OLIVER WYMAN

IMPACT OF NEW EU ROAD HAULAGE RULES ON COMBINED TRANSPORT

Survey summary

January 2021

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STARTING POINT AND GOALS OF THE SURVEY

STARTING POINT

On 15 July 2020 EU legislation was adopted as part of Mobility Package 1 to comprehensively reform the European road transport sector. The revised rules for access to the road haulage market and the new social/working/posting rules for drivers will take effect in early 2022.

The new Road Haulage Rules might also have an influence on Combined Transport, which uses road haulage for the "first / last mile" transport within the intermodal transport-chain.

The UIRR and the Combined Transport community have been closely following the developments and latest decisions. There are concerns regarding the potential limitations to be imposed by the new regulatory framework on the first / last mile road haulage, the additional cost effects, and the consequences for the overall competitiveness of Combined Transport when compared to long-distance Road Haulage.

SURVEY GOALS

The survey aimed at collecting first hand market views supporting answers of three questions:

1. Will the new regulation impose limitations on first/last mile Road Haulage?
2. Is there an additional cost effect to be expected and to what extend?
3. What are the consequences for the competitiveness of Combined Transport compared to long-distance Road?

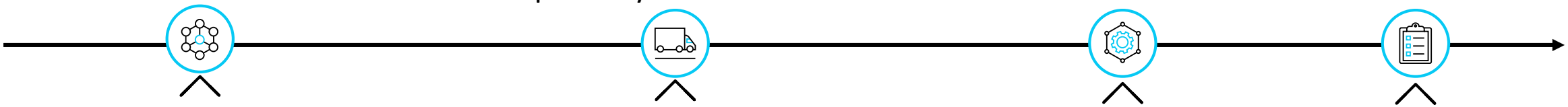
Results have been fed a more in-depth report aiming at increasing the awareness and understanding of potential risks and resulting effects on Combined Transport in Europe due to the changes induced by the new EU Road Haulage Rules.

The report builds the argumentation and narrative for a broader evidence-based corporate and political stakeholder dialogue to mitigate the negative impacts as well as to further develop the European Combined Transport sector.

Source: UIRR - Oliver Wyman

ONCE FULLY IMPLEMENTED, THE NEW EU ROAD HAULAGE RULES MIGHT IMPACT THE WAY HOW FIRST/LAST MILE ON ROAD IN COMBINED TRANSPORT CAN BE OPERATED

Overview where and how regulatory changes in road haulage will impact first / last mile on road in Combined Transport



Access to market

- New **"Cooling-off period"** of 4 days (on top of the 3 cabotage activities within 7 days in a Member State) aims at preventing systematic cabotage in the same Member State by of non-domestic hauliers and could reduce their offer and increase costs of transport in case of switch to domestic hauliers.
- Possibility of Member States to **unilaterally suspend Article 4 of CTD[1]** and add cabotage restrictions on domestic road legs of cross border operations in Combined Transport could limit capacity offer of non-domestic hauliers and increase costs of transport in case of switch to domestic hauliers.

Sizing of locations, productivity of trucks & drivers

- New **"balancing" rule** between supply (vehicle and driver positioning) and transported volumes in a Member States could reduce the opportunity for cross-country capacity optimisation of non-domestic hauliers.
- New **return rule to operational centre of registry for vehicles used in international carriage** at least within 8 weeks after leaving reduces productivity of trucks. It could add additional operating costs for non-domestic hauliers.
- New requirements when and how (within each period of 3 consecutive weeks) a **driver working in international carriage is entitled to return/ take the rest at home base.** It could add additional operating costs for non-domestic hauliers.
- Stricter and more tailored p**osting rules for non-domestic drivers** in a Member, potentially adding additional operating costs for non-domestic hauliers.

Operating conditions

- New requirements to **provide evidence about** all **operations** carried out **during** a **cabotage** could add additional administrative, operational and compliance costs for non-domestic hauliers.
- Adapted **driver rest and duty times eligible for compensation** could add additional costs for non-domestic hauliers.

SG&A & Compliance

- Numerous **additional and stricter compliance requirements for local branches** incl. increased Member State control duties and enforcement possibilities could add additional costs for non-domestic hauliers.

1 CTD = Combined Transport Directive

Source: Expected changes to Regulations 1071 and 1072/2009 and Directive 2006/22, trialogue results, Brussels December 2019, Oliver Wyman analysis

KEY TAKE-AWAYS FROM THE SURVEY REGARDING THE POTENTIAL EFFECTS OF THE NEW EU ROAD HAULAGE RULES ON COMBINED TRANSPORT

Key survey take-aways

1

Expected cost increase for Road Haulage could be higher for short-distance than for long-distance Road Haulage

Cost of short-distance Road Haulage (partner of Combined Transport) operated by non-domestic road hauliers could increase by around +16%.

Cost of long-distance Road Haulage (competitor of Combined Transport) could increase between +5 and +10%, with +5% being seen as probable.

2

Additional capacity restrictions and cost increases could result, if Member States decide to to unilaterally suspend Article 4 CTD

Suspension of Article 4 CTD could lead to a capacity shortage on first / last mile on road. Triggers are an expected capacity shifts of non-domestic hauliers to long-distance Road Haulage and the inability of domestic hauliers to compensate. The capacity effect was estimated estimated between -5 to -10% in average

Additional increase of costs for the first / last mile by +15 to +22% (subject to country) for those volumes, where shippers need to replace non-domestic hauliers by domestic truckers on domestic legs

3

End-to-end Combined Transport using non-domestic road hauliers could see a cost increase of up to 9%

End-to-end Combined Transport using non-domestic road hauliers might see therefore a cost increase between 6% on long-distances (over 1’000 km), 7% on mid-distances (between 500 and 1’000 km), and 9% on shorter distances (between 300 and 500 km)

4

Potential decline in Combined Transport competitiveness

As long-distance road is expected to be able to compensate significant parts of its additional costs, there is a risk of an increased cost gap between the two competing solutions of freight transport. This might trigger an additional demand shift towards long-distance Road Haulage.

Source: UIRR-Oliver Wyman survey among and interviews with Combined Transport actors in 10 European countries

WHILE THERE IS A BELIEVE IN THE BENEFIT OF COMBINED TRANSPORT, SURVEYED PANEL CONFIRMS IDENTIFIED RISKS

Selective quotes from survey and interviews

“ ***Combined Transport has a future*** *as it has better CO_2 footprint and higher operational potentials than Road Haulage. However,* ***the business is becoming*** *more and* ***more difficult and risky*** *to run due* ***increasing cost and competition*** *with road.*

We expect a ***cost increase between 20 and 30% in the first and last mile on road haulage*** *of the Combined Transport, if we implement all measures of the new EU Road Haulages Rules.*

We expect ***long-haul road haulage to see additional cost due to the new EU Road Haulage Rules****; however,* ***the effect will be easier to compensate*** *in daily operation and efficiencies to come i.e., new truck technology or overall schedule optimisation.*

Given the high interdependencies along the value chain, negative domino effects should not be underestimated. In ***case of major volume losses,*** *we will face further* ***challenges as as fix cost*** *(i.e., of terminals)* ***will be redistributed****,* ***triggering a deterioration of the competitive position*** *of Combined Transport.*

In light of the regulatory changes to the legal frame of Road Haulage and the expected negative impact on Combined Transport, ***customers already proactively asking for alternative, more cost-efficient solutions for their Combined Transport volumes.***

Today’s ***intermodal stakeholders*** *are loosing confidence in regulations / regulators and as a consequence* ***might delay or even skip long-term investments in intermodal business.***

Unless governments are willing to increase subsidies for rail (Combined Transport), ***shifts towards road will continue as additional cost are not accepted by the industry****.* ***These shifts will be permanently and irreversible.***

We foresee quite some challenges in preparing and implementing the new EU Road Haulage Rules starting from 2022. We are ***not able to answer quite a lot of questions, because we don’t have sufficient substantiated data available at this moment.*** ”

Source: UIRR-Oliver Wyman survey among and interviews with Combined Transport actors in 10 European countries

A JOINT UIRR-OLIVER WYMAN SURVEY INCLUDED 20 COMBINED TRANSPORT PLAYERS WHO SHARED FIRST HAND VIEWS ON HOW THEIR BUSINESS MIGHT BE IMPACTED

Overview of surveyed Combined Transport players

20

Logistics and road service providers active in Combined Transport from 10 European countries

3

operating models typologies for first/last mile operation:

First / last mile capacity purchaser (approximately 40% of surveyed sample)	• Sources first / last mile capacity at origin and/or destination point, and uses varying levels of domestic and non-domestic hauliers by countries • Low share of own fleet / fleet used in Combined Transport
Regional first / last mile operator (approximately 40% of surveyed sample)	• Uses own as well as sources capacity to operate first / last mile • Own fleet operates in across key markets, organised mainly by regions but managed centrally. Operates first / last mile also in cabotage on domestic legs
Pan-European operator in first / last mile (approximately 20% of surveyed sample)	• Operates fleet across Europe and operates first / last mile in cabotage to increase utilisation • Fleet is positioned and managed by countries and/or cluster of countries

- Overall consistent feedback regarding trends, challenges as well as expected impacts of the new EU Road Haulage Rules on Combined Transport
- Varying answers triggered mainly due to player specifics, i.e. in the operating model for first / last mile, served markets and/or industry segments, company strategy, etc.

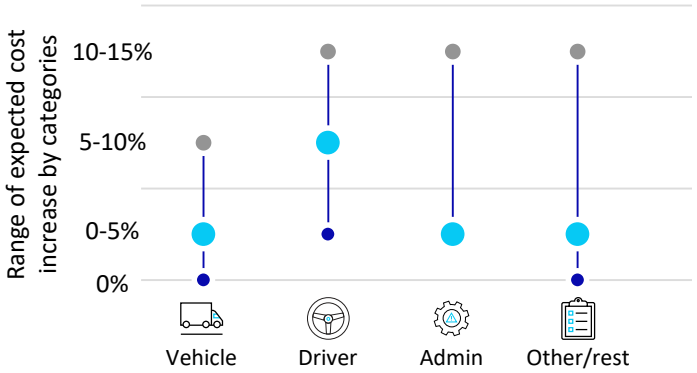
1 Estimated split based on collected business information (overall and Combined Transport specific)
Source: UIRR-Oliver Wyman survey among actors in Combined Transport in 10 European countries

CHANGES DUE TO THE NEW EU ROAD HAULAGE RULES COULD TRIGGER COST INCREASES FOR NON-DOMESTIC ROAD-HAULIERS ON AVERAGE AROUND +16%

Expected cost increase by key changes due to the new EU road haulage rules[1]

New (re)balancing requirement between offered capacity and transported volumes in a country

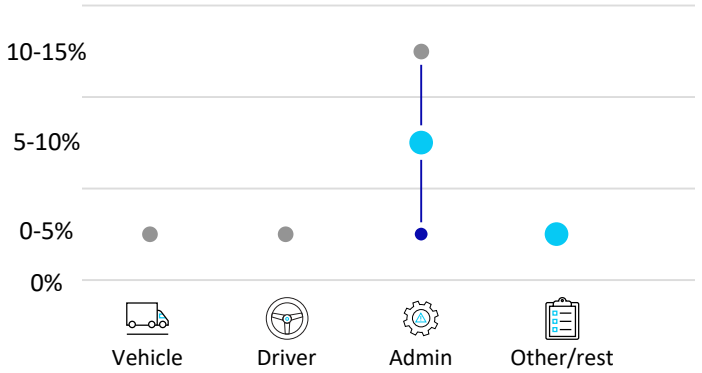
Isolated effect on total cost
average +5.8%[2]



NEW: Vehicles and drivers normally based at an operational centre in the Member State need to be proportionate to the volume of the transport operations carried out by the undertaking in the Member State.

New documentation requirement for operations under cabotage

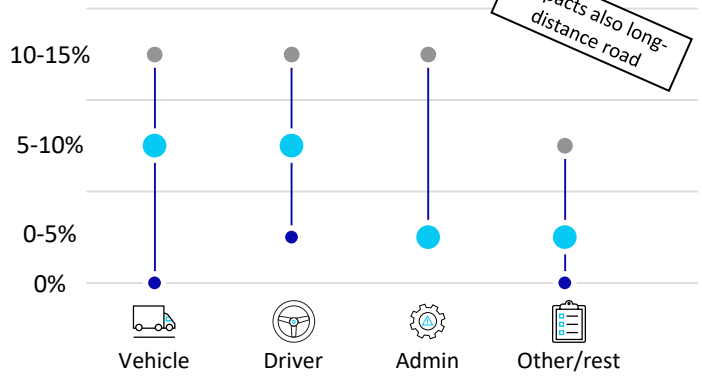
Isolated effect on total cost
average 3%[2]



NEW: Hauliers to provide evidence of every operation carried out in a Member State within a period of 4 days proceeding in the international carriage

New requirements for vehicles and drivers involved in international road transport to return to their operating home bases

Isolated effect on total cost
average +5.5%[2]



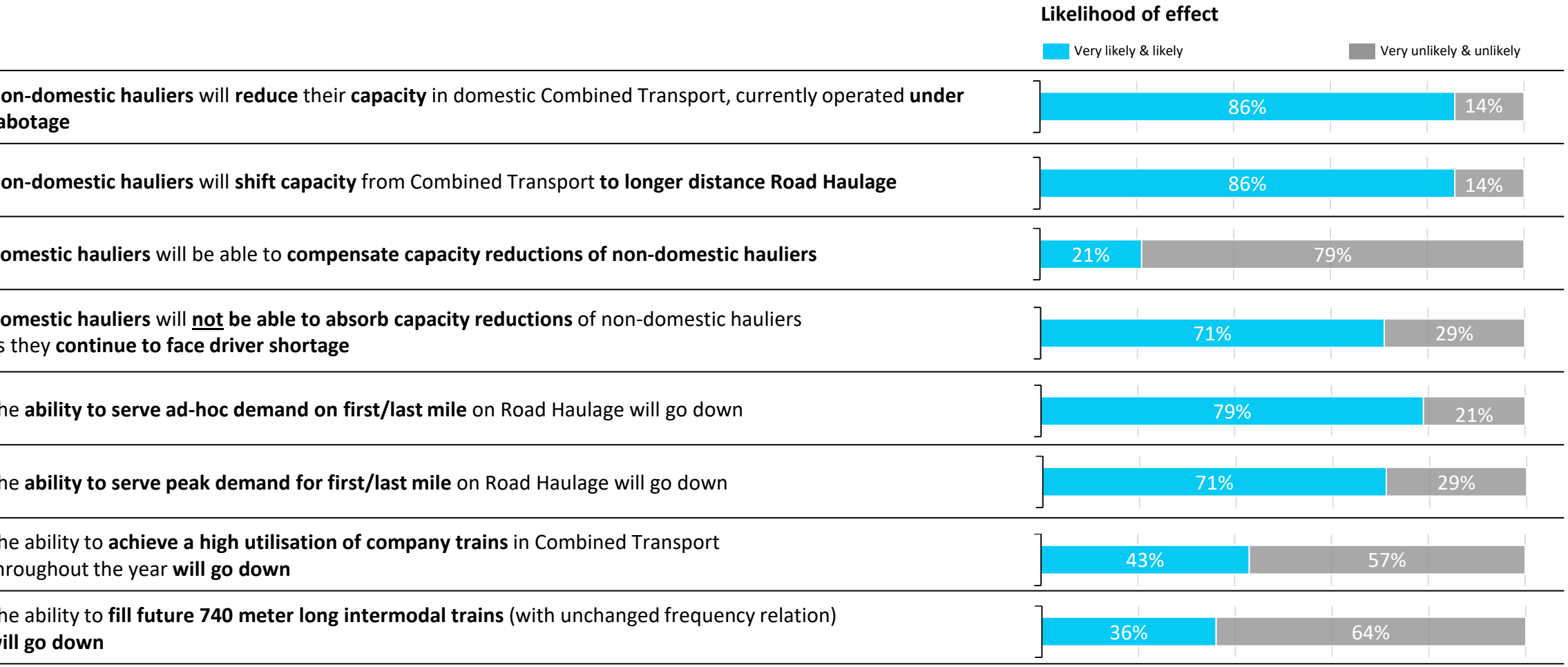
NEW: International truck rotations as well as driver schedules will need to be organised in a way, that:

1. Trucks return to operating centre in country of registration every 6 weeks
2. Eligible driver returns home within each period of 3 consecutive weeks

1 Three major rule changes surveyed in detail, higher personal positioning cost estimated with +1.9% cost increase. 2 Total cost effect estimated by using both average (median and geometric mean) and upper range (3rd quartile) of impacts and average cost share of categories Legend: Median 1. Quartile 3. Quartile of answers provided by interviewees
Source: UIRR-Oliver Wyman survey among actors in Combined Transport in 10 European countries

IF ARTICLE 4 CTD IS SUSPENDED, CAPACITY SUPPLY COULD SHORTEN AS DOMESTIC HAULIERS MIGHT NOT BE ABLE TO COMPENSATE FOR NON-DOMESTIC HAULIERS' DECLINE

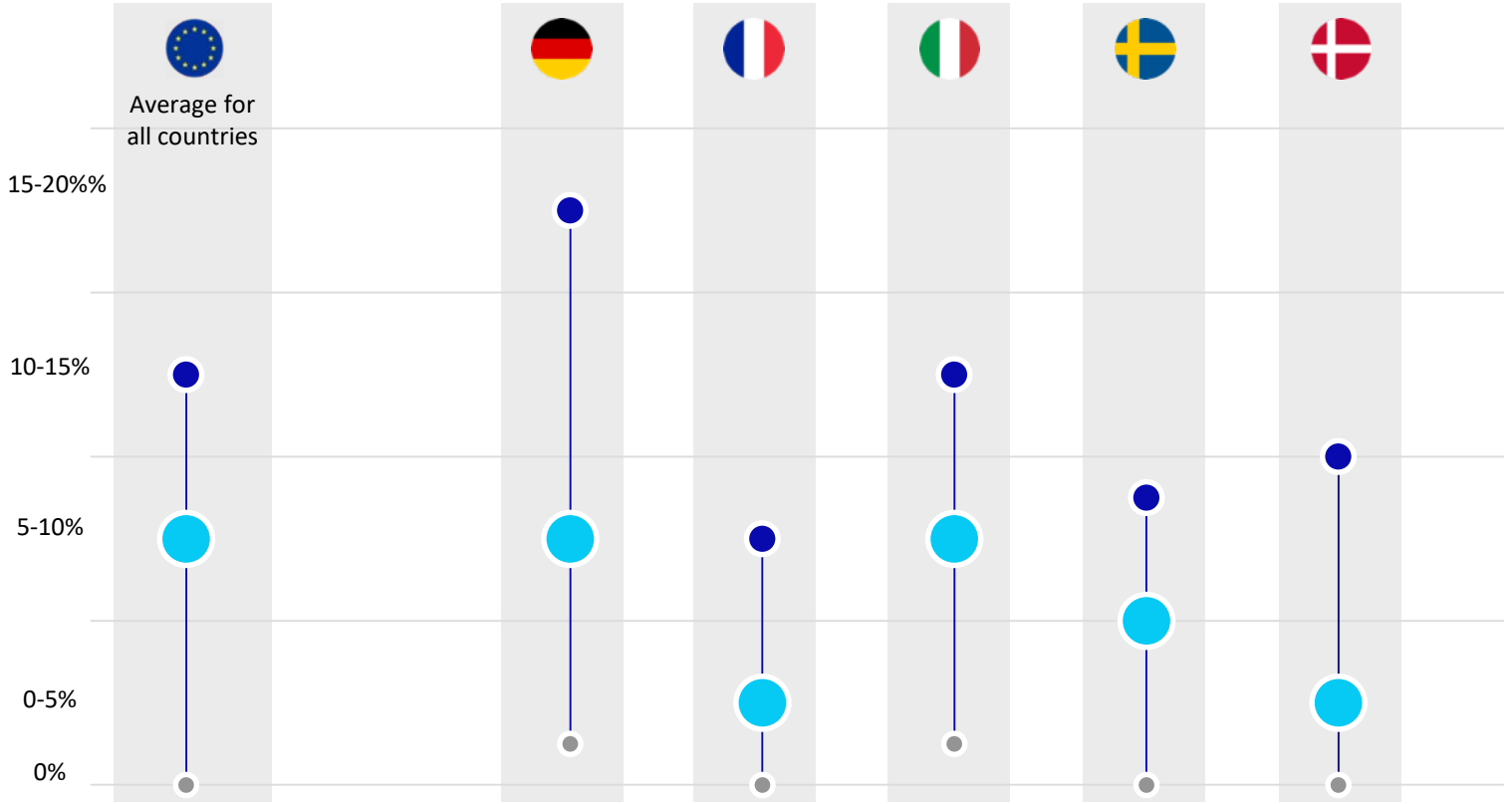
Expected capacity effects due to suspension of Article 4 Combined Transport Directive



Source: UIRR-Oliver Wyman survey among actors in Combined Transport in 10 European countries

IF MEMBER STATES SUSPEND ARTICLE 4 OF CTD, CAPACITY REDUCTION OF INT. FLOWS INVOLVING ROAD LEGS NOT CROSSING BORDERS COULD RANGE BETWEEN -5% TO -10%

Capacity impact for international flows in combined transport involving a road legs, that does not involve border crossing



Legend: Median 1. Quartile 3. Quartile of answers provided by interviewees

Source: UIRR-Oliver Wyman survey among actors in Combined Transport in 10 European countries

The new regulation creates the possibility for Member States to unilaterally suspend Article 4 CTD (exemption of domestic road legs of international Combined Transport operations from cabotage restrictions).

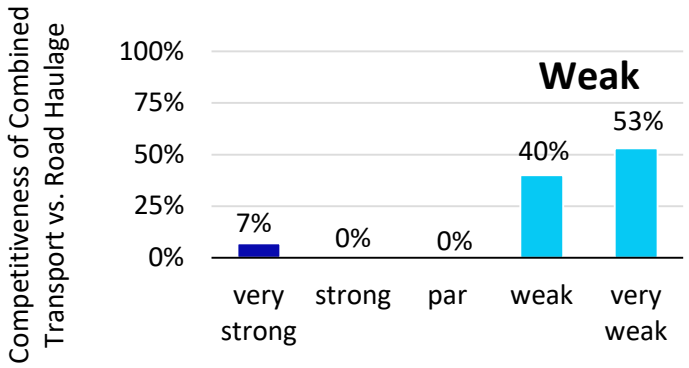
The average (median) volume effects are seen between -5 and -10%, with highest effects key market Germany and Italy where several participants see negative effects of up to -15 to -20%.

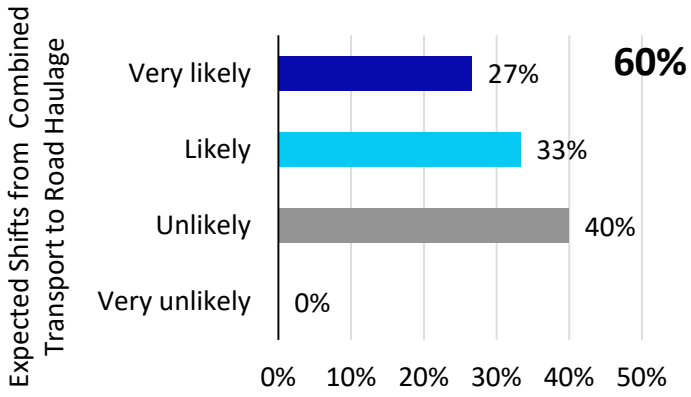
However, there are also some less critical views highlighting opportunities going forward:

> While 1st /last mile cost of Combined Transport on road might go up (negative for rail), we believe that the impact on the long distance outperforms the first/last mile costs, resulting in a more favourable future for Combined Transport

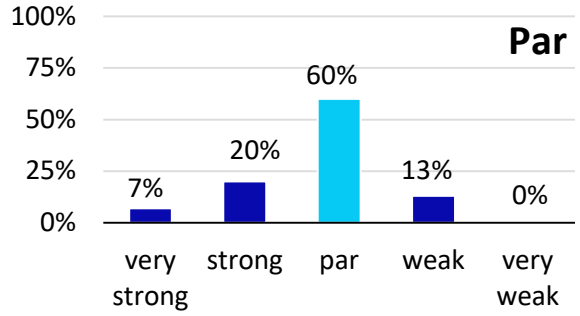
COMPETITIVENESS OF COMBINED TRANSPORT LACKS BEHIND LONG-DISTANCE ROAD – VOLUME SHIFTS TOWARDS ROAD HAULAGE LIKELY

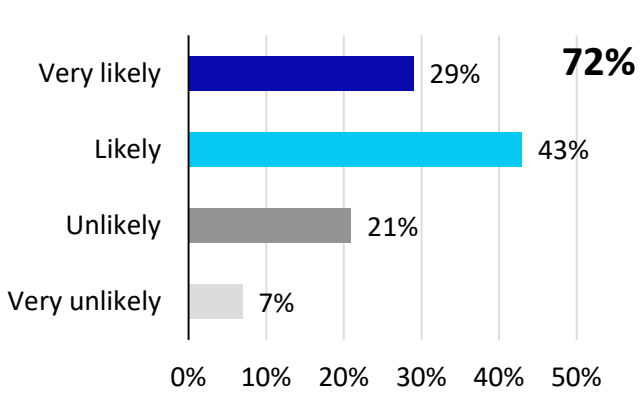
Short-haul
Origin-Destination distance <500 km



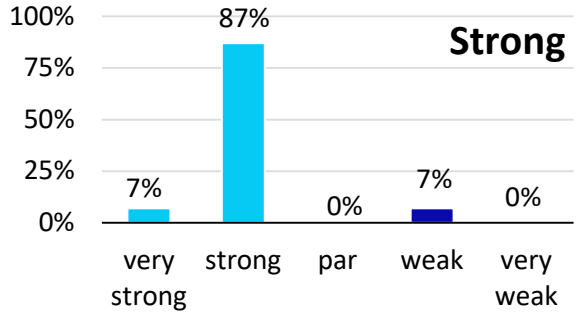


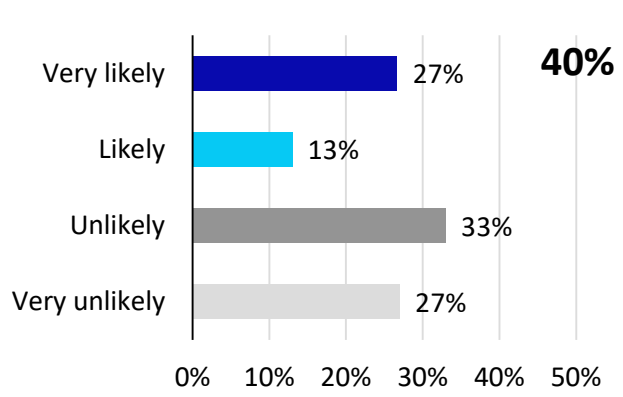
Mid-haul
Origin-Destination distance 500 to 1000 km





Long-haul
Origin-Destination distance >1000 km





xx% likelihood: Sum of very likely and likely
Source: UIRR-Oliver Wyman survey among actors in Combined Transport in 10 European countries

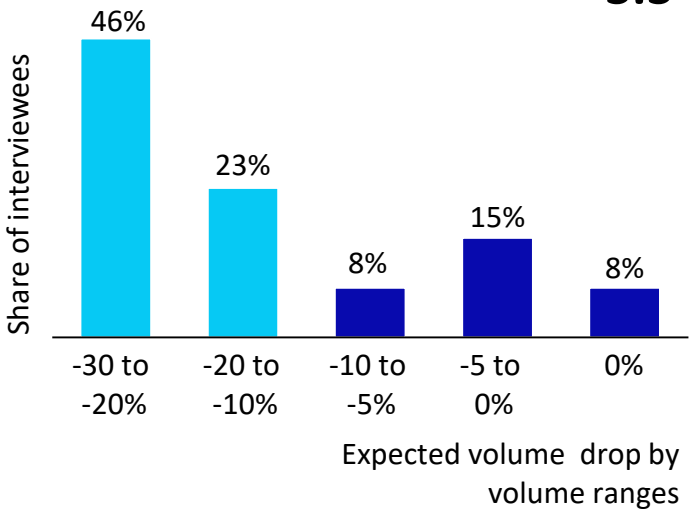
DUE TO THE COMPETITIVE LEVEL WITH ROAD, PRICE INCREASES TO COMPENSATE FOR ADDITIONAL COST COULD TRIGGER A VOLUME CHANGE BETWEEN FACTOR -2 AND -3

Expected volume changes and elasticity in Combined Transport, if prices are increased by 5%

Short-haul
Origin-Destination distance <500 km

70% of interviewees expect a volume **drop between 10 and 30%** in case prices are increased by 5%

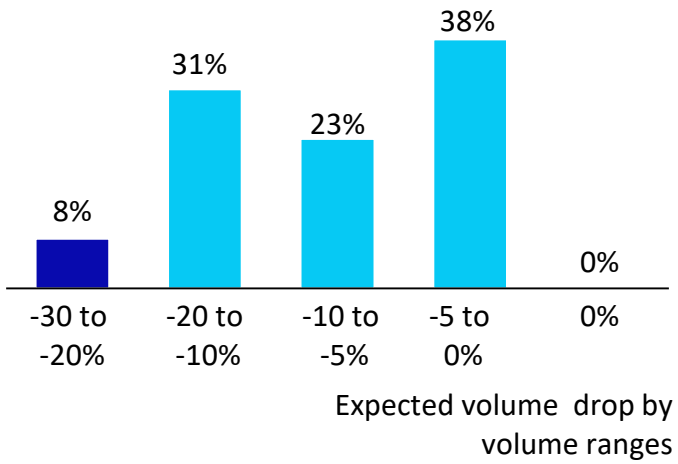
Price elasticity of demand **-3.3**



Mid-haul
Origin-Destination distance 500 to 1000 km

92% of interviewees expect a volume **drop between 0 and 20%** in case prices are increased by 5%

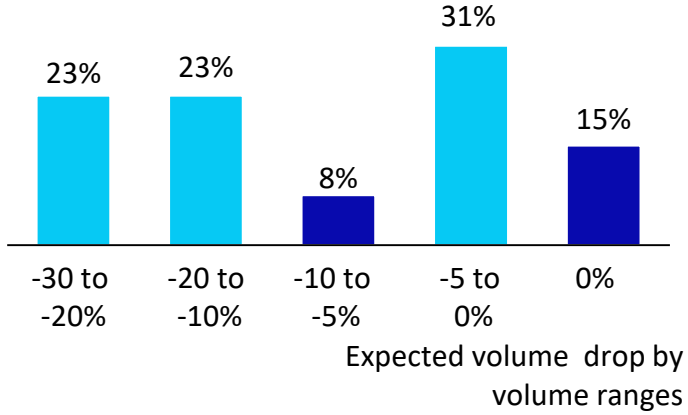
Price elasticity of demand **-1.9**



Long-haul
Origin-Destination distance >1000 km

Split view: **46%** expect a volume **drop between 10 and 30%** while **31%** expect only a marginal volume **drop between 0 and 5%** in case prices are increased by 5%

Price elasticity of demand **-2.2**



Source: UIRR-Oliver Wyman survey among actors in Combined Transport in 10 European countries

COMPARISON OF SURVEYED COST PER KILOMETRE SHOWS THE COMPETITIVE STRETCH OF COMBINED TRANSPORT VERSUS LONG-DISTANCE ROAD HAULAGE

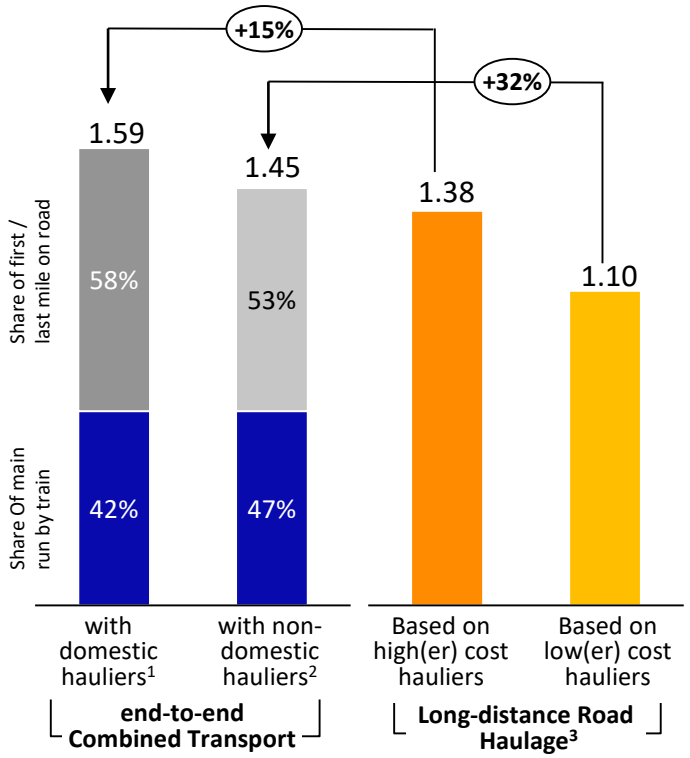
Comparison of average operating cost between Combined Transport and Road Haulage (Euro per km for a CT load unit) for three distance examples

Short-haul

Origin-Destination distance example 450km

Very weak competitive position

of Combined Transport vs. Road Haulage

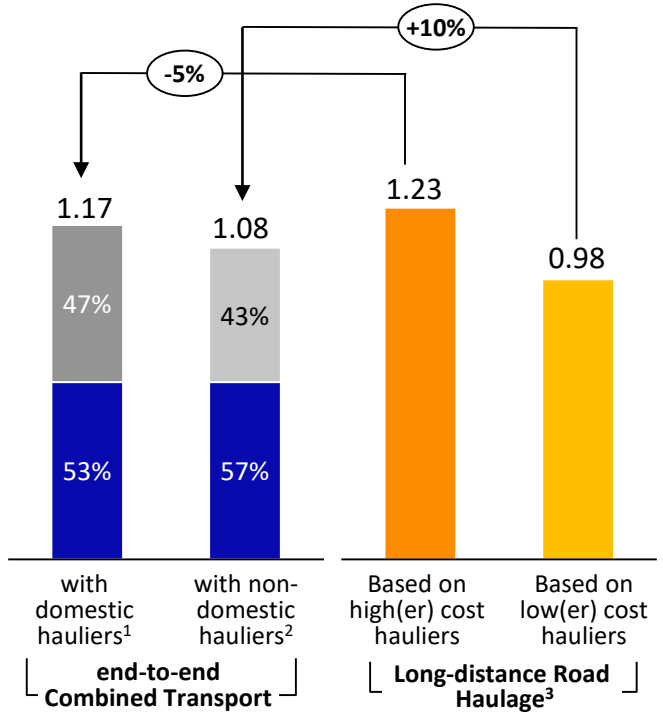


Mid-haul

Origin-Destination distance example 750 km

Approx. on par competitive position

of Combined Transport vs. Road Haulage

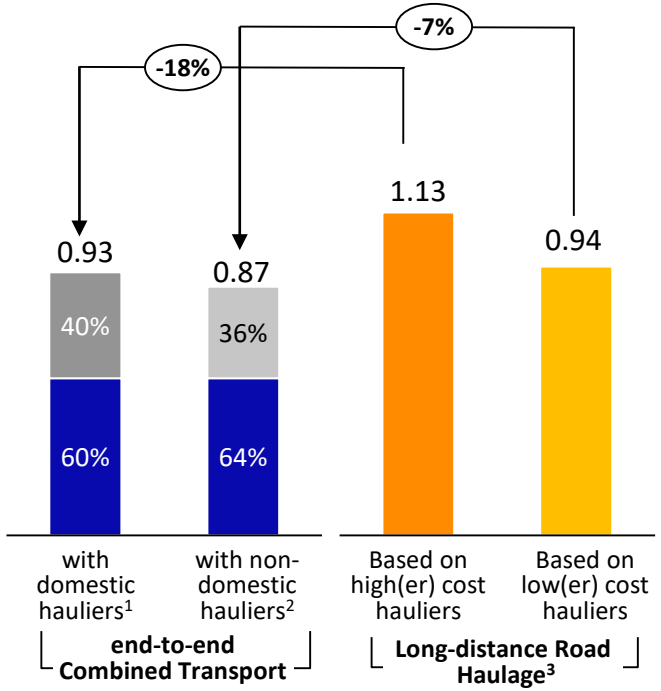


Long-haul

Origin-Destination distance example 1’100 km

Strong competitive position

of Combined Transport vs. Road Haulage



1) First / last mile on road done with domestic hauliers. 2) First / last mile on road done with non-domestic hauliers. 3) Long-haul road competing with Combined Transport

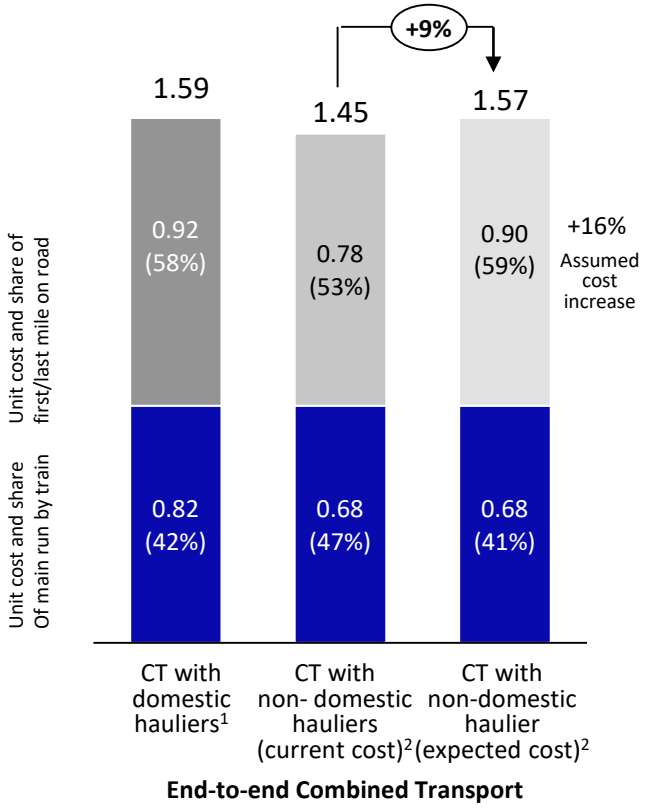
Source: UIRR-Oliver Wyman survey among actors in Combined Transport in 10 European countries

THE INCREASE OF SHORT-DISTANCE COST ON NON-DOMESTIC ROAD HAULIERS COULD TRIGGER A COST INCREASE FOR END-TO-END COMBINED TRANSPORT OF UP TO 9%

Cost in euro per kilometre for a Combined Transport load unit for three distance examples

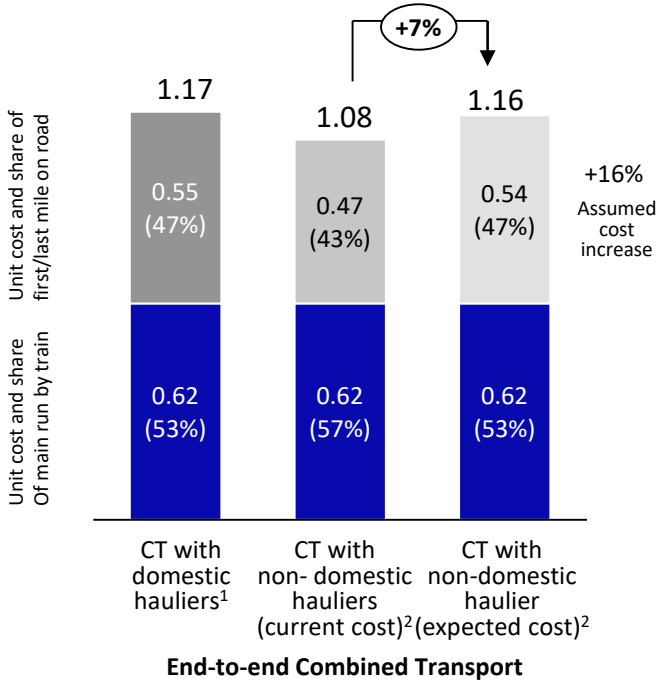
Short-haul

Origin-Destination distance example 450km



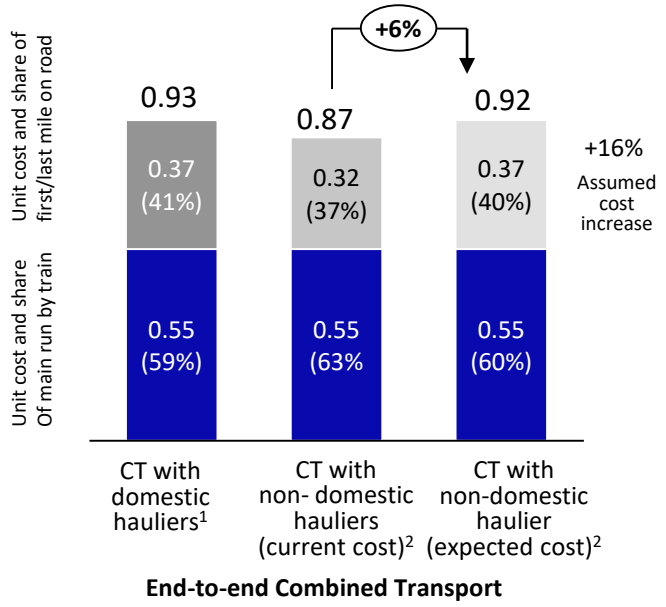
Mid-haul

Origin-Destination distance example 750 km



Long-haul

Origin-Destination distance example 1’100 km



1 First / last mile on road done with domestic hauliers. 2 First / last mile on road done with non-domestic hauliers. 3 Long-haul road competing with Combined Transport

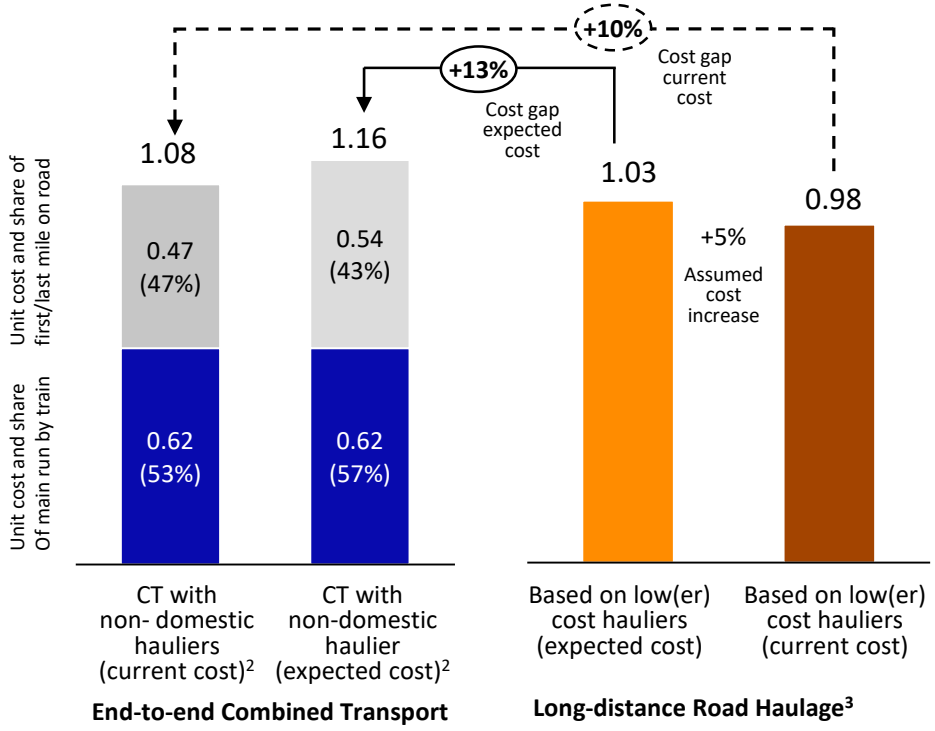
Source: UIRR-Oliver Wyman survey among actors in Combined Transport in 11 European countries

THE EXPECTED COST INCREASE FOR NON-DOMESTIC HAULIERS COULD WEAKEN COMBINED TRANSPORT'S COMPETITIVENESS ON END-TO-END DISTANCES BELOW 1'000 KM

Comparison of current versus forecasted average operating cost of end-to-end Combined Transport and long-distance Road Haulage

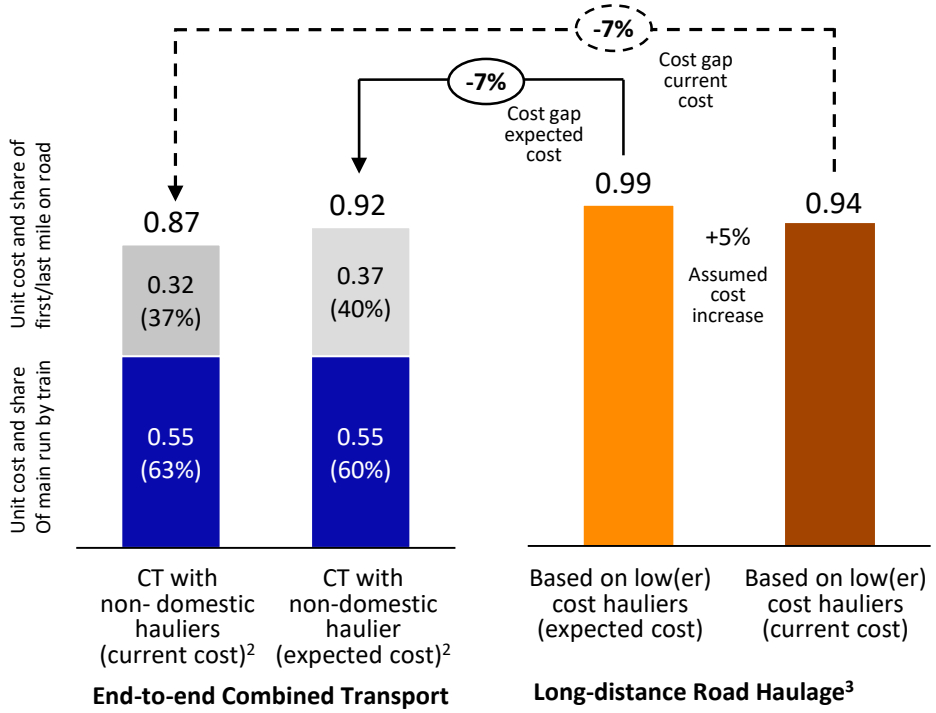
Mid-haul - Origin-Destination distance example 750 km
Euro per kilometre for a Combined Transport load unit

Combined Transport with cost disadvantages versus long-distance Road Haulage - Cost gap increase from 10% to 13%
end-to-end CT with non-domestic hauliers vs. long-distance RH with low(er) cost hauliers



Long-haul - Origin-Destination distance example 1'100 km
Euro per kilometre for a Combined Transport load unit

Combined Transport with cost advantages versus long-distance Road Haulage - Cost gap stays constant
end-to-end CT with non-domestic hauliers vs. long-distance RH with low(er) cost hauliers



1 First / last mile on road done with domestic hauliers. 2 First / last mile on road done with non-domestic hauliers. 3 Long-haul road competing with Combined Transport
Source: UIRR-Oliver Wyman survey among actors in Combined Transport in 11 European countries

55% OF THE PARTICIPANTS THINK THAT THE NEW EU ROAD HAULAGE RULES COULD CREATE HURDLES AND NEGATIVELY IMPACT THE SURFACE FREIGHT TRANSPORT

Overall view on how MP1 will help companies achieving key goals in surface freight transport

Key goals in surface freight transport in Europe	Impact due to the new EU Road Haulage Rules	Goal relevance
Support fair, model neutral competition between different modes of surface freight	44% / 56%	85%
Support fair, modal neutral competition between domestic and non-domestic road hauliers	31% / 13% / 56%	85%
Facilitate model shift and achieve a modal split of rail freight of 30% by 2030, 50% by 2050	38% / 6% / 56%	85%
Maintain supply chains of current price levels	19% / 81%	85%
Reduce CO_2 emissions of surface freight transport	38% / 6% / 56%	85%
Reduce the pollutant emissions of surface freight transport	19% / 44% / 38%	92%
Decrease number of road accidents	31% / 25% / 44%	92%
Reduce road congestion	38% / 6% / 56%	75%
Improve driver shortage in Road Haulage	33% / 12% / 56%	77%

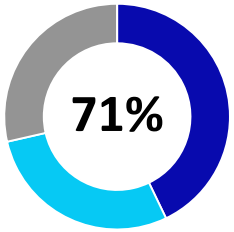
Legend: Rating of effects Very positive and positive | neutral | Negative and very negative

Source: UIRR-Oliver Wyman survey among actors in Combined Transport in 10 European countries

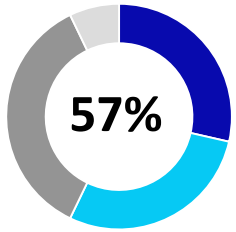
AS A RESULT OF THE NEW ROAD HAULAGE RULES, AN INCREASED ECONOMIC PRESSURE IS EXPECTED ALONG THE COMBINED TRANSPORT VALUE CHAIN

Likelihood of actors in Combined Transport to be exposed to economic risks after new EU Road Haulage Rules are fully implemented

Combined Transport operators

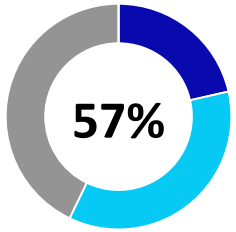


Small to mid-sized operators will be more exposed to risks compared to …

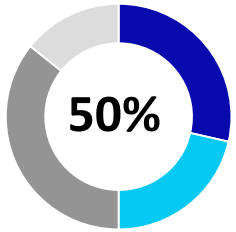


… large operators, who will suffer less from revenue/profit drops or bankruptcy

Railway undertakings

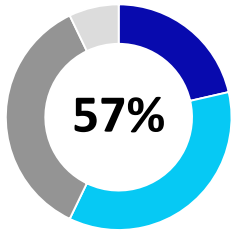


”Private”, non incumbent railway undertakings will be expose higher than

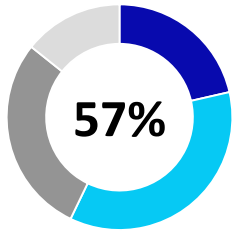


Incumbent railway undertakings

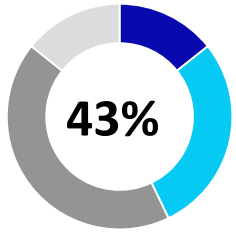
Terminal operators



Small to mid-sized open access terminals as well as …

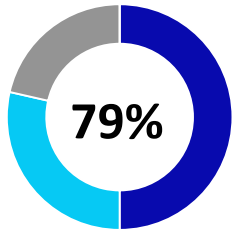


Private, non-open access terminals will more exposed to risks compared to



Large-sized open access terminals which are see as resilient

Other



Those actors, i.e. forwarders that fully rely on Combined Transport and cannot adapt their business model are seen as most exposed to risks

Given the high interdependencies along the value chain, negative domino effects should not be underestimated.

In case of major volume losses, we will face further challenges as as fix cost (i.e., of terminals) will be redistributed, triggering a deterioration of the competitive position of Combined Transport.

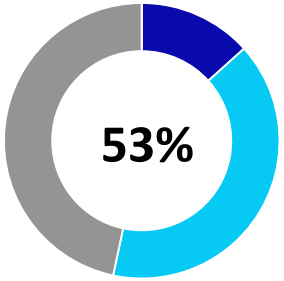
Legend: Likelihood Very likely Likely Unlikely Very unlikely **xx%** likelihood very likely and likely

Source: UIRR-Oliver Wyman survey among actors in Combined Transport in 10 European countries

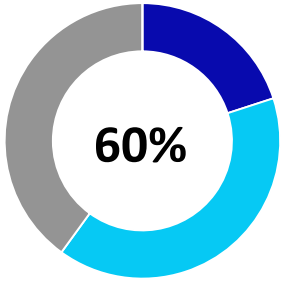
WHILE 53% EXPECT ONGOING GROWTH OF THE COMBINED TRANSPORT BUSINESS, 60% SEE STRONG PRESSURE DUE TO TEMPORARY RESULT DROPS CALLING FOR ACTION

Combined Transport outlook and planed activities

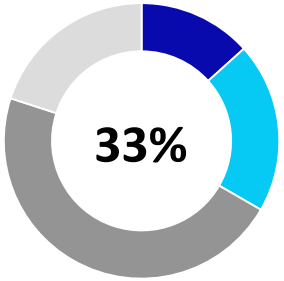
Expected changes where Companies can benefit and/or be put at risk from the new regulatory framework of Road Haulage



53% sees an **ongoing, reasonable growth of their Combined Transport business** going forward, but 43% say this is unlikely pointing at challenges ahead



Temporary reduction of profitability requiring restructuring and transformation is expected by nearly 2/3 of interviewees.

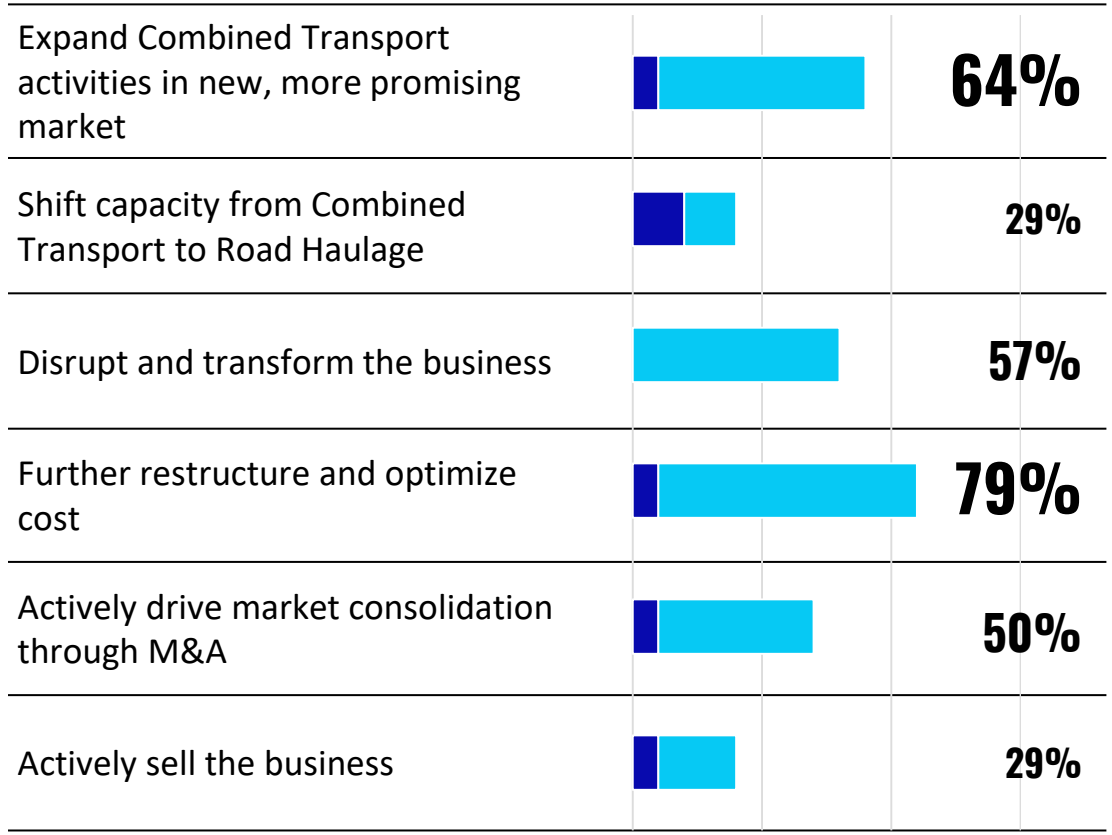


While a **permanent reduction of profitability**, incl. potential risks of bankruptcy is **quiet unlikely**.

Legend: Likelihood Very likely Likely Unlikely Very unlikely **xx%** likelihood very likely and likely

Source: UIRR-Oliver Wyman survey among actors in Combined Transport in 10 European countries

Activities being prioritized to further adapt the Combined Transport business going forward



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