2020 Report on Combined Transport (CT)

Press conference

BSL Transportation Consultants

Brussels, 28 October 2020

Schedule

Top	Time	Topic	Responsible
1	14:30 – 14:33	Introduction	Majorie van Leijen
2	14:33 – 14:38	Why UIC supports Combined Transport?	Sandra Géhénot
3	14:38 – 15:08	Insides of the current CT market	Mathias Lahrmann
4	15:08 – 15:13	Political dimension and the need to develop CT	Ralf-Charley Schultze
5	15:13 – 15:18	CT's contribution to achieving the transport objectives	Eric Lambert
6	15:18 – 15:30	Q&A, summary	Majorie van Leijen

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Please follow the rules below for the web-based press conference

- If you are not the speaker, your device’s mic and camera’s will be turned off during the entire session.
- The Q&A chat room will be opened during the entire session. Please keep your messages short and to the point and only for topics relevant to the session.
- The host will follow the Q&A chat room during the session and will forward the questions of general interest to the moderator. All remaining questions will be answered later on.
- Please stay focused, avoid multitasking.
- Please consider that the session will be recorded. The record will only be used by the host and will not be distributed or published in any way or form.

THANK YOU AND ENJOY THE PRESS CONFERENCE!

Why UIC supports Combined Transport?

The European land freight transport market is an important economic sector. Its impact on the environment and society is significant. It is absolutely vital for the sector to work together to drive modal shift towards sustainable transport solutions and rail is a key tool for this.

This is the aim of the Rail Freight Forward coalition (RFF) . This message and the concrete actions to implement this ambition are part of a work program articulated around 3 pillars:

- A political component requiring a level playing field
- A strong cooperation with Infrastructure Managers to have the right level and quality of infrastructure
- Railway undertakings to improve their product and develop multimodal solutions for the benefit of the customer

This last aspect is steered by UIC through a range of projects aiming at fostering a "drive through" philosophy in Europe (removing operational borders) – contributing to European Commission initiatives such as the Issue Log or the Sector Statement - and combined transport is a crucial element of this.

This is indeed the work objective of the UIC Combined Transport Group (representing 80% of CT railways in Europe) which, for years, has worked to make it an "easy to use" solution for the market through technical standardization but also undertaking a close market monitoring with its now renowned and unique report, published every other year since the early 2000's.

I am particularly pleased to be here today as it is a landmark in the report history. UIC Combined Transport Group and UIRR have been cooperating for many years. Both associations formalized this cooperation a couple of years ago when they signed an MOU and the 2020 Report is one example of this even closer cooperation.

This year, with the worldwide pandemic, has been very difficult with Freight RUs reporting approx. 15% loss of turnover for the first semester. But the crisis also highlighted the crucial role of rail in modern supply chains and the Report results about to be presented will attest this.

Sandra Géhénot

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The 2020 Report on Combined Transport presents updated market data and analyses, but also includes new components

Chapter 1

- Market segmentation, structure and definitions
- Main transport relations of CT in Europe (differentiated geographically and per ILU)
- Shares of CT in overall rail transport

Chapter 3

- Analysis of European intermodal loading units
- Regional approach of the CT market in Europe: disparity between selected regions
- Analysis of the role of terminals in the CT chain

European Rail/Road Combined Transport market – facts and figures → **General framework and key elements of CT in Europe** → **Spotlight Analysis**

Chapter 2

- Trends determining future developments of CT
- CT contribution Rail Freight Forward Initiative “30by2030”
- Key bottlenecks and requirements for CT
- Support and funding programs
- Key operators and economic Importance
- Advantages and disadvantages of CT

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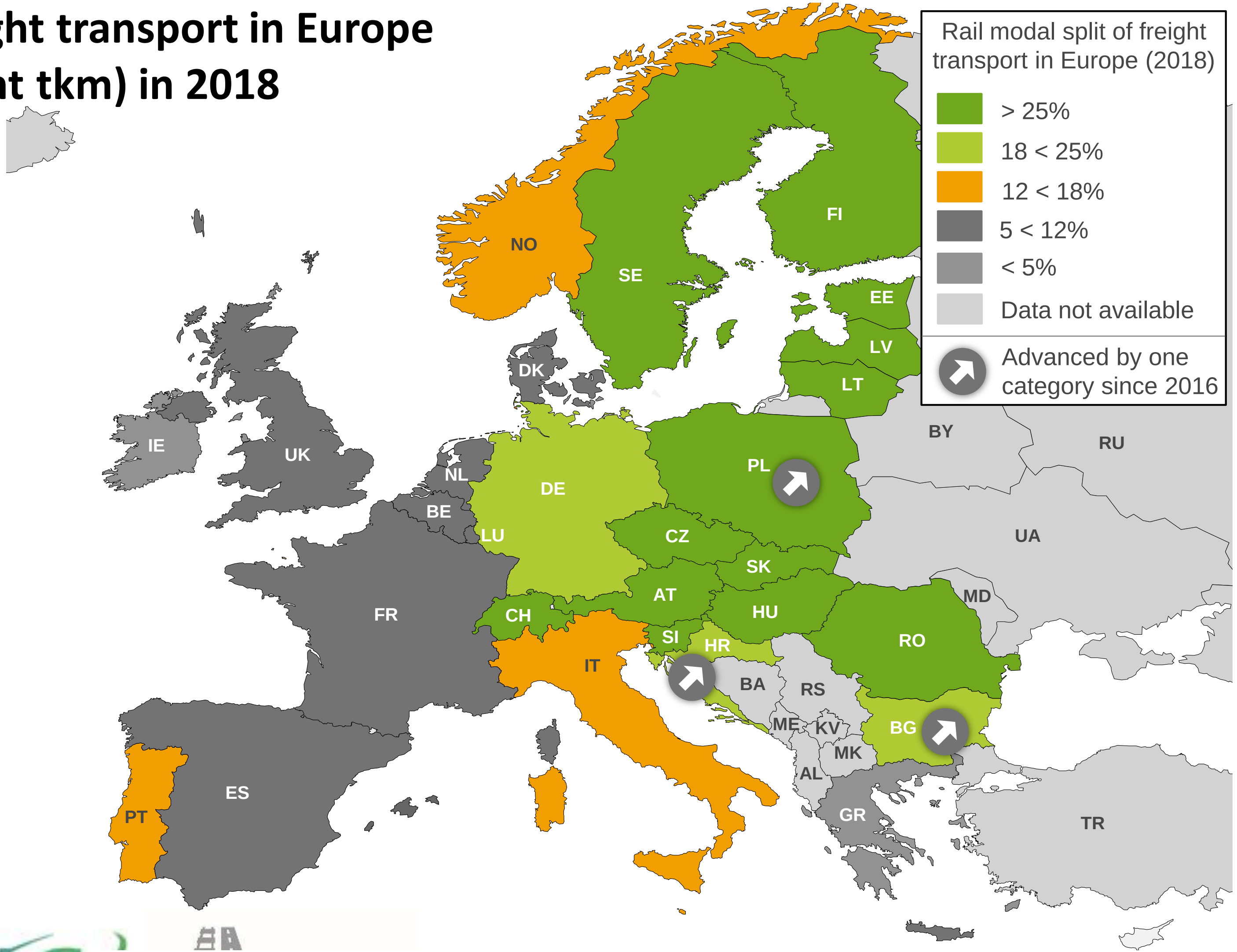
The average rail share in the overall modal split of European freight transport is about 18% - with significant differences between the countries

Rail modal split of freight transport in Europe (% in total inland freight tkm) in 2018



Source: Eurostat (2020), last database update by Eurostat: modal split (tran_hv_frmod) April 1, 2020

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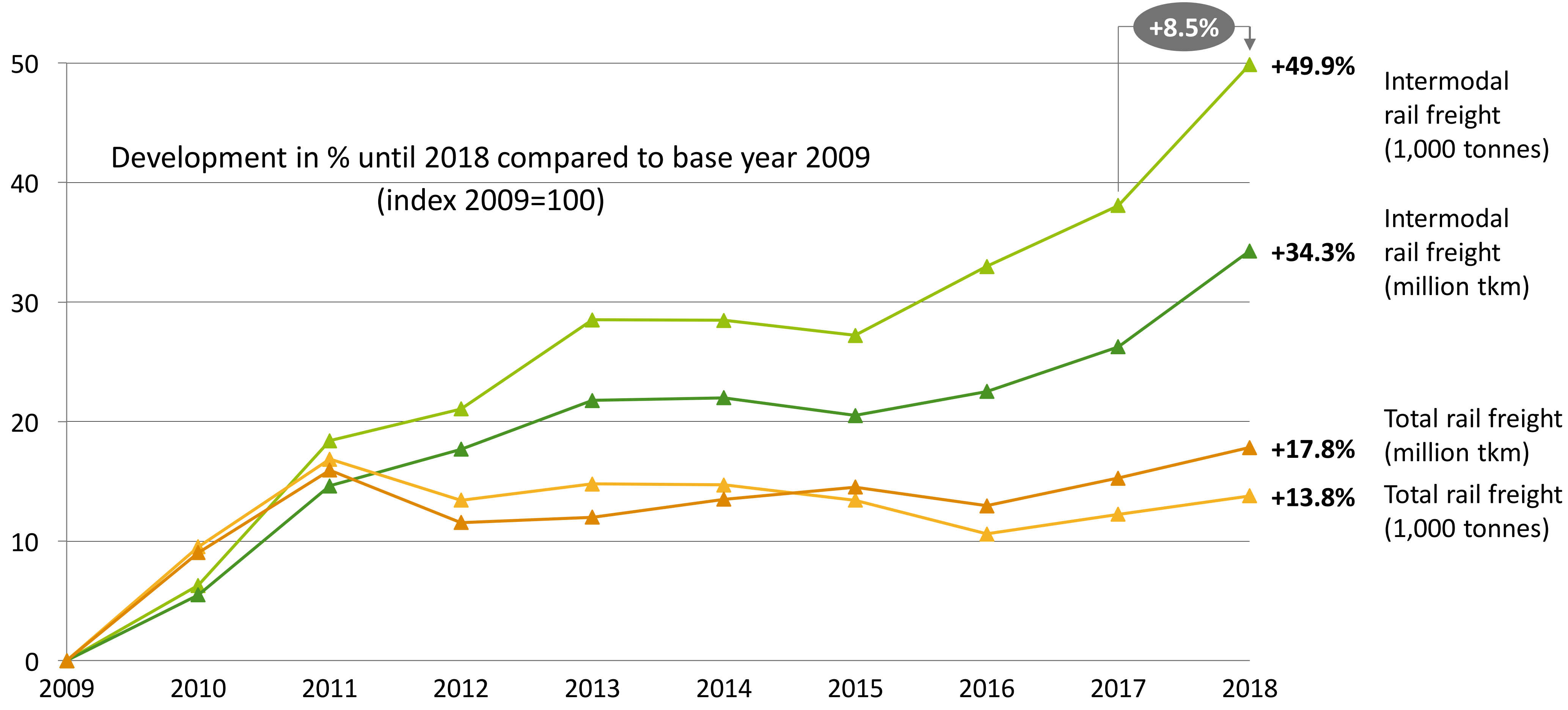
Based on Eurostat data, intermodal rail transport in Europe continues to develop more positively than rail freight transport in general

Development of total rail freight performance vs. rail transport of goods in intermodal transport units



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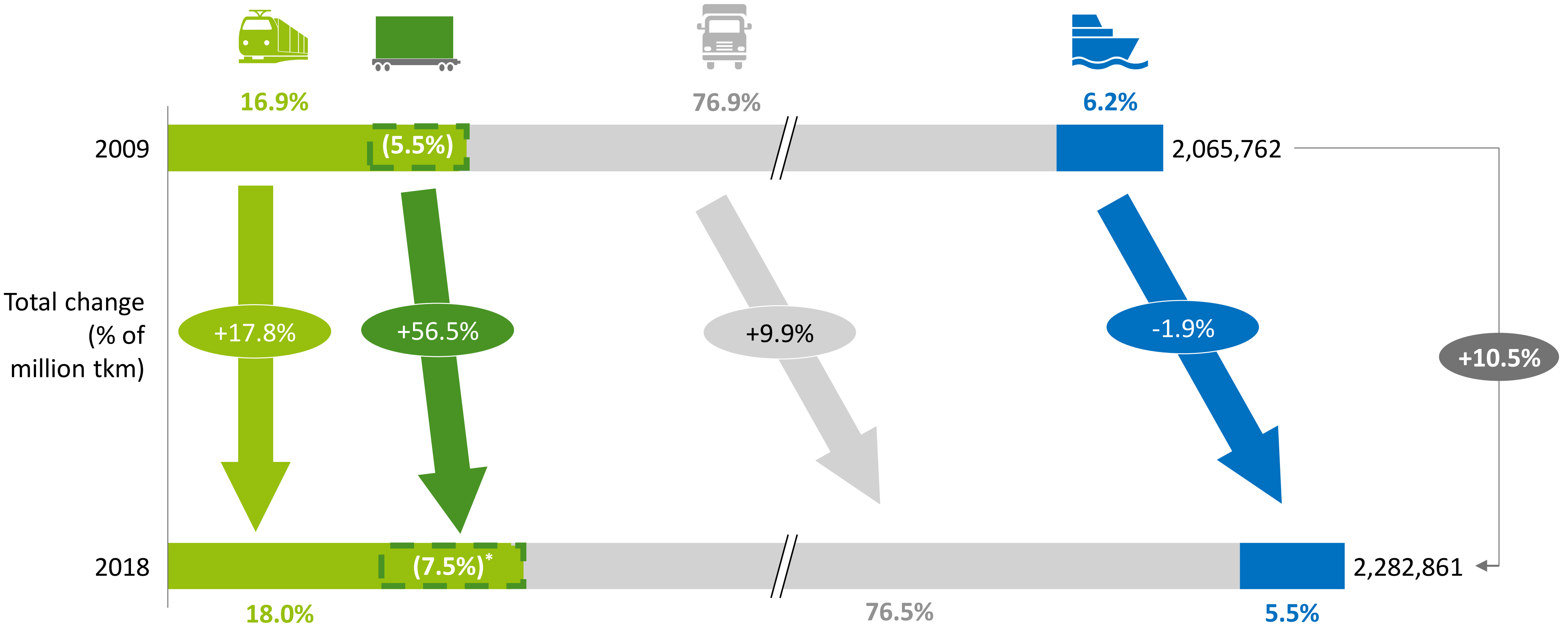
Source: Eurostat (2020), last database update by Eurostat: intermodal rail freight (rail_go_contwgt) 24 September 2020, total rail freight (rail_go_typeall) 25 September 2020

Shares of rail freight and particularly of combined transport have increased from 2009 to 2018, while shares of road freight transport have declined

Share of intermodal and total rail freight in the overall modal split (in million tkm)[1)]



* Particularly due to gaps in data availability which is not given for every country/ transports, the share of CT based on tkm published by Eurostat is below 5%.

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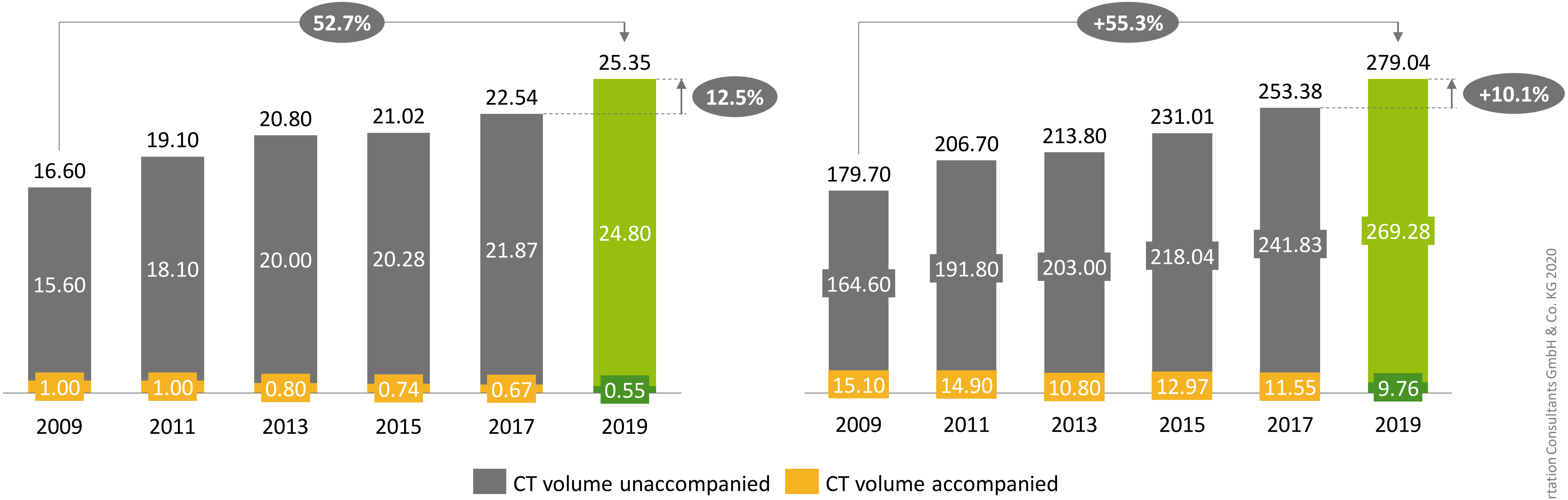
1) While rail, road and barge modal split is based on Eurostat data, CT shares are calculated based on market survey figures
Source: Eurostat (2020), last database update by Eurostat: modal split (tran_hv_frmod) April 1, 2020, intermodal rail freight (rail_go_contwgt) 24 September 2020, total rail freight (rail_go_typeall) 25 September 2020; BSL market analysis

Based on our market survey, increase of the total CT-volume adds up to more than 50% between 2009 and 2019

Development of total CT volumes 2009 to 2019 (in million TEU and in million tonnes)



Accompanied CT sector has negatively developed throughout the past decade. However, accompanied CT is important in terms of transport political targets as well as geographic specialties like the transport of goods across the alps

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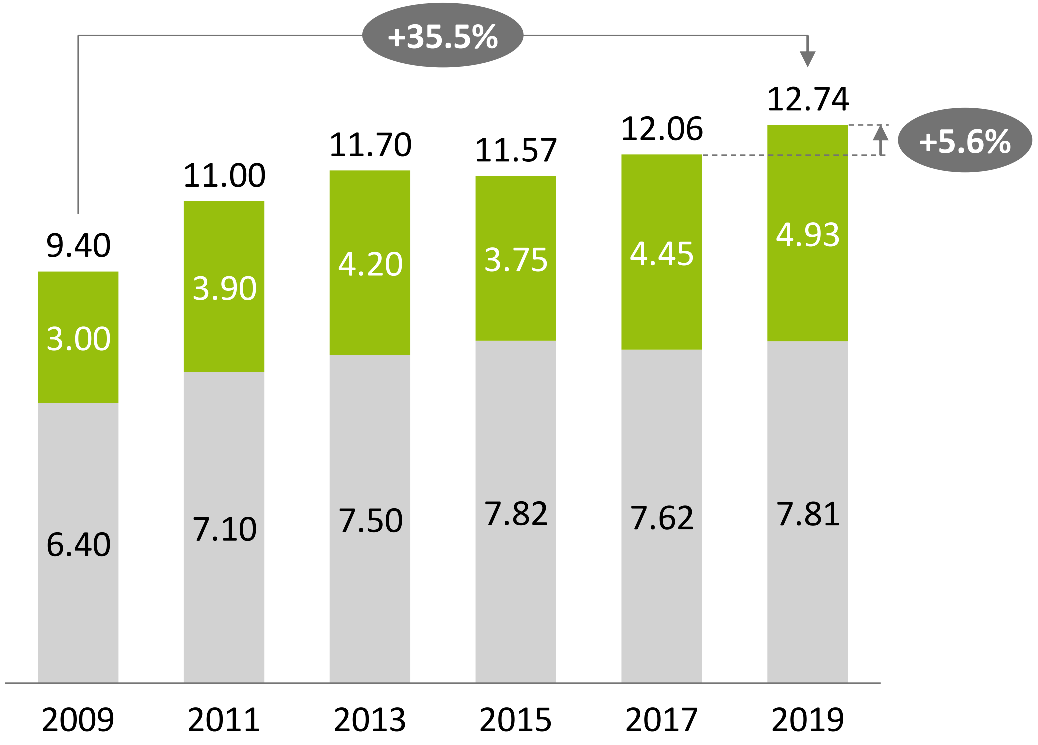
Note: rounding differences may occur
Source: BSL Transportation analysis based on survey

The key driver for the positive market development remains the cross-border CT which increased by more than 20% from 2017 to 2019

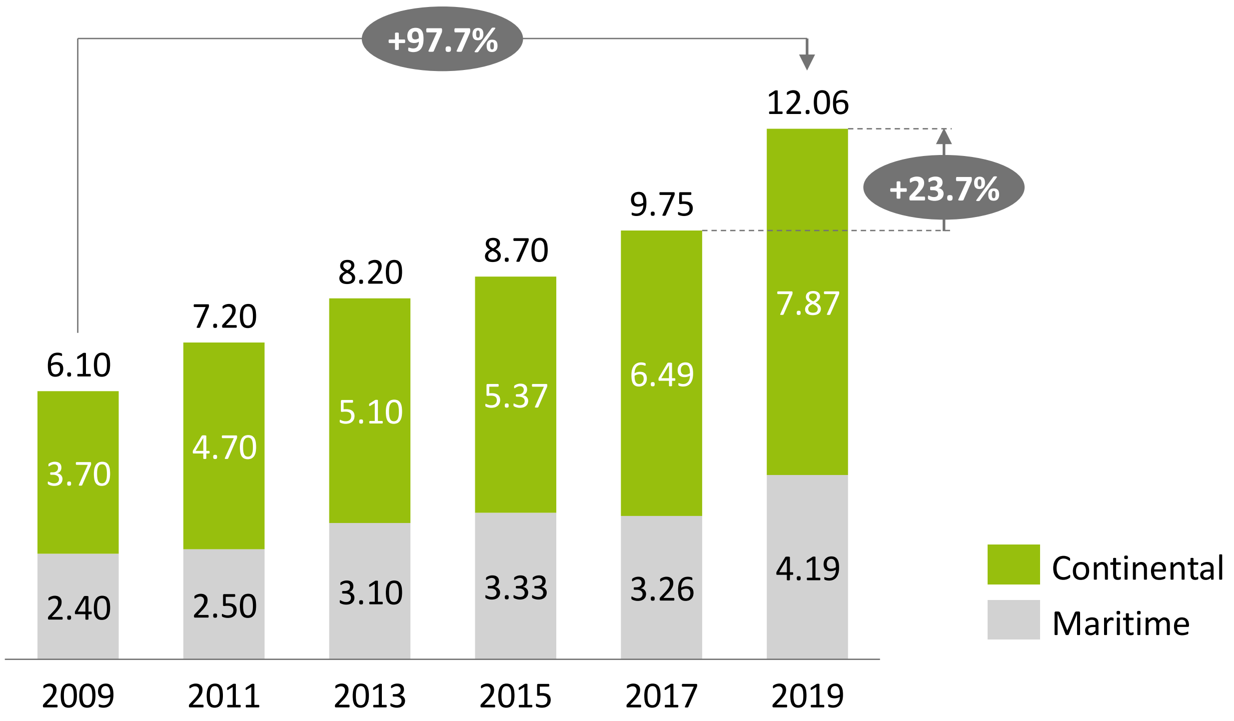
Development of unaccompanied CT volumes by market segments 2009 to 2019 (m TEU)

Domestic CT



Top 3 domestic markets: Germany, United Kingdom and Poland

International CT



Top 3 international corridors: Germany - Italy, Czech Republic – Germany and Belgium - Italy

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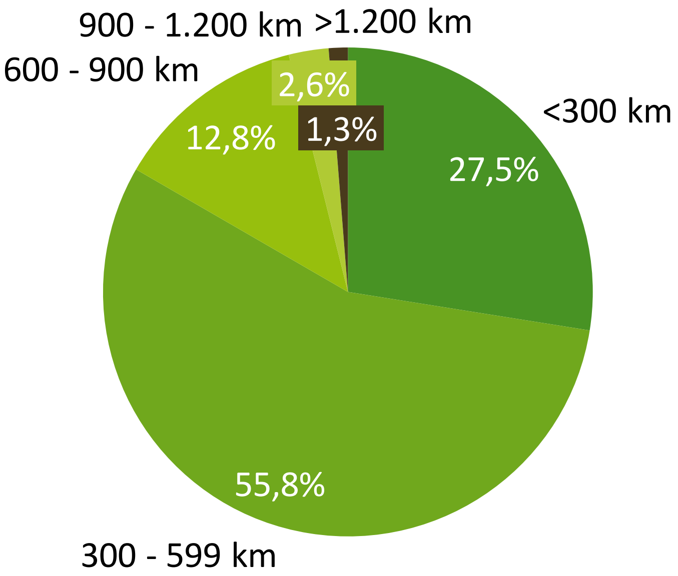
Note: rounding differences may occur
Source: BSL Transportation analysis based on survey

The average rail leg of domestic CT trains is nearly 500 km – the average international rail leg is roughly 80% higher

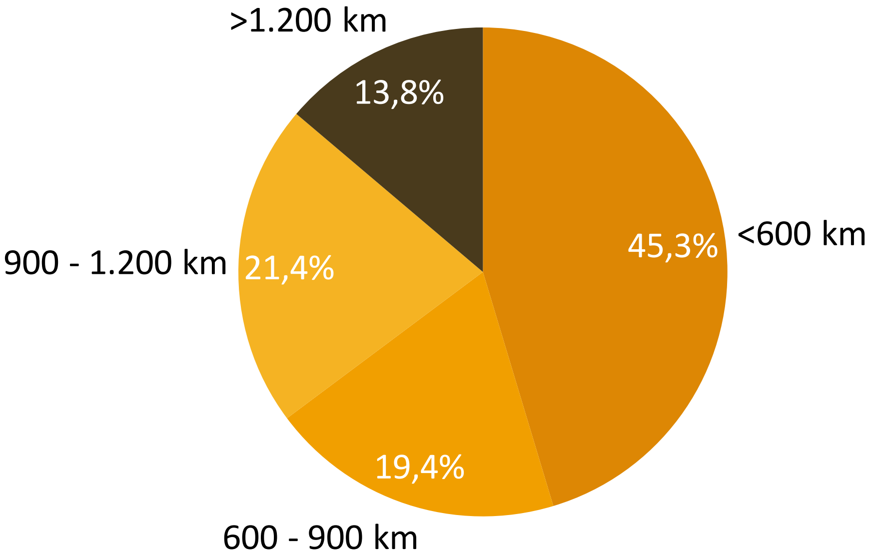
CT rail leg (km)

Domestic CT



Average distance: 480 km[1)]

International CT



Average distance: 860 km[1)]

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Source: BSL Transportation analysis based on survey

Compared to single mode transport, Combined Transport compiles several advantages in all relevant categories

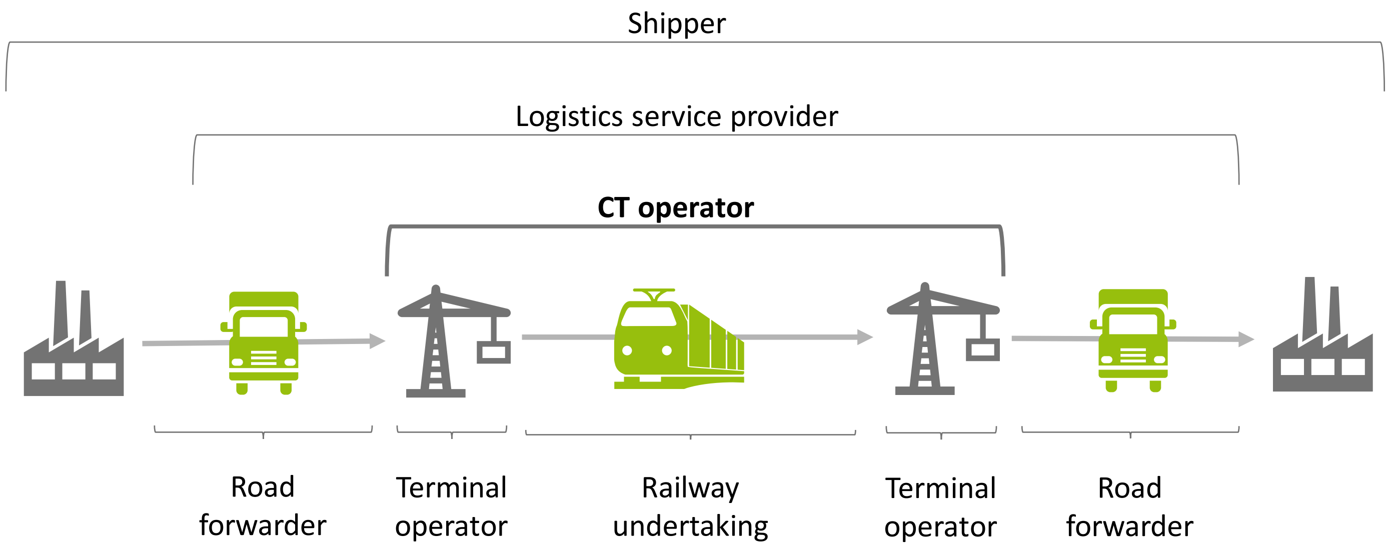
Advantages of Combined Transport

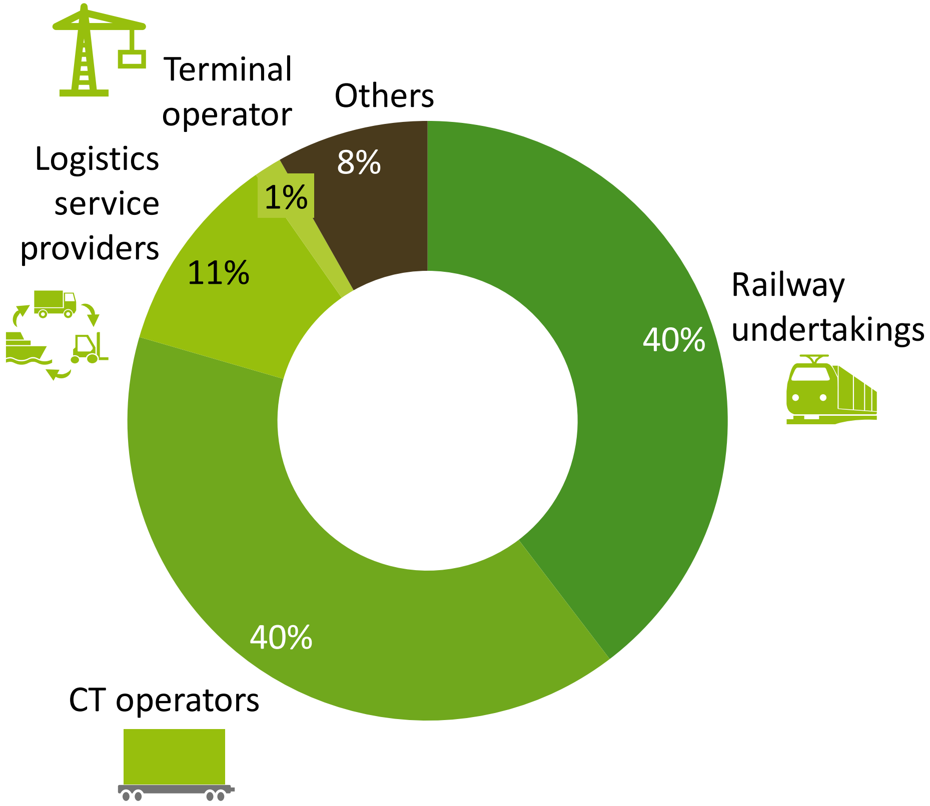
Economical	Environmental	Social	Modal
▪ Planning is easier due to fixed journey times ▪ Less road congestion ▪ Productivity through higher capacities on long distances ▪ Less wear on equipment	▪ Savings on fuel/ non-regenerative energies ▪ Reduction of emissions ▪ Less air pollution ▪ Higher energy efficiency ▪ Less external costs	▪ Improved road safety ▪ Less noise ▪ Reduction of climatic changes	▪ Safer transport ▪ Legal benefits e.g. exemption from traffic bans ▪ More equal spread of modal split ▪ Increasing automation

Source: BSL Transportation analysis; UIRR; UIC

CT chain has a variety of different actors and business models, whereby CT operators and Railway undertakings have a share of 80% in CT operation

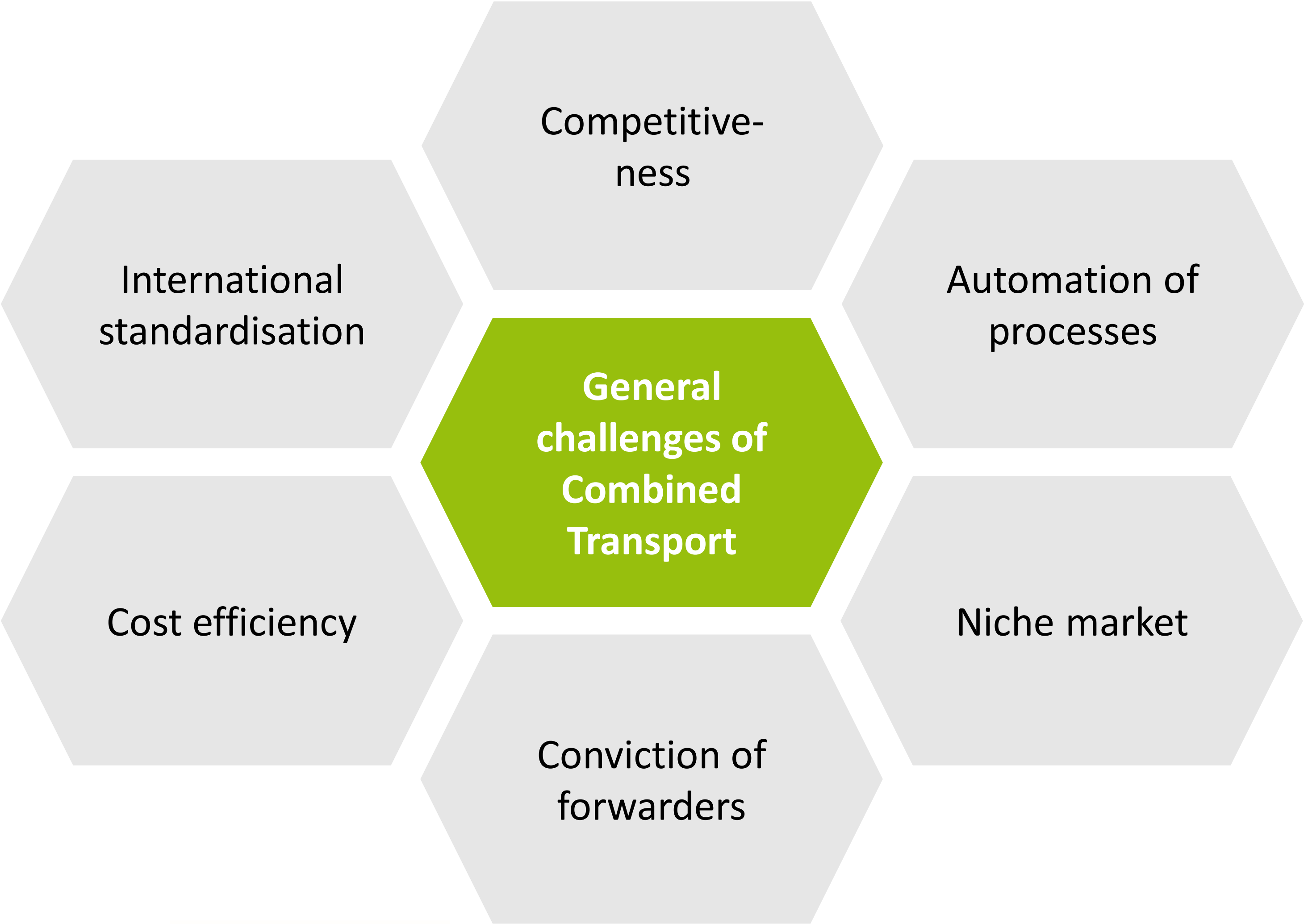
Actors in CT operations and market shares (based on CT volume)





Source: BSL Transportation analysis; Wecon GmbH

The Combined Transport sector has to deal with a variety of challenges influencing its actions



Source: Market analysis; SGKV Studiengesellschaft für den Kombinierten Verkehr e.V. (2020)

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The Combined Transport sector is an increasingly important market – however there are some economic challenges

Economic importance of European's Combined Transport

Market volume: > 6 bn EUR

More than 50,000 jobs in CT operation and transshipment

High investments in new technologies and digitalisation

Freight growth driver: +50% more tonnes within 10 years

Reduced CO_2 emissions: 5 M t p.a.[1)]

Important contribution to EU-climate change

Economic situation of CT companies

1. **Strong competition on freight market (incl. road)**
2. **Comparably low profitability (to loss-making business)**
3. **Little scope for investments (in new technologies/ innovation)**
4. **Limited growth and innovation potential**

1) Source: German Ministry of transport and digital infrastructure, extrapolated for Europe
Source: BSL Transportation analysis

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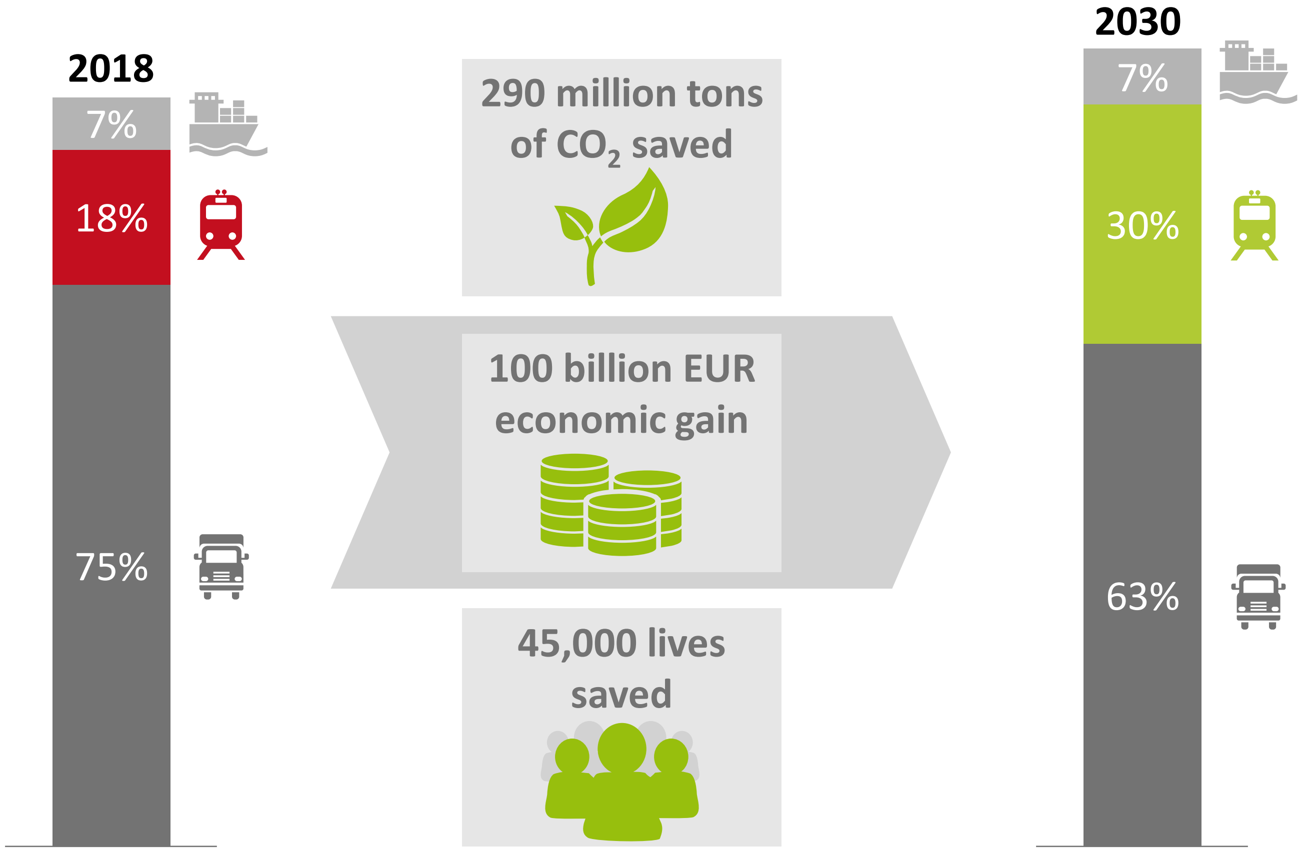
Combined Transport with its growth figures is a key driver in order to achieve the 30by2030 objectives for the rail sector

Impact of 30by2030



In addition to the modal split increase of the rail sector the overall freight market volume will probably expand by 10%

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Source: https://www.railfreightforward.eu/sites/default/files/usercontent/white_paper-30by2030-150dpi6.pdf

RUs, operators and IMs as well as policy makers and authorities can contribute towards a positive CT development by eliminating bottlenecks

Fields of action in the rail freight sector

Fields of Action

Railway Undertakings (incl. CT operators)

- Restructuring and modernisation
- Quality, flexibility and ease of use
- Automation, telematics and more user-friendly interfaces
- Contingency management
- Standardisation of assets

Infrastructure Managers

- High quality infrastructure
- Network accessibility
- Easy and innovative train operations

Policy Makers/ Authorities

- Internalisation of external costs
- Reducing Track Access Charges
- Reduction of costs
- Stimulating and maintaining best last-mile infrastructure
- Supporting innovation
- Operational and technical interoperability

Source: Market analysis, e. g.
https://www.dbcargo.com/resource/blob/3704288/027dd7493f7366266ac65800c187c212/Brochure-30-by-2030-data.pdf

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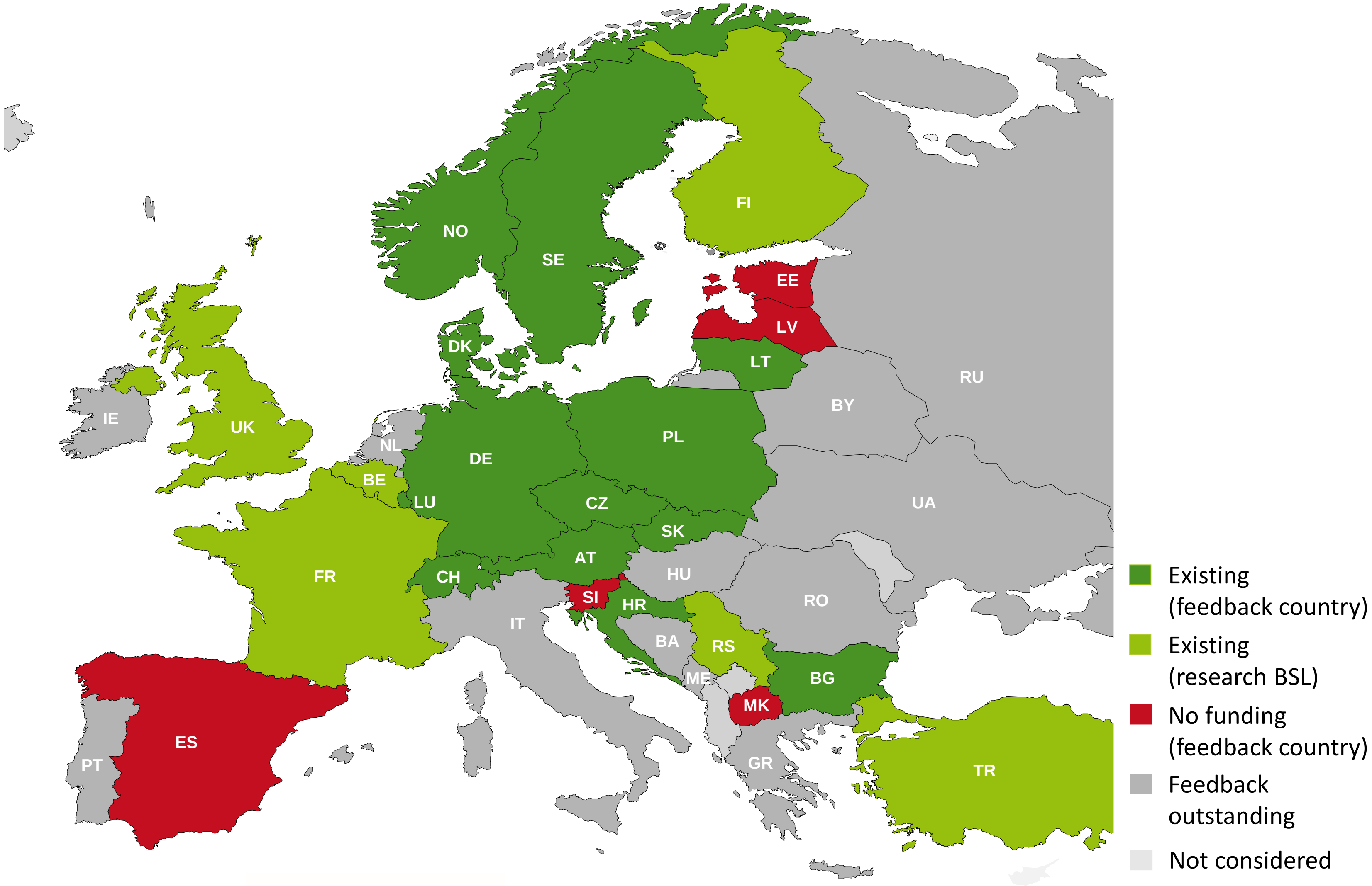
A high number of European countries has funding programmes to support Combined Transport - still some governments still do not support CT



Source: BSL Transportation analysis

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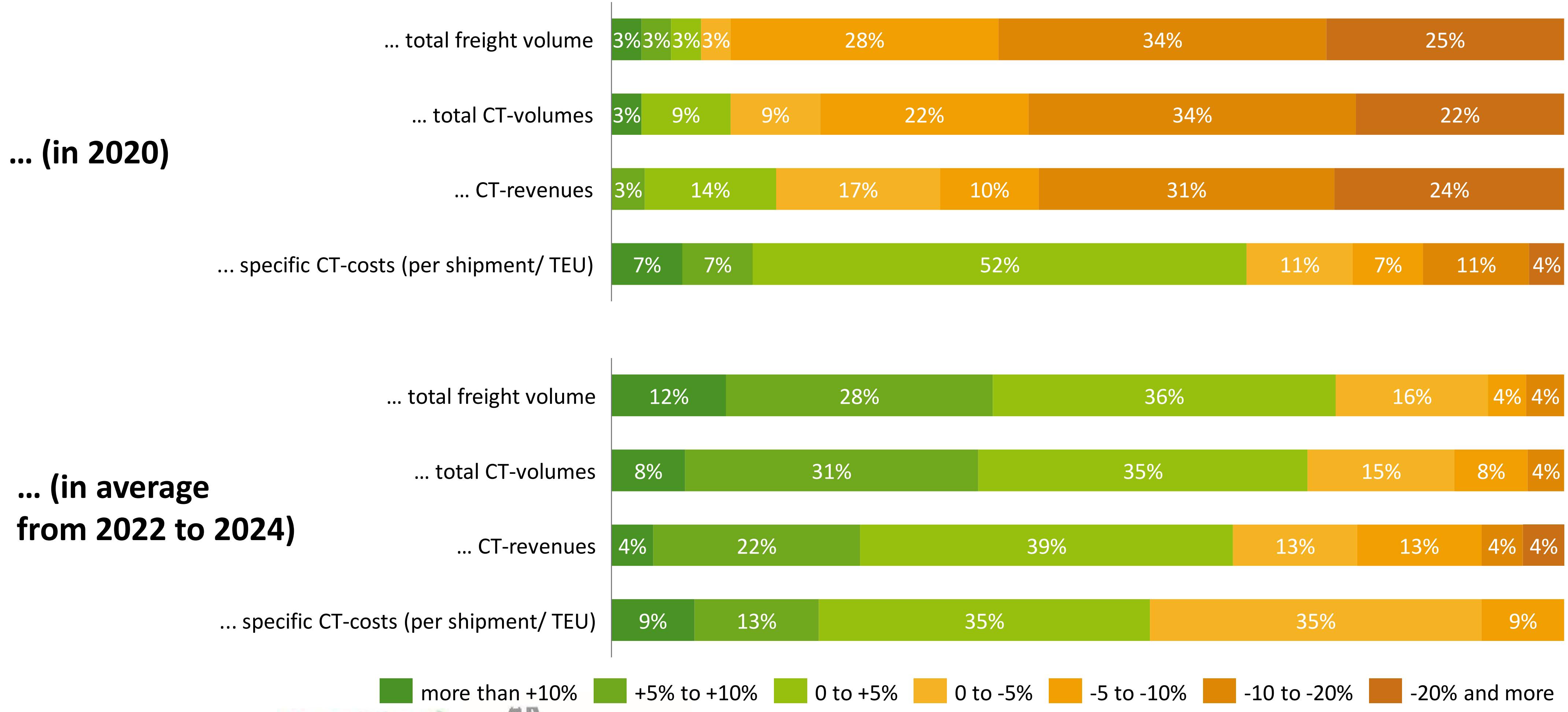
Even though the expected impact of the coronavirus in 2020 is very negative, the forecast for 2022 to 2024 is positive

Expected impact of the coronavirus on … (in 2020)



Source: BSL Transportation analysis based on survey

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Spotlight analyses of 2020 Report on Combined Transport

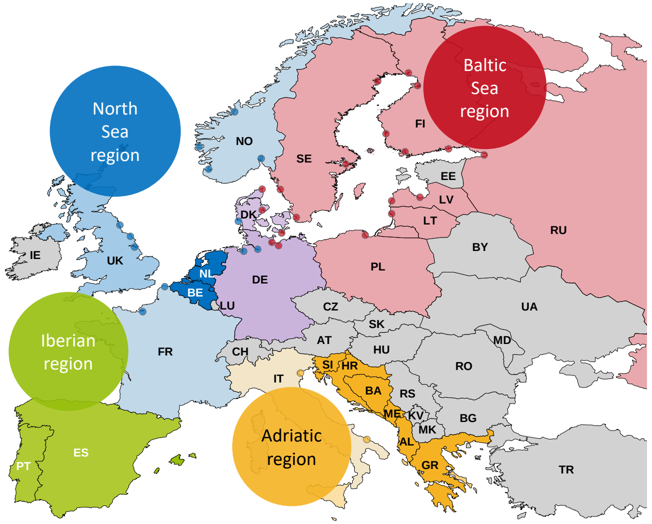
Intermodal Loading Units

Inter-modal loading unit (ILU)

- **Con-tainer** — ISO-container
  - 20' (6.10m)
  - 30' (9.15m)
  - 40' (12.20m)
  - 45' (13.72m)
  - → Marking according to ISO 6346 (BIC-Code)
- **Semi-trailers**
  - Cranable
  - Non-cranable
  - → 13.60m → Marking according to EN-13044 (ILU-code[1])
- **Swap body[2]**
  - Class A[3]
  - Class B
  - Class C
  - 12.50m or 13.60m
  - 7.82m - 12.20m
  - 7.15m, 7.45m or 7.82m
  - Marking according to EN-13044 (ILU-code[1]) or ISO 6346 (BIC-Code)

1) Consists of three parts: owner-key, registration number and check digit
2) Known as non-ISO containers
3) Incl. 45PW containers, refrigerated- and tank-containers

Regional approach of the CT market



Analysis of the role of terminals

Terminal size		Market segment: Equipment handled, Transshipment technology — Container	Continental vertical	Continental horizontal	Mixed vertical	Mixed vertical + horizontal
Area, Modules, Transshipment tracks, Handling	Small					
	Medium					
	Large					
	X-Large					

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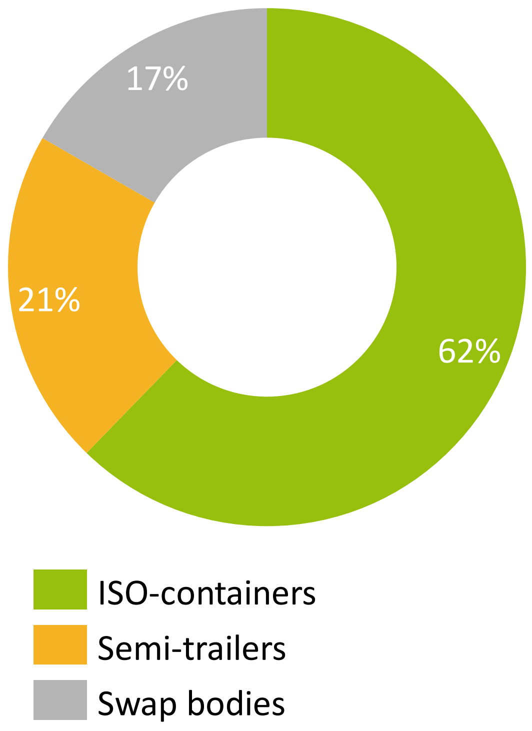
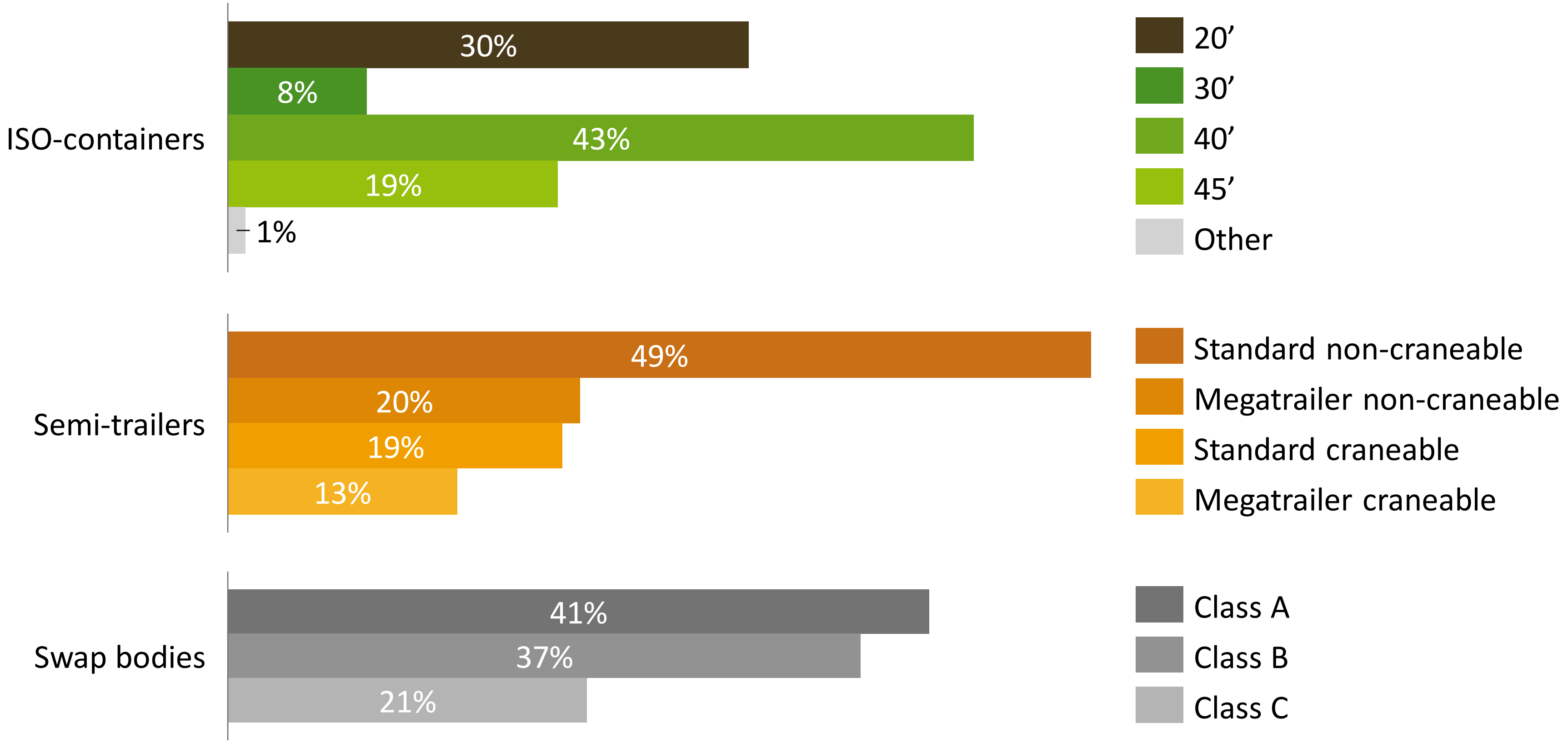
Based on the analysis of realised Combined Transport activities approximately two third of the units are containers

Use and structure of Intermodal Loading Units in European CT

Use of ILUs

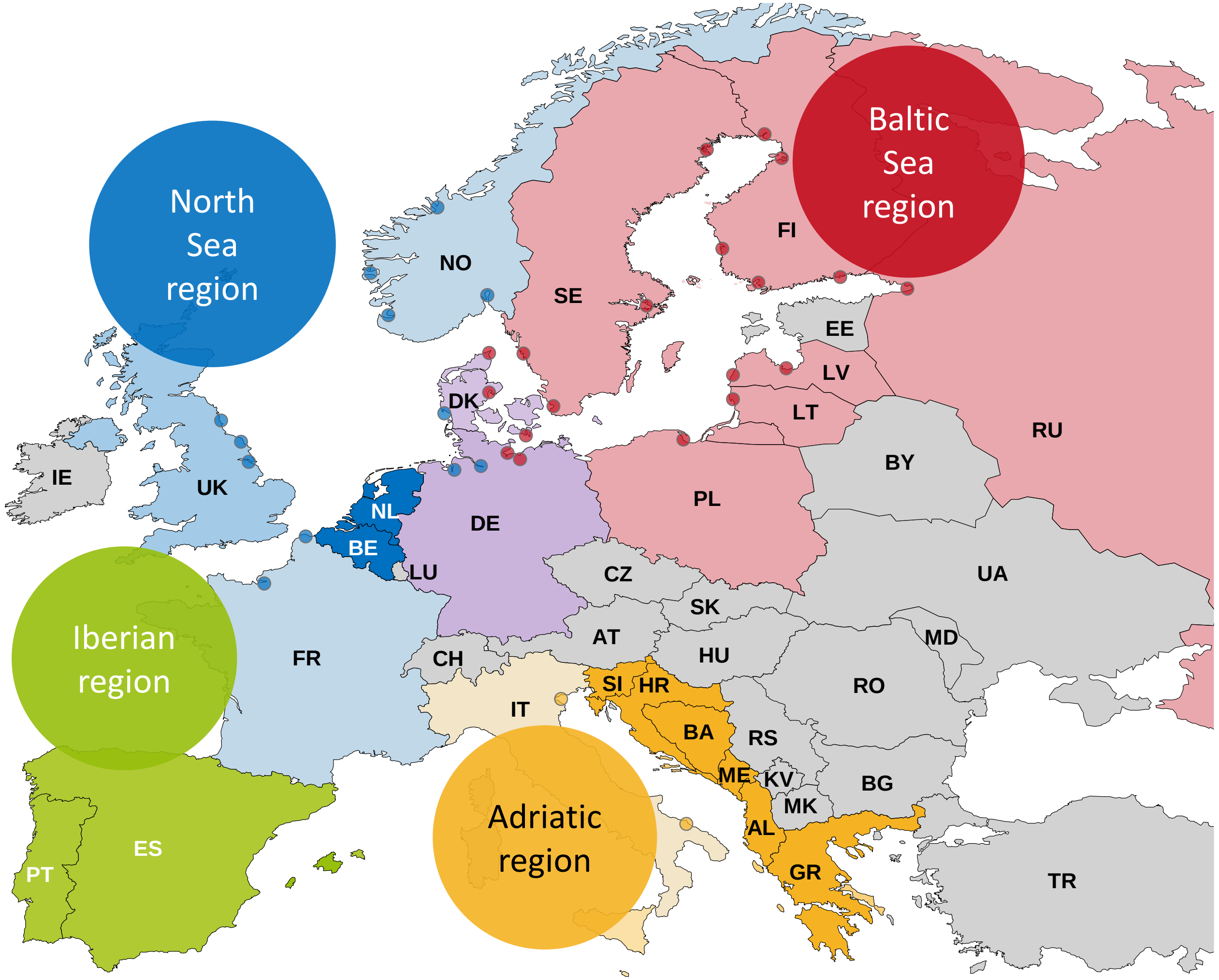


Market structure of ILUs



Source: CESAR’s data base, ILU-workshop, 2020

CT structure and traffic are different between the different European regions – specific measures are necessary to attract the regional sub-market



Mapping of involved countries (coloured states) and ports (coloured spots)

Example

CT volume distribution (in %)

	Inbound CT	Domestic CT	Outbound CT
North Sea Region	41	19	40
Baltic Sea Region	42	17	41
Iberian Region	29	41	30
Adriatic Region	48	3	49

Source: CESAR's data base, BSL Transportation analysis

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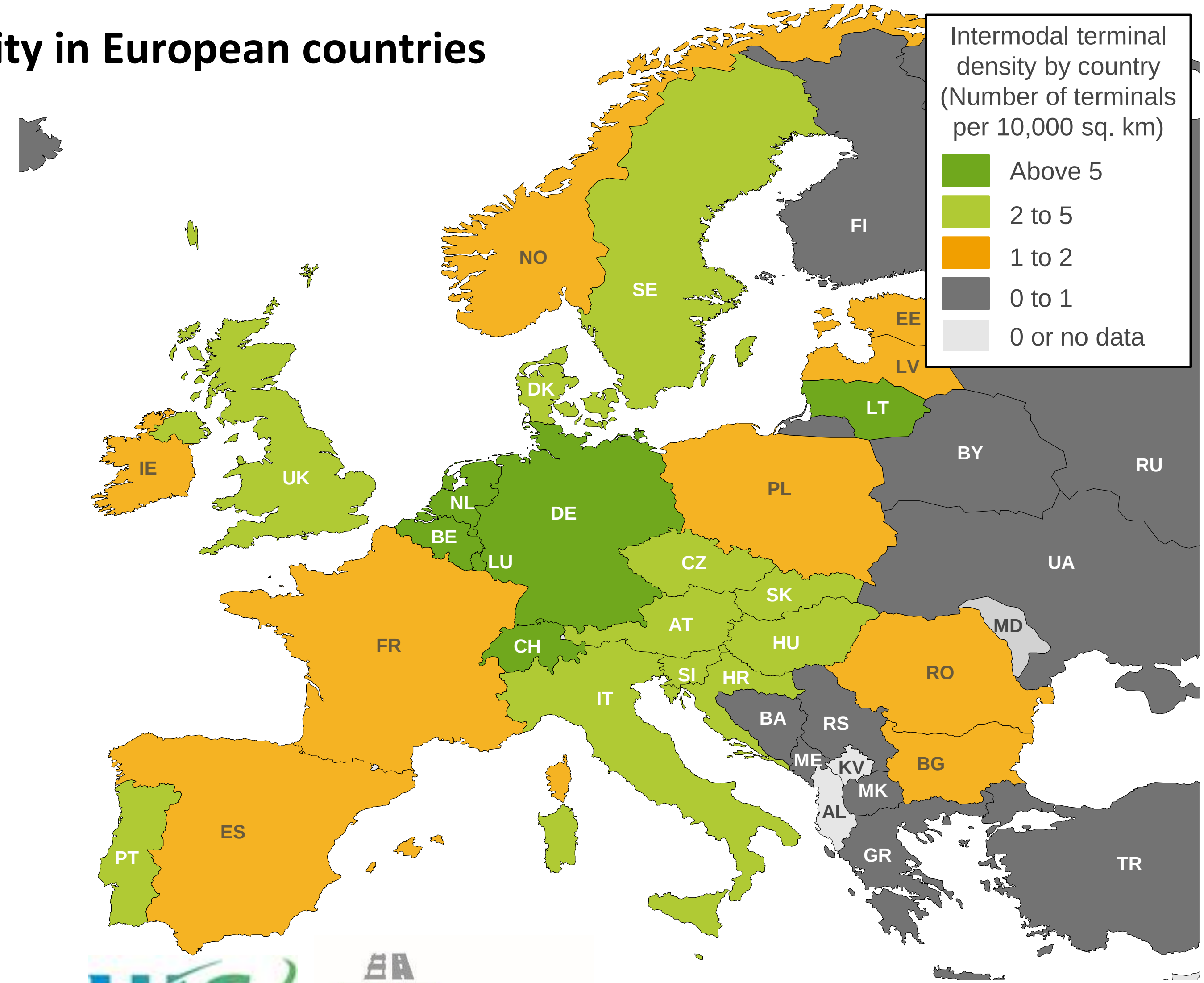
Terminal infrastructure is a key factor in Combined Transport chain which must grow with the sector development

Terminal density in European countries



Country	No of CT terminals
Austria	23
Belarus	20
Belgium	44
Bulgaria	13
Croatia	15
Czech Republic	22
Denmark	11
Estonia	7
Finland	19
France	101
Georgia	1
Germany	214
Greece	7
Hungary	23
Ireland	7
Italy	76
Kasachstan	1
Latvia	6
Lithuania	7
Luxembourg	2
Moldova	1
Montenegro	1
North Macedonia	2
Norway	34
Poland	44
Portugal	28
Romania	28
Russia	104
Serbia	7
Slovakia	18
Slovenia	5
Spain	51
Sweden	92
Switzerland	50
The Netherlands	30
Turkey	13
Ukraine	19
United Kingdom	58
TOTAL	**1,204**

Source: Planco / KombiConsult based on RFP

In the Report, for the first time, the European terminals are structured and classified by different criteria

CT terminal categorisation

Criteria	Size category			
	Small	Medium	Large	X-Large
Capacity	≤ 75,000 LU	75,000 LU < x ≤ 150,000 LU	150,000 LU < x ≤ 300,000 LU	> 300,000 LU
Total transshipment track length	≤ 1,000 m	1,000 m < x ≤ 2,500 m	2,500 m < x ≤ 4,000 m	> 4,000 m
Surface area	≤ 45,000 m^2	45,000 m^2 < x ≤ 100,000 m^2	100,000 m^2 < x ≤ 210,000 m^2	> 210,000 m^2
Number of modules	1	1	≤ 2	> 2
Number of handling equipment: gantry cranes (vertical) / system tracks (horizontal)	≤ 1	1 < x ≤ 2	2 < x ≤ 5	> 5

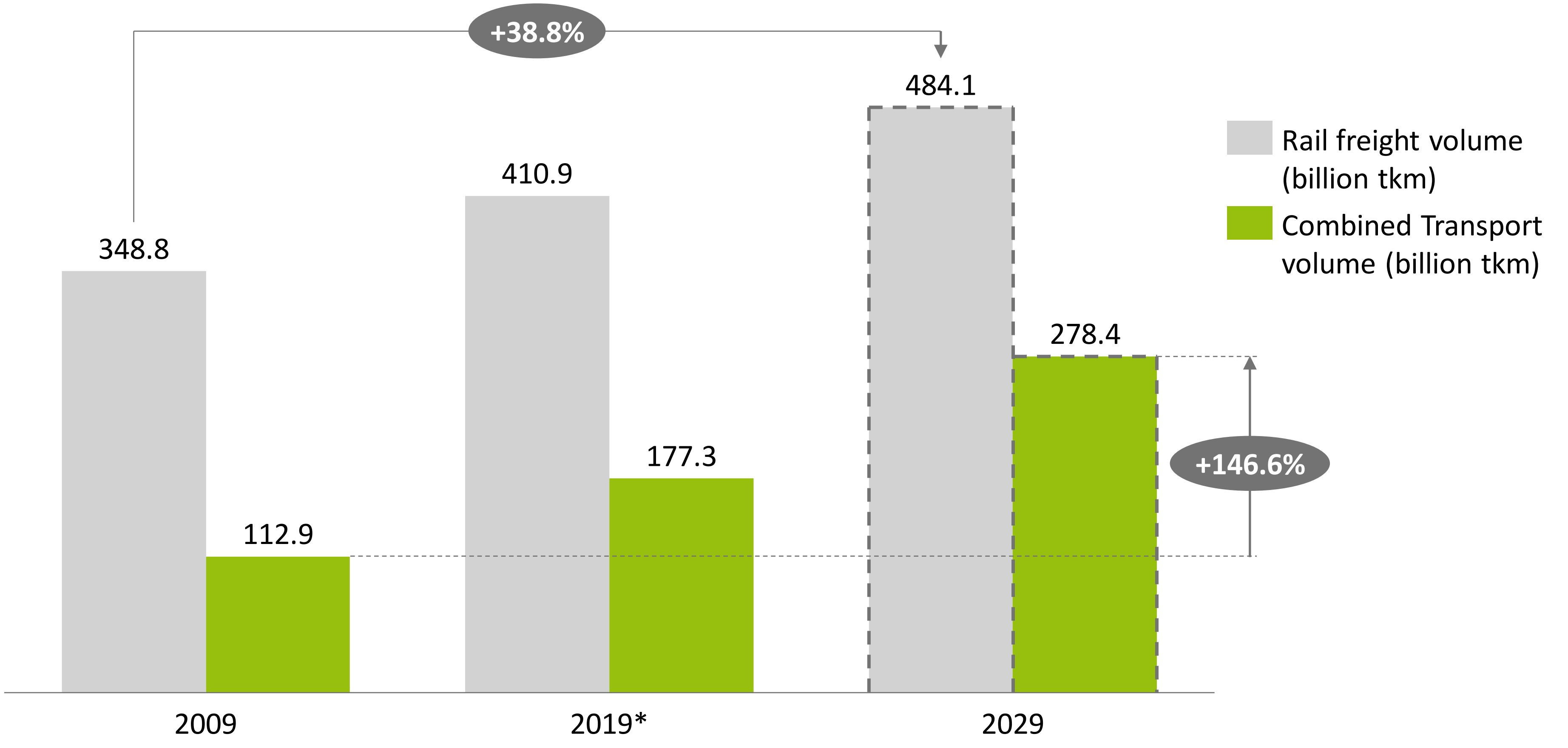
Terminal size		Market segment				
▪ Capacity ▪ Area ▪ Modules ▪ Transshipment tracks ▪ Handling equipment		▪ Equipment handled ▪ Transshipment technology				
		Container	Continental vertical	Continental horizontal	Mixed vertical	Mixed vertical + horizontal
	Small					
	Medium					
	Large					
	X-Large					

Specific Value-Added-Services (VAS) – orientated to the customer needs – are growing in importance for Combined Transport's success

Source: Planco / KombiConsult

Taking the previous development as a basis, the CT market will have grown by nearly 150% between 2009 and 2029

Previous and expected CT and total rail freight volume growth (in billion tkm)



* Due to data availability the rail share for 2019 is illustrated by 2018 values.

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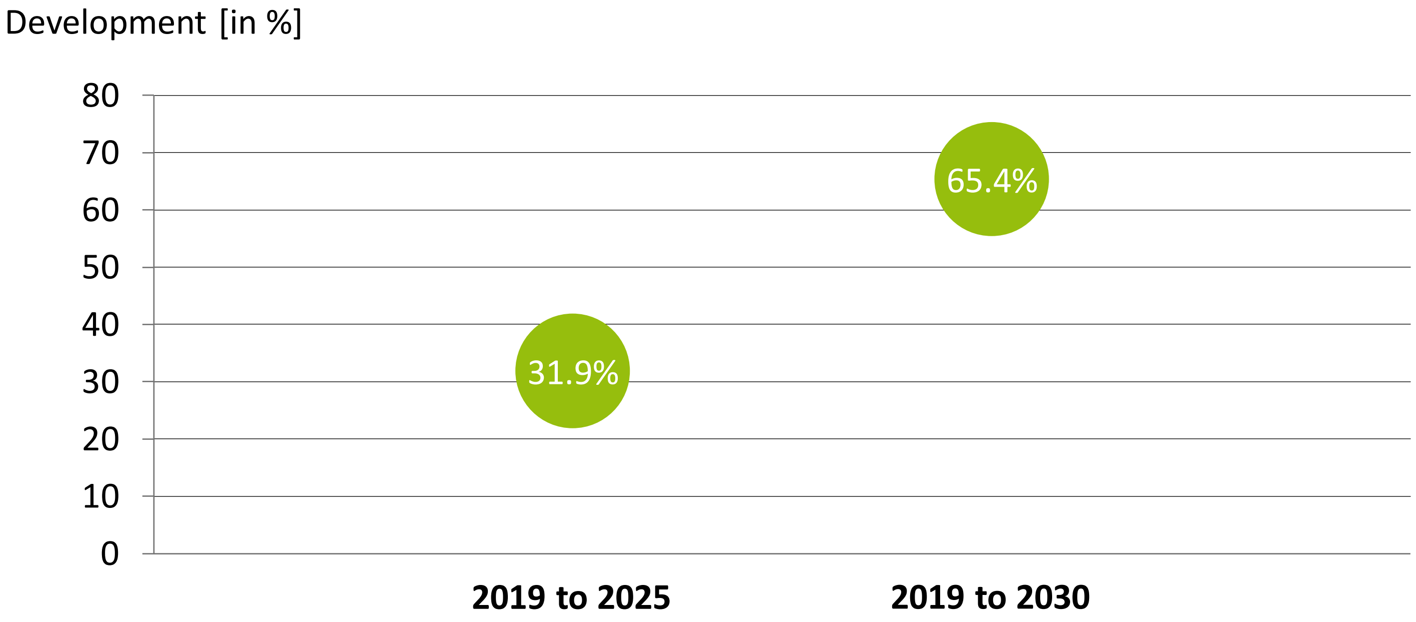
Source: BSL Transportation analysis based on survey (CT); rail development based on Eurostat (2020)

The outlook of the market stakeholders for the CT market in Europe was expected to develop even more positively until 2030

Market stakeholders’ expected volume growth of the total CT market in the long term



Source: BSL market survey

Political declaration on the need to develop CT

Climate change, public concerns for air pollution caused by diesel engines, and unabated road congestion have all directed the attention of European policymakers to Combined Transport.

The European Parliament Resolution on Climate and Environment Emergency of 28 November 2019 has led to the **European Green Deal**, which inspired the European Climate Law. The legislative proposal is to spell out the pace and extent of decarbonization: 55% until 2030 and climate-neutrality by 2050.

Decarbonization and effectively countering the other challenges of our times (pandemic, social inclusion, etc.) cannot be achieved without a major impact on the way transportation is done today. Within the transport sector, when it comes to the longer distance freight segment, Combined Transport delivers.

Ralf-Charley Schultze

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CT's contribution to achieving the transport objectives

UIC, the worldwide professional association representing the railway sector and promoting rail transport! We are faced with a critical challenge on a global scale. To battle climate change, the EU Green Deal aims to make Europe the first carbon-neutral continent by 2050. To get there, Europe has to lower its CO_2 emissions with 40-50% by 2030. Freight transport is responsible for 10% of those emissions. This is mainly caused by trucks. CT combines the various strengths – flexibility and reliability - of both modes, road and rail and at the same time diminishes the clear negative impact on our climate by single mode transportation via road.

Shares of rail freight and particularly of Combined Transport have increased from 2009 to 2018, especially international CT. CT with its growth figures is a key driver in order to achieve the 30by2030 objectives for the rail sector as a reliable system even in times of crisis. This is indorsed also by the positive outlook of the sector for 2022 to 2024 regarding volume and revenues. More and more Big Players are sensitive to the added value of combined transport in an integrated, and tomorrow digitalized supply chain.

The mental shift must be the main key of the year 2021, the Year of Rail, as only a mental shift will lead to a modal shift.

As a result: WE NEED MORE RAIL FREIGHT, and Combined Transport is an integral part of the solution for encouraging a modal shift and ensuring that rail becomes the backbone of future mobility.[1)]

Eric Lambert

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1) https://www.railfreightforward.eu/

Questions & Answers – moderated by Majorie van Leijen

- All questions arising in the chat room during the session were compiled.
- We will answer the questions of general interest within the next minutes.
- All remaining questions will be answered later on.

Your contacts

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