



## Lecture 3

# Multimodal supply chain capacity issues: the way forward

Organized within framework Dennie Lockefer Chair



# Welcome

Katrien Storms, holder Dennie  
Lockefeer Chair, University of  
Antwerp, Department of  
Transport and Regional Economics





# For the cloud: house rules



Participants other than speakers are **muted**.



Please write **questions** as the talk is progressing **in the Q&A**. The chair of the session will then serve as host and call upon you to ask your questions directly (allowing speaking/ microphone privileges) at the end.



The session will be **recorded**. You will receive info on recording/presentation after the lecture



Technical issues: mail to [katrien.storms@uantwerpen.be](mailto:katrien.storms@uantwerpen.be)

# Program

Timing	Speaker
3:30 p.m. – 4:00 p.m.	Registration with coffee
4:00 p.m. – 4:20 p.m.	Welcome by <ul style="list-style-type: none"><li>• Dean prof. dr. Koen Vandenbempt – Faculty of Business and Economics, University of Antwerp</li><li>• Yves Hebb – Van Moer Logistics</li></ul>
4:20 p.m. – 4:30 p.m.	Setting the scene by prof. dr. Christa Sys – promotor Dennie Lockefer Chair
4:30 p.m. – 5:00 p.m.	Research “Managing delayed containers: legal and managerial best practices” by Katrien Storms – holder Dennie Lockefer Chair and prof. dr. Wouter Verheyen
5:00 p.m. – 5:40 p.m.	Industry panel moderated by prof. dr. Thierry Vanelslander – promotor Dennie Lockefer Chair <ul style="list-style-type: none"><li>• Alain Baeyens – Umicore</li><li>• Marco Huijsman – Cofano</li><li>• Dirk Van den Bosch – DP World Antwerp</li><li>• Frank Hellebosch – CBO bargaining solutions</li></ul>
5:40 p.m. – 5:50 p.m.	Q&A or overall closing discussion
5:50 p.m.	Closing + reception drink



# Welcome

Dean prof. dr. Koen Vandenbempt and Yves Hebb



# Welcome

Dean prof. dr. Koen Vandenbempt  
– Faculty of Business and  
Economics, University of Antwerp





# Dennie Lockfeer Chair

## 3 pillars

- Research
  - Short-term and long-term
- Education
  - Thesis award
  - Antwerp Inland Navigation School
- Scientific services
  - Lectures
  - Webinar

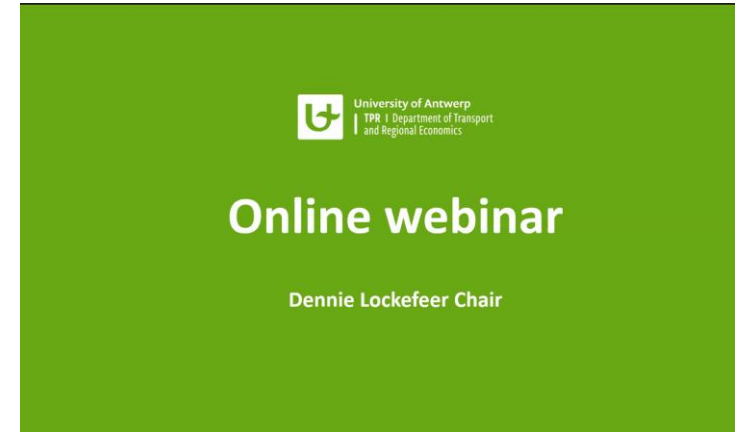


**Inauguration**



**Lecture 1**  
Adequate data, a key step that will benefit inland shipping

**Lecture 1**



**Webinar**



**Lecture 2**



**Dennie Lockfeer thesis award**



**Antwerp Inland Navigation School**



# Dennie Lockfeer Chair

Unique ecosystem of 30 companies and friends of the chair

Gold



Silver



Bronze





# Welcome

Yves Hebb – HR Director  
Van Moer Logistics



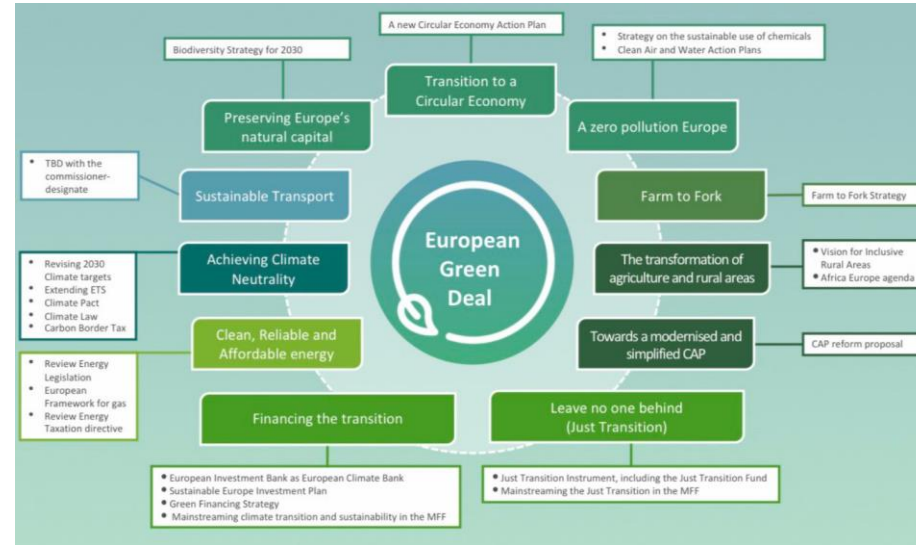
# Setting the scene

# What indicators tell...

By prof. dr. Christa Sys



# SUSTAINABLE DEVELOPMENT GOALS



## SUSTAINABLE & SMART MOBILITY STRATEGY

### European transport on track for the future



AN IRREVERSIBLE SHIFT TO ZERO-EMISSION MOBILITY

- 90% reduction in transport emissions;
- All transport modes are made more sustainable;
- Sustainable alternatives are available;
- Right incentives are in place for sustainable choices.

ACHIEVING SEAMLESS, SAFE AND EFFICIENT CONNECTIVITY

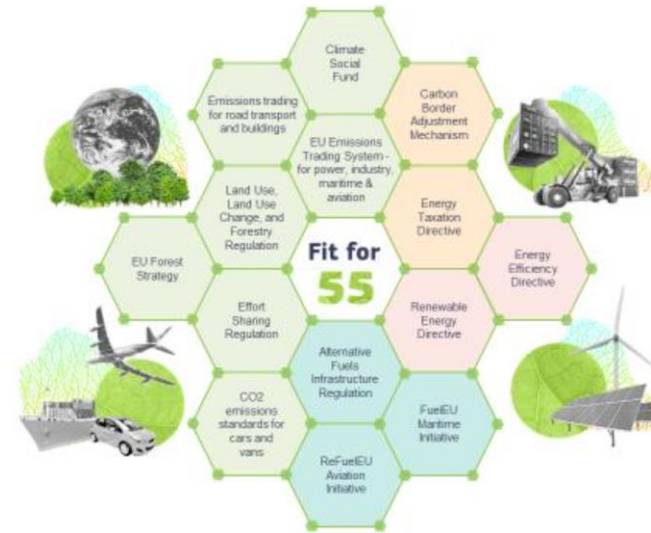
- Seamless **multimodal** transport based on digital solutions;
- Unleash full potential of **data**;
- Develop and deploy **connected**, cooperative, and automated mobility services;
- Paperless freight transport in favour of fast digital procedures.

A MORE RESILIENT SINGLEEUROPEAN TRANSPORT AREA FOR INCLUSIVE CONNECTIVITY

- Reinforced Single Market:
  - more investment in infrastructure and fleets;
  - deepening and enforcing internal market;
  - making our system crisis proof.
- Fair and just mobility (that is affordable and accessible);
- Enhanced safety and security.

THE EU AS THE WORLD'S CONNECTIVITY HUB

#MobilityStrategy



# Central theme chair: Intermodality/modal shift

- **SSMS:**

- to shift a substantial part of the freight transport to sustainable and less congested transport modes
- Inland waterway transport and short-sea shipping volumes should increase by 25% by 2030 and by 50% by 2050

- **NAIADES III program: Inland Waterway Transport Action Plan 2021-2027'**

- shifting more freight transport to inland waterways, and
- setting the sector on an irreversible path to zero-emissions accompanied by a paradigm shift towards further digitalization

➔ Inland navigation as an essential component of intermodal transport



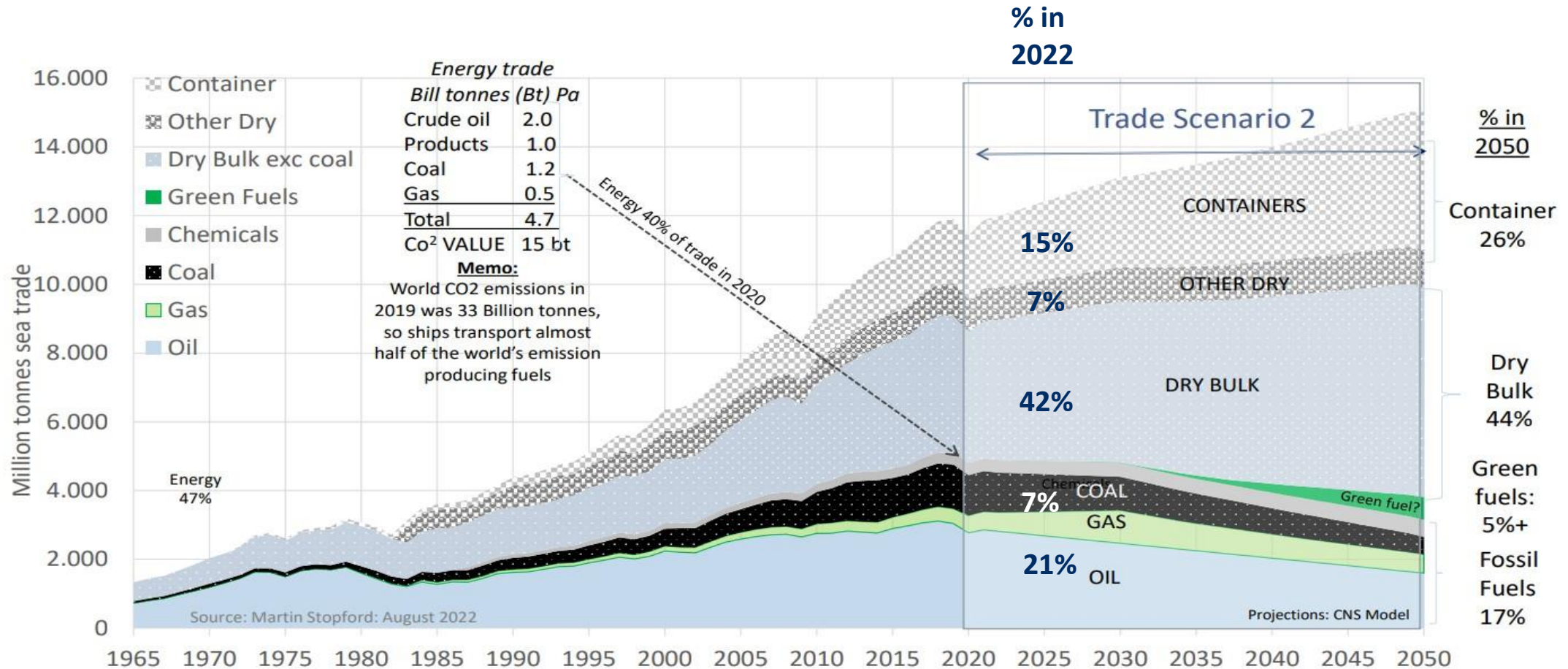
# Inland container shipping





# Will growth of seaborne containers be reflected in inland container shipping?

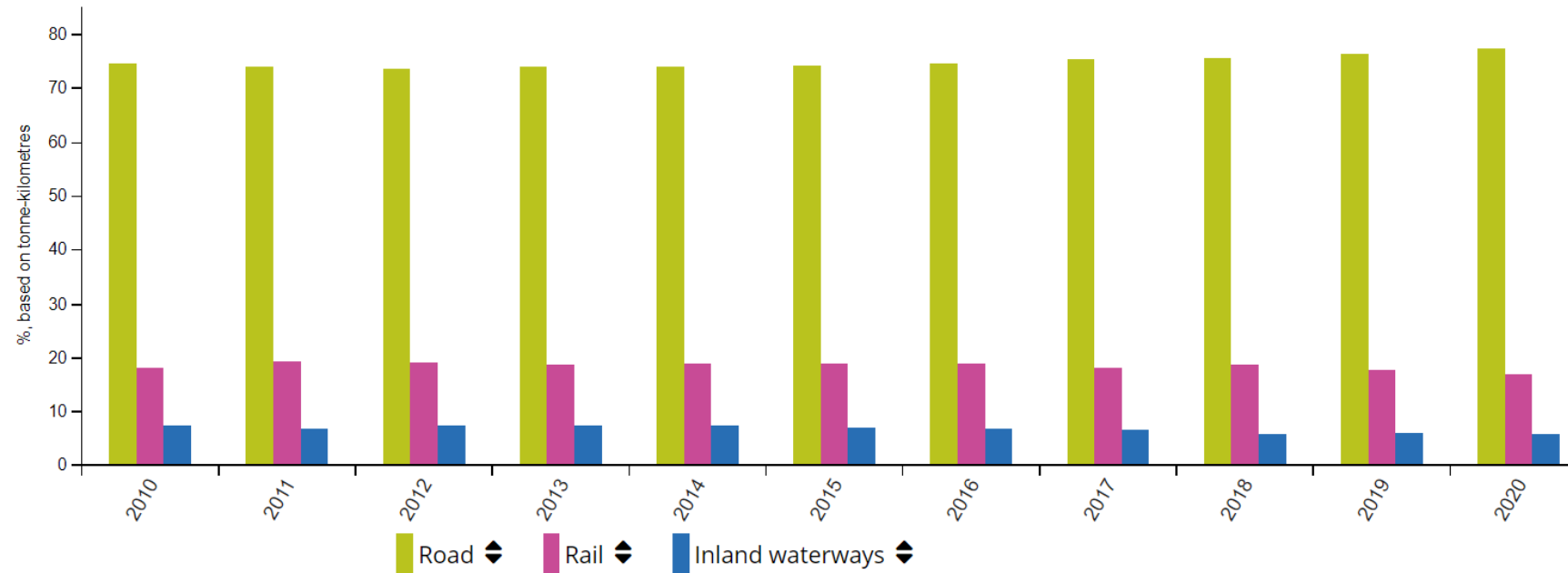
Sea trade by commodity showing actual volumes to 2021 and Trade Scenario 2 for 2020-2050 (revised August 2022)



# Core objective 1: an increased share of inland waterway transport

**In 2020, road freight transport accounted for 77.4 % of the total inland freight transport, followed by rail and inland waterways transport (16.8 % and 5.8 % respectively)(Eurostat, 2022)**

Modal split of inland freight transport, EU, 2010-2020



*Includes Eurostat estimates for rail transport for Belgium (2012-2019) and inland waterways transport for Finland (2017-2018), but does not include road transport for Malta, international transport o. Cyprus (negligible) and inland waterways transport for Sweden (2008-2015: negligible).*

*Figures may not add up to 100% due to rounding.*

*Source: Eurostat (online data code: tran\_hv\_frimod)*

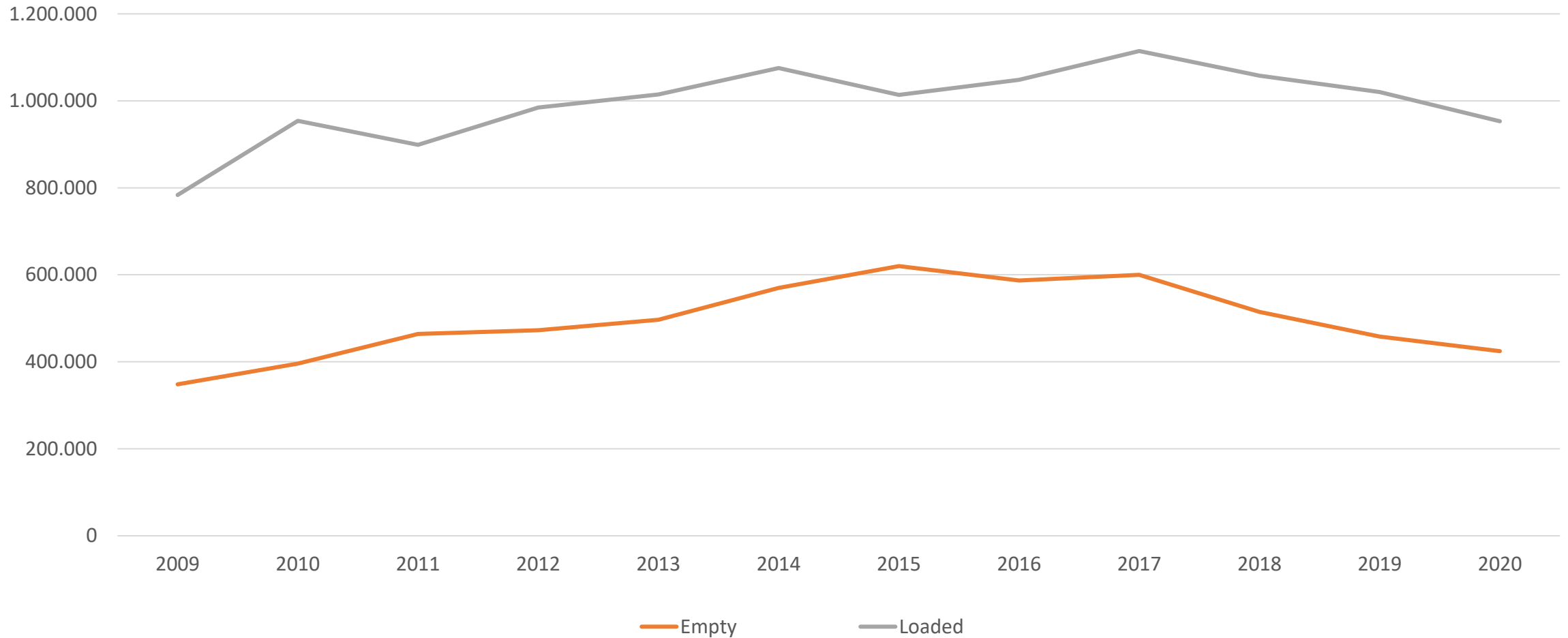


# Evolution freight transport in Belgium (%)

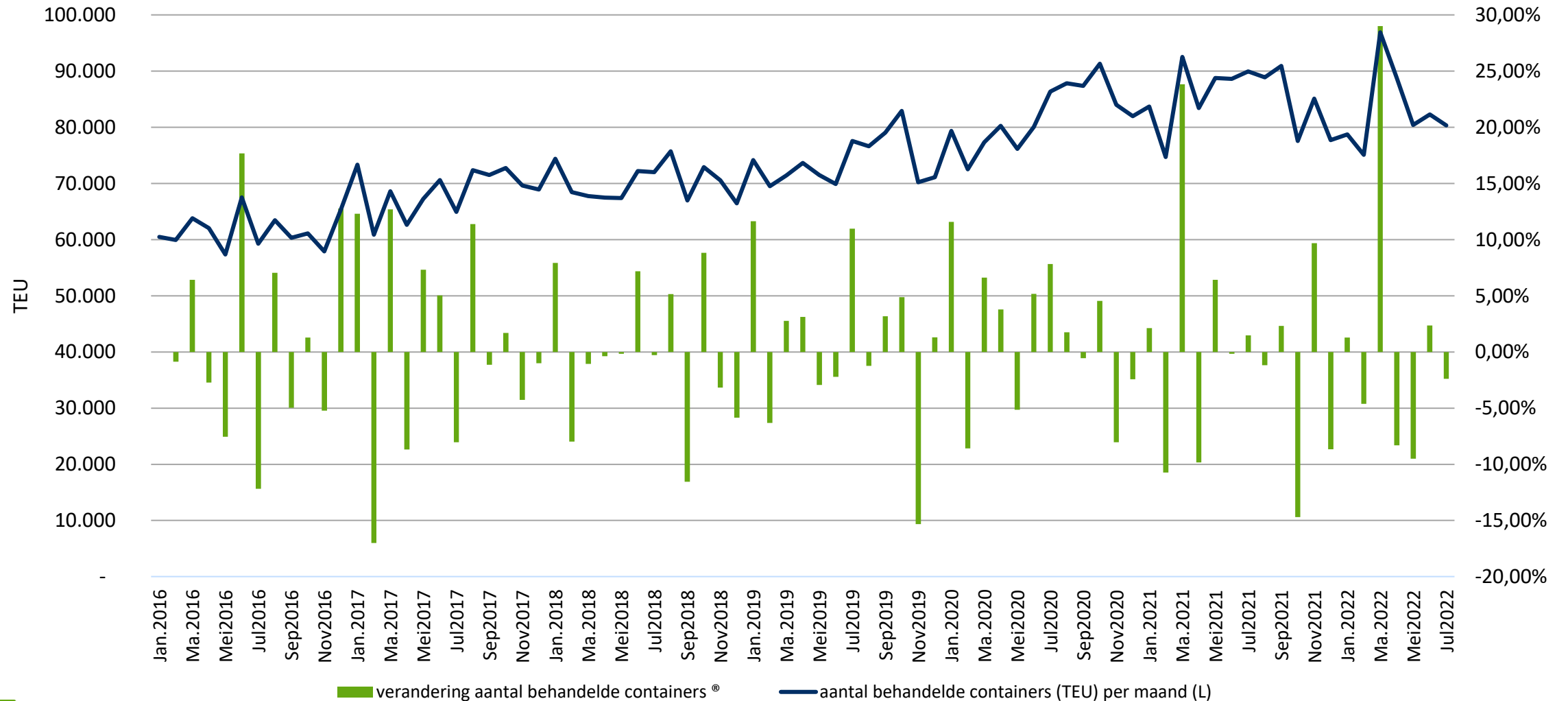
## Mode shift reversal from rail/inland navigation back to road



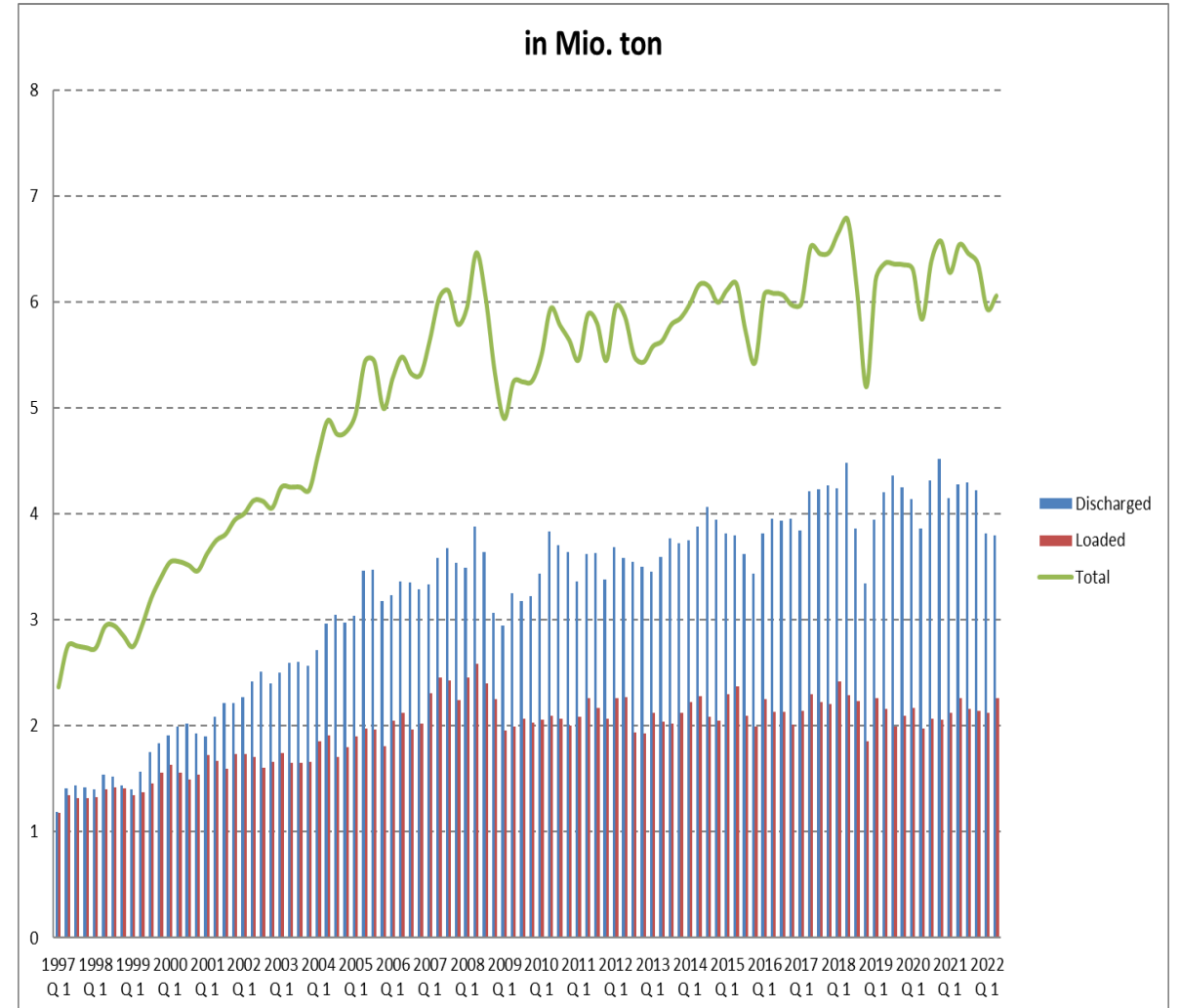
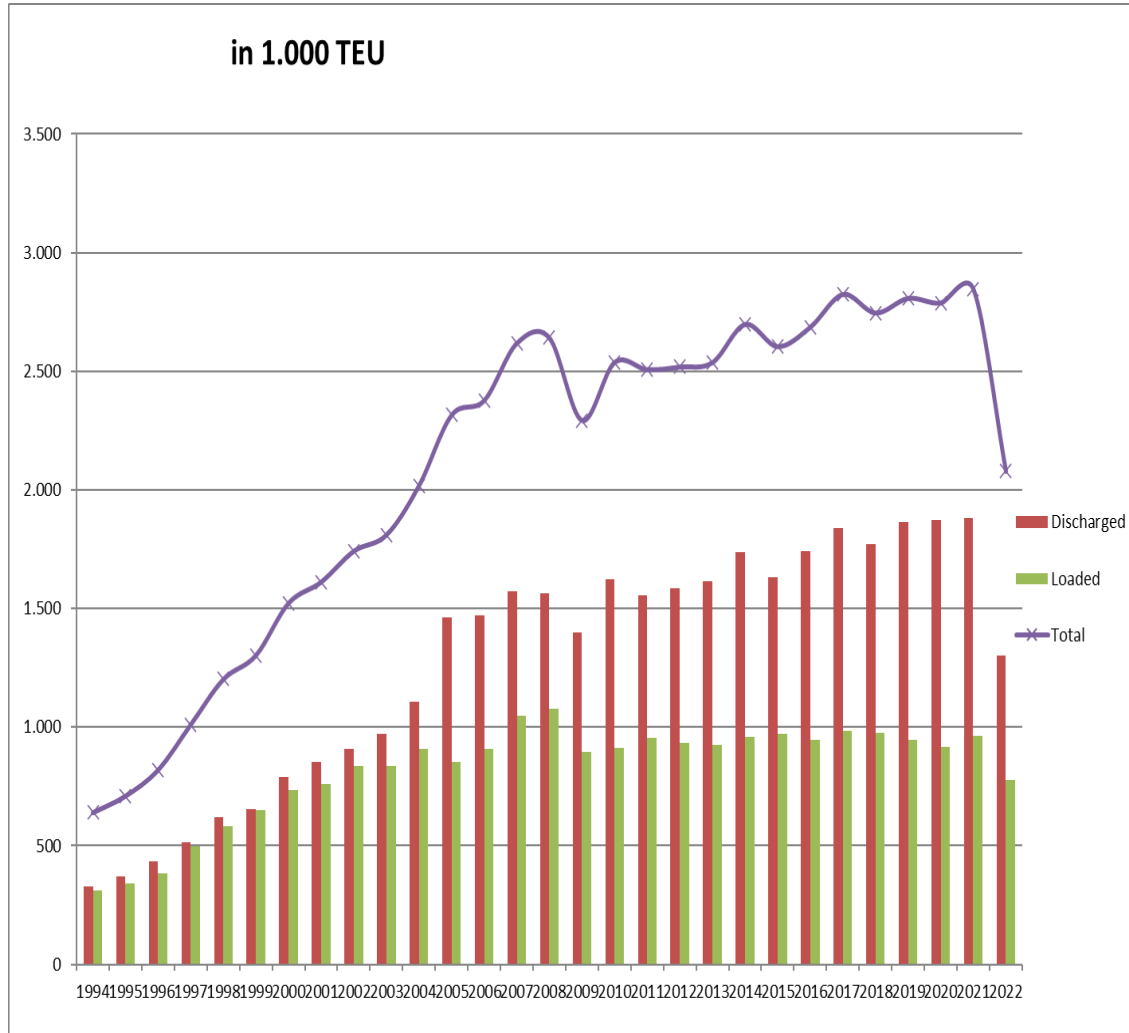
# Container inland navigation EU-27 (1000 TEUtkm)



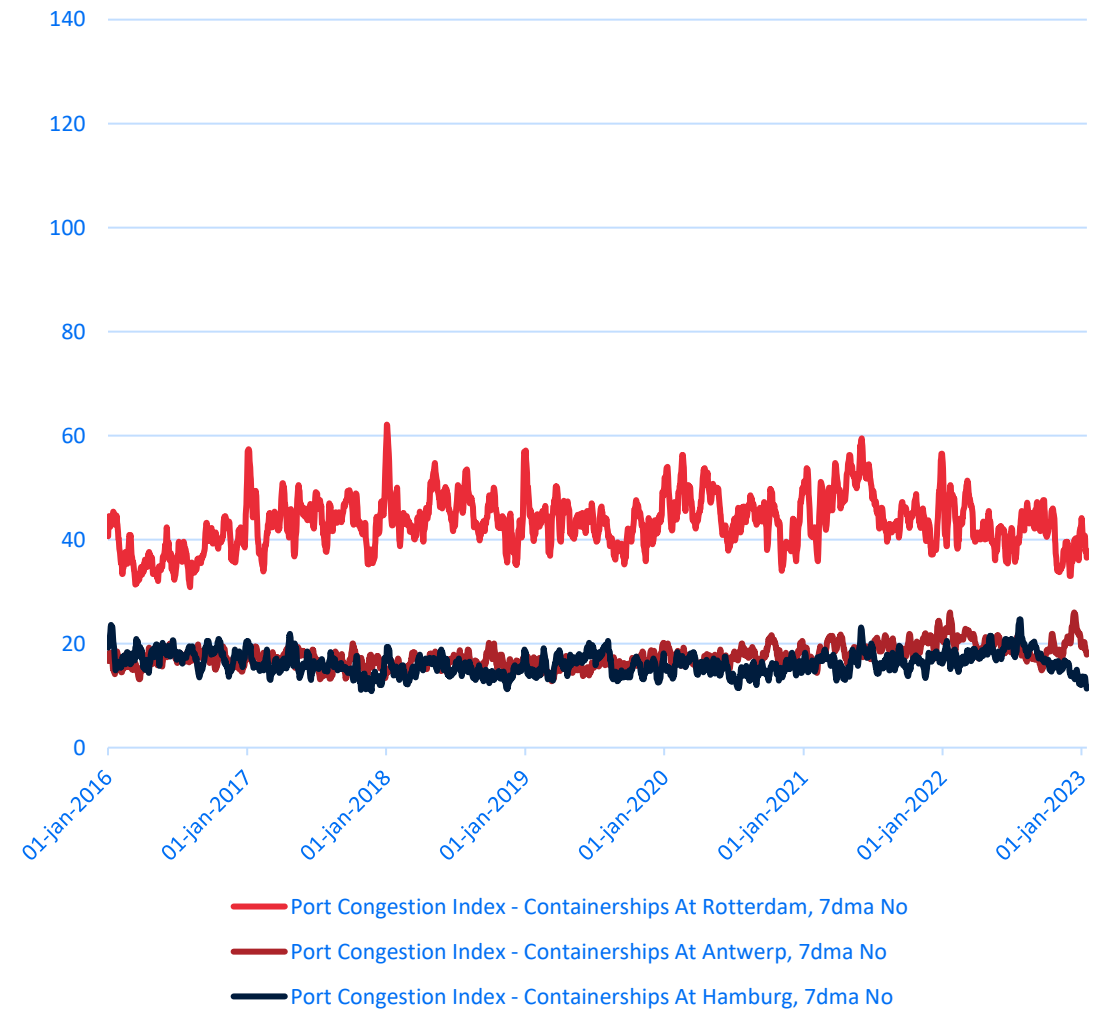
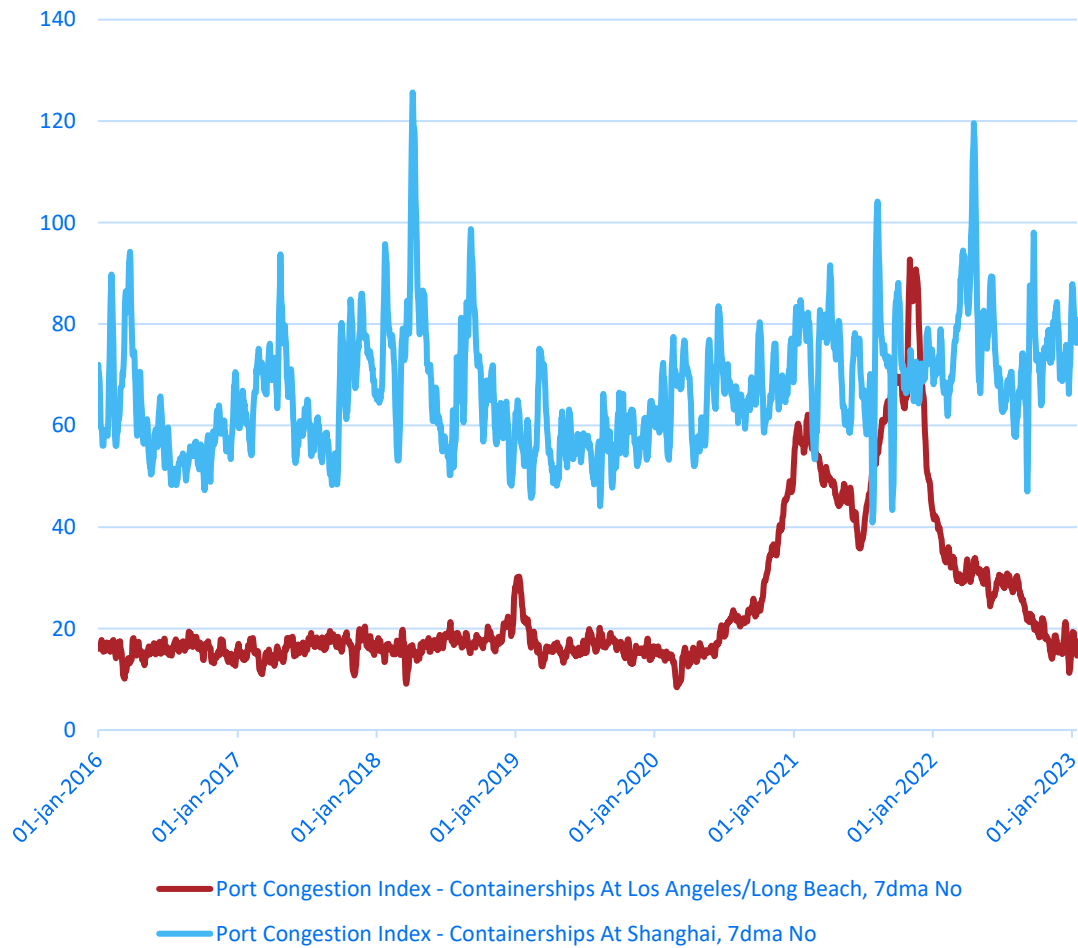
# Container inland navigation in Flanders, Belgium (TEU)



# Evolution container traffic in inland navigation in the port of Antwerp(Bruges)



# Correcting imbalances: long-lasting port congestion





# Sentiment regarding D&D

Katrien Storms



## What is D&D

“The compensation paid depending on the Incoterms and Bill of Lading (Merchant Clause) **by** the consignor or consignee (including freight forwarders and others acting on their behalf) **to** the shipping company for the delay of the container

- **at the terminal (= demurrage)**, and/or
- **in the chain (= detention)**,

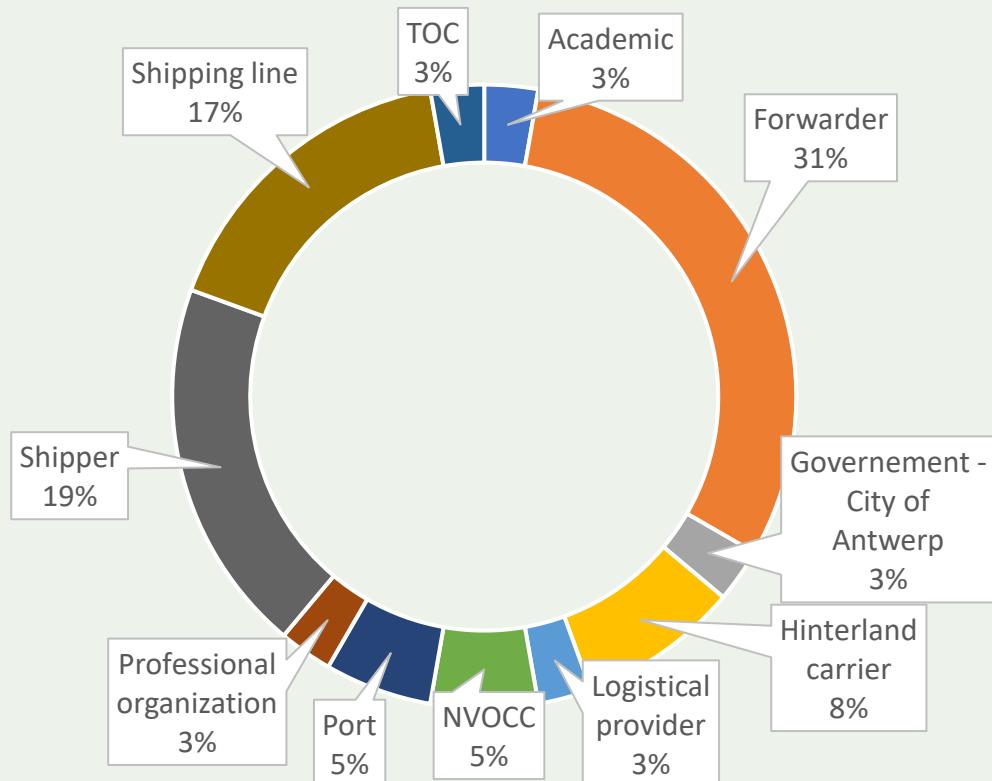
if the agreed period (free time) has expired“

# Survey results



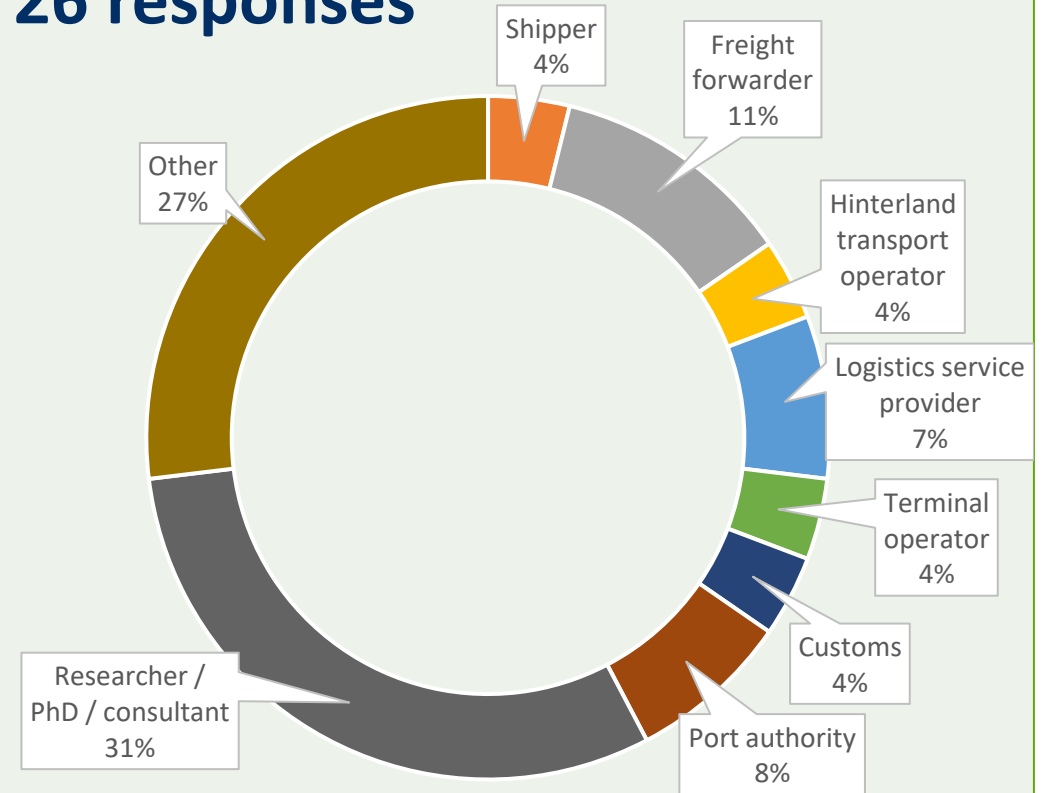
2017

■ 36 responses



2022

■ 26 responses



# Survey results

## 2017

- **Major reasons for D&D**
  - Shortening of free time
  - Increasing D&D fee
  - Terminal congestion
- **Most feasible solutions**
  - Increased attention during negotiations
  - More free time for intermodal transport
  - Increased digitalization

## 2022

- **Major reasons for D&D**
  - Shortening of free time
  - Terminal congestion
  - Increase in ship size
- **Most feasible solutions**
  - More free time for intermodal transport
  - Increased digitalization
  - Working days instead of calendar days

# Survey results 2022

## 85% do not negotiate D&D

- If negotiated
  - Fixed contracts, not for spot contracts
  - More free time for intermodal transport

## 75% indicate that D&D hinders intermodal transport

- Short free time is a game stopper for intermodal transport
- Several carriers offer same D&D free time for all modalities → disadvantage
- Free time is no longer sufficient to make a round trip → difficult for barge transport to compete with road transport
- Lack of flexibility for re-use

## 69% find that D&D should not be abolished





# Survey results 2022

- Other intermodal issues
  - Waiting times at terminals
  - Unrealistic terminal slots
  - Congestion at ports
  - Collecting data
  - Unreliable schedules of rail and barge
  - Mental conservatism
  - Modal shift challenged by additional handling costs and expensive last mile by truck
  - Digitalization is lacking behind

# Managing delayed containers: legal and managerial best practices

Katrien Storms, Marta Kolacz, Christa Sys and Wouter Verheyen

# When young and senior researchers meet each other

## Department of Transport and Regional Economics



**Katrien Storms**

- Holder Dennie Lockefer Chair



**Prof. dr. Christa Sys**

- Promotor Dennie Lockefer Chair
- Holder BNP Paribas Fortis Chair

## Faculty of Law



**Dr. Marta Kolacz**

- Marie-Curie Post-Doc Rouen Univ
- Affiliated senior researcher Antwerpen Univ



**Prof. dr. Wouter Verheyen**

- Tenure track docent

# Research rationale

## Lecture 1

### ▪ Research

#### 7 solutions:

- Using working days instead of calendar days
- Increased (attention during) negotiations
- Earlier announcement planning
- More free time for inland locations when using intermodal transport
- Digitalization
- Re-use of containers
- Legislation

### ▪ Panel

- Customs
- **Legal**
- Finance



## Lecture 2

### ▪ Research

- Economic-legal approach

### ▪ Panel

- Shipper
- Terminal
- IT
- Inland navigation sector





**Slides will be shared after the publication  
of the research**

# Panel

By prof. dr. Thierry Vanellander

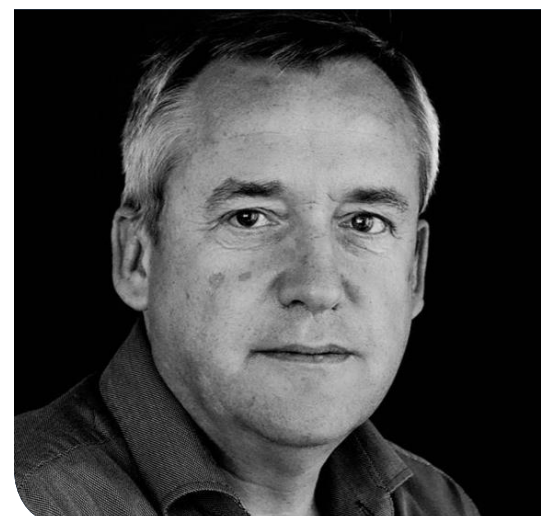
# Panel members



**Dirk Van den Bosch**  
**DP World Antwerp**



**Marco Huijsman**  
**Cofano**



**Frank Hellebosch**  
**CBO, Barging Solutions**



**Alain Baeyens**  
**Umicore**



# Industry panel

Can more attention to D&D during the negotiation of the contract contribute to limiting D&D

More free time for intermodal transport → (Reverse) Modal Shift

In the past, shipping lines (e.g. Maersk) introduced D&D calculators, etc. Is it a failure? As D&D remains a topic of concern. Does increased digitalization help?  
→ need for collaboration

More/new legislation (waiting times)

Night deliveries

Increased Customs Screening

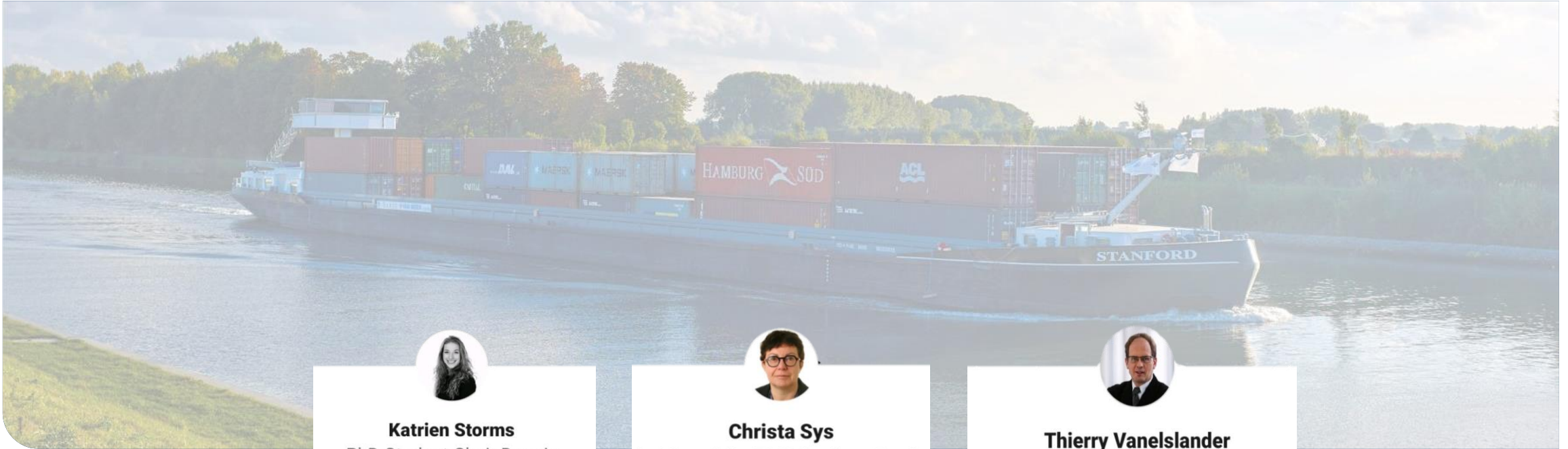
# Closing

By prof. dr. Thierry Vanellander



Thank you

# Thank you for your attention



**Katrien Storms**

PhD Student Chair Dennie  
Lockfefer



**Christa Sys**

holder of the BNP Paribas Fortis  
chair on transport, logistics an...



**Thierry Vanelslander**

Professor at University of  
Antwerp - Faculty of Business and...





## Dennie Lockefeer Chair

### Dennie Lockefeer Thesis Prize 2023

More info website:

[Dennie Lockefeer Chair | !\[\]\(e2376d476d06eb31946dc01a69a4403a\_img.jpg\) Transport and Regional Economics | !\[\]\(bbb3388d591ef640dd8a8c4262f2866a\_img.jpg\) University of Antwerp](https://uantwerpen.be)  
[\(uantwerpen.be\)](https://uantwerpen.be)



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## Note

- Thursday 18 Jan. 2024