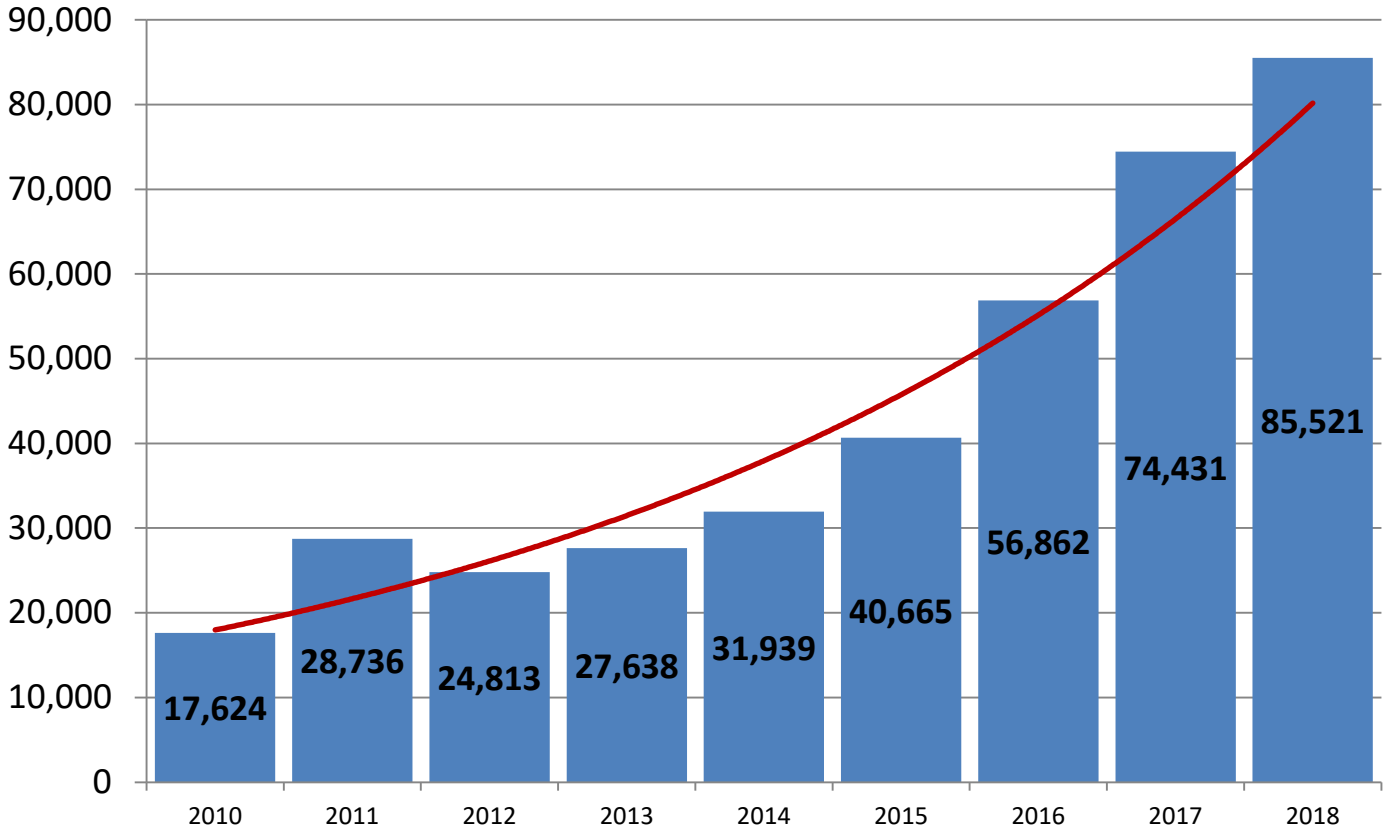
Container traffic and multimodality in the port of Liège

Three container terminals exist at the Port the Liège, including the new **Liège Trilogiport** container terminal. It was inaugurated on 13 November 2015 and is managed by the Liège Port Authority. It is **connected to**

- **three maritime access points at the sea** (Antwerp, Rotterdam and Dunkirk),
- **three modes of transport** (waterway, railway and road) and
- **three trans-border markets** (France, the Netherlands and Germany).

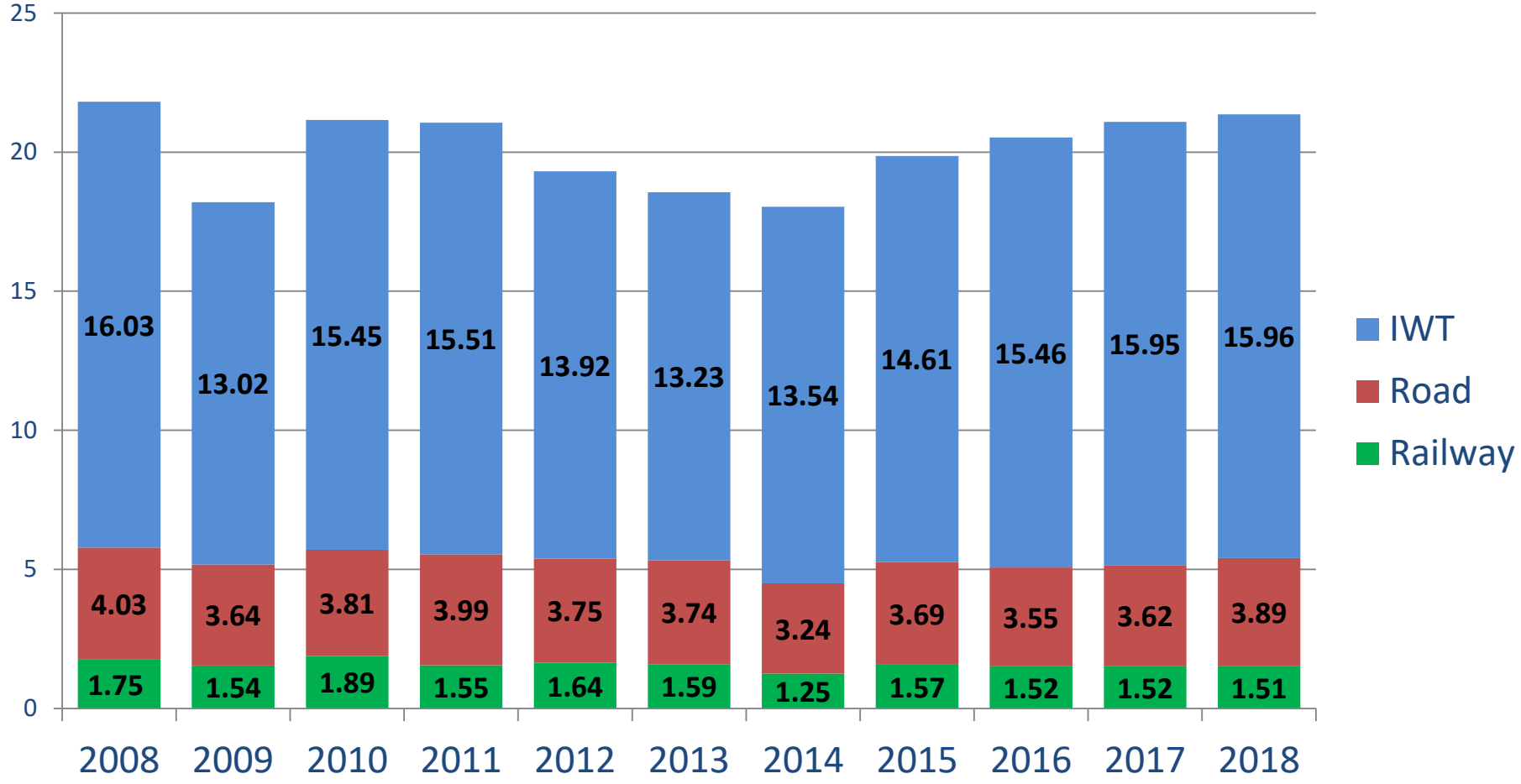
Source: CCNR report on multimodality and Port de Liège

Waterside container traffic at the Autonomous Port of Liège (in TEU)



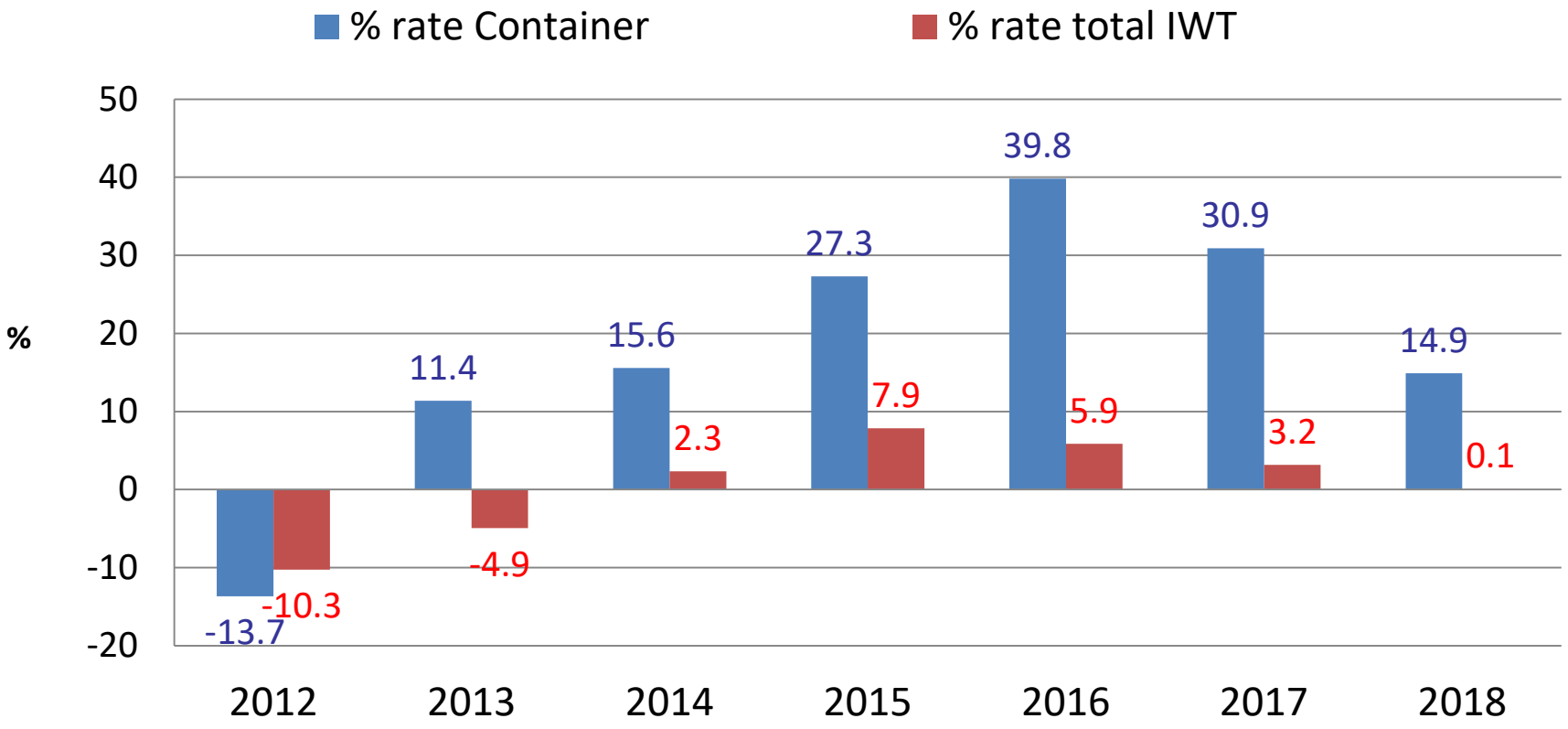
Source: Port de Liège

Traffic volume per mode of transport in the Port of Liège (Mio. t)



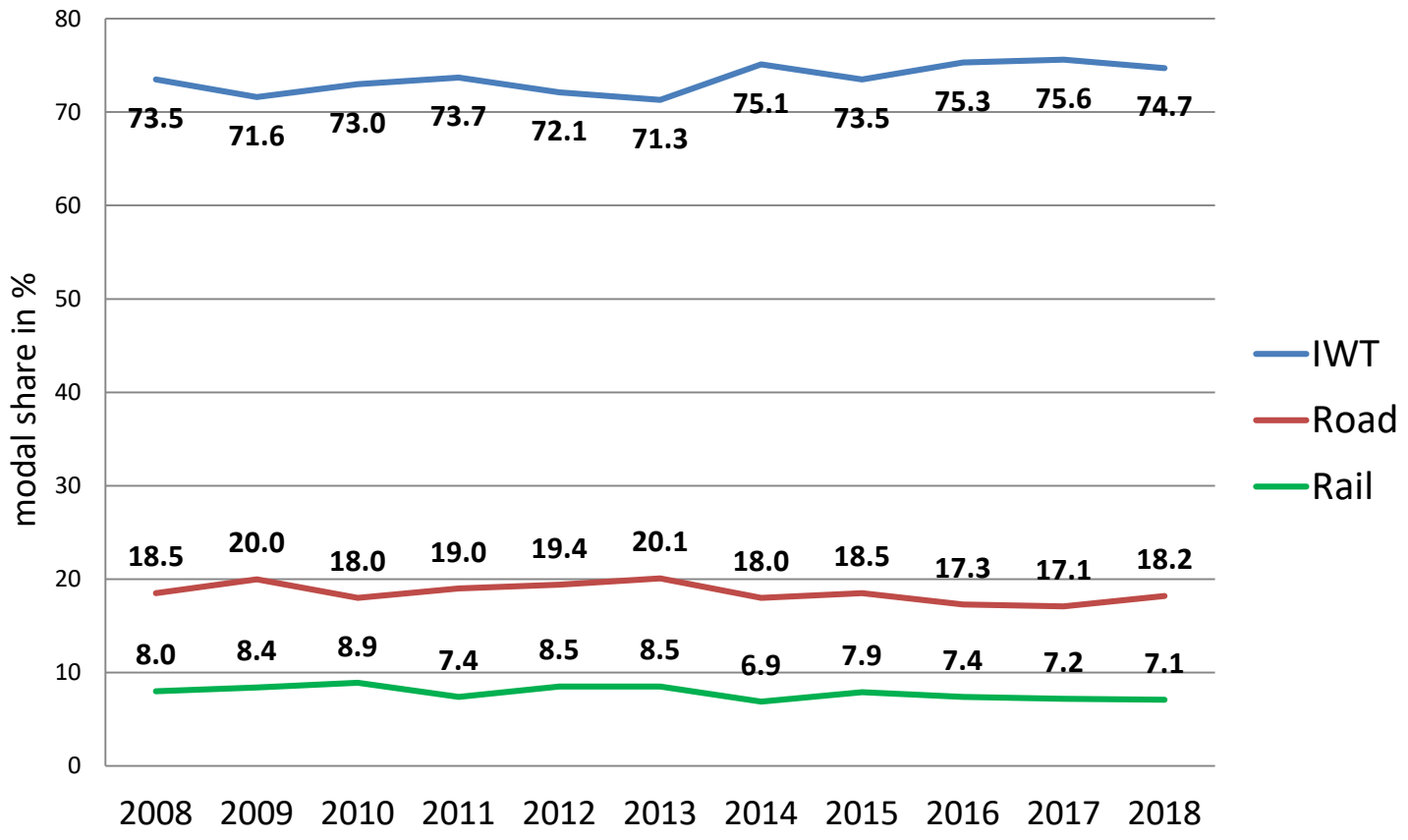
Source: Port de Liège

Growth rate of container traffic compared to total waterside traffic in the port of Liège (in %)



Source: Port de Liège

Modal split evolution at the port of Liège (in %)



Source: Port de Liège

THANK YOU VERY MUCH FOR YOUR ATTENTION

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