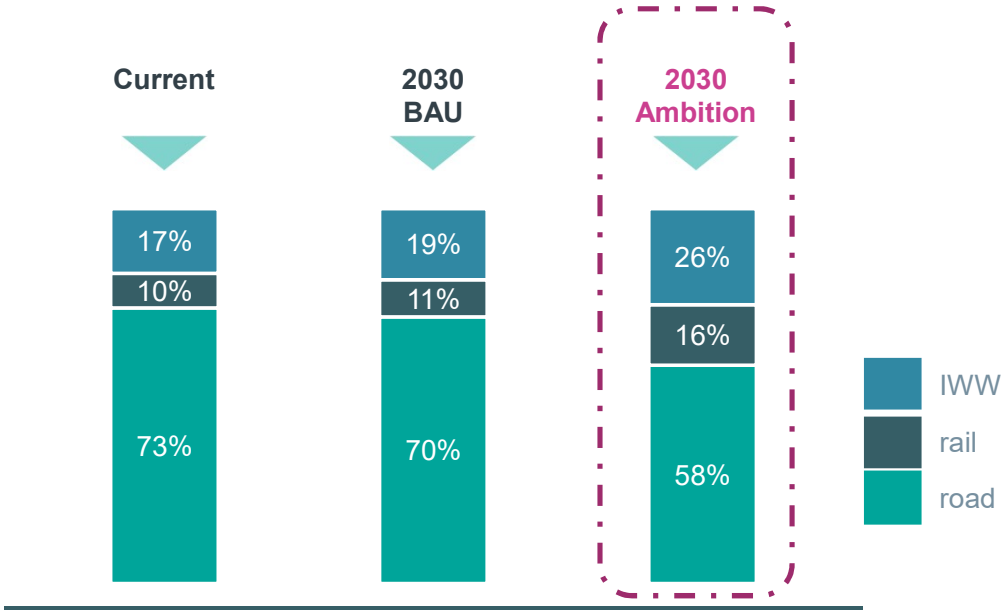
Level playing field in the transport sector

1. Ambition

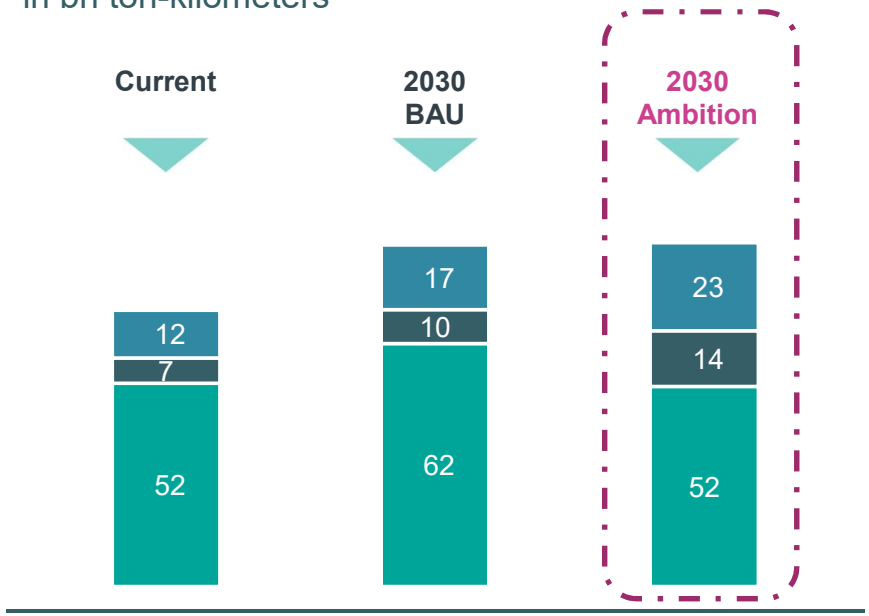
Absorbing the traffic growth by 2030 requires doubling rail freight volumes = modal shift of 7Bln TKM from road to rail*

The rail sector believes is it possible to double its volume by capturing a large share of the forecasted growth in demand

Traffic evolution
in % of modal share



Traffic evolution
in bn ton-kilometers



* TKM = Ton Kilometers

BELGIAN RAIL FREIGHT FORUM

2. Challenge

Rail freight requires consolidation

 X 50 = 

➔ extra costs for first/last miles, feeder network, marshalling, transhipment

➔ train not competitive on short distances

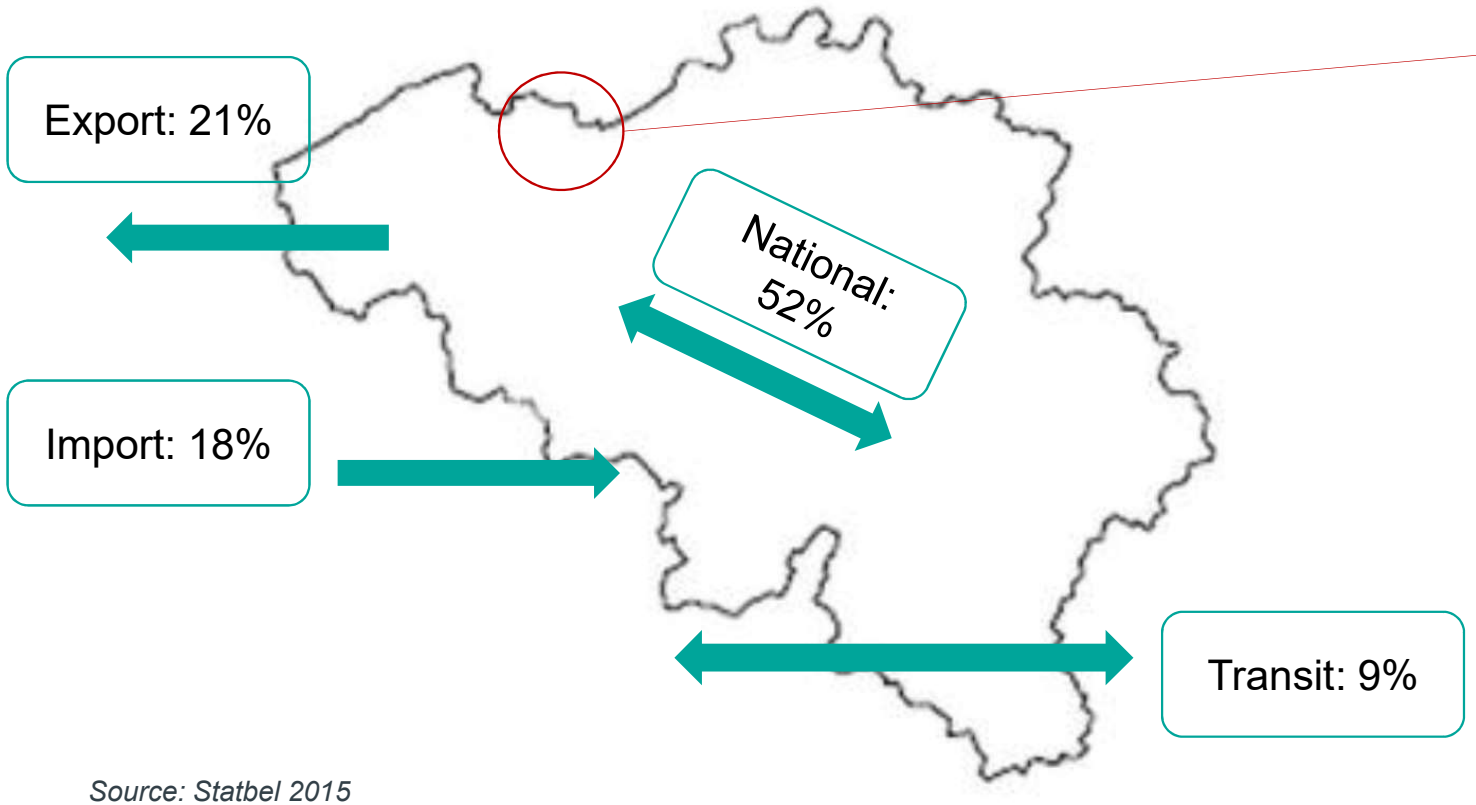
BUT MODAL SHIFT IN BELGIUM = SHORT DISTANCE

➔ need for market incentives

3. Modal shift potential in Belgium

In order to improve mobility, environment & climate

Current road transport in Belgium is primarily < 300 km…



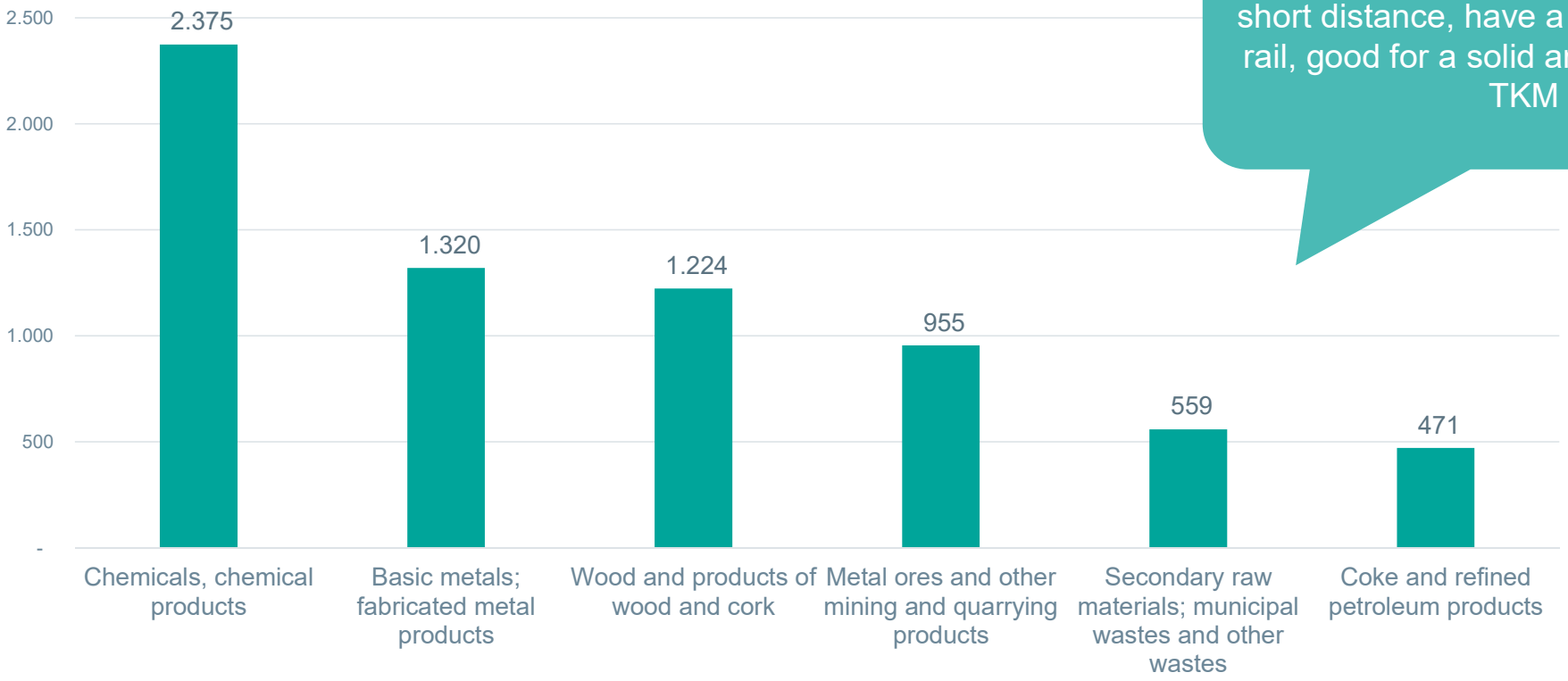
For instance, 69 % of the maritime containers trucked from the Port of Antwerp stay in Belgium

Source: Statbel 2015

BELGIAN RAIL FREIGHT FORUM

12% of BE road transport is on short distance with high rail affinity

Product transported by road within the 100 - 300 KM distance category Mio Ton KM



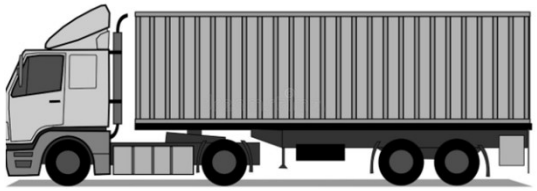
12% of products, transported on the short distance, have a high affinity with rail, good for a solid amount of 6,9BN TKM

* TKM = Ton Kilometer
** by NST

BELGIAN RAIL FREIGHT FORUM

4. Rail Freight Business

USP of rail freight transport



X 50 =

\+

Great for large volumes, very energy efficient, mobility, environmental & climate friendly,

BUT

\-

requiring consolidation/massification to get large volumes
with extra costs for
last/first miles, feeder network, shunting, transhipment

Rail freight products : 1. Block train

1 to 1 connection between rail connected factories

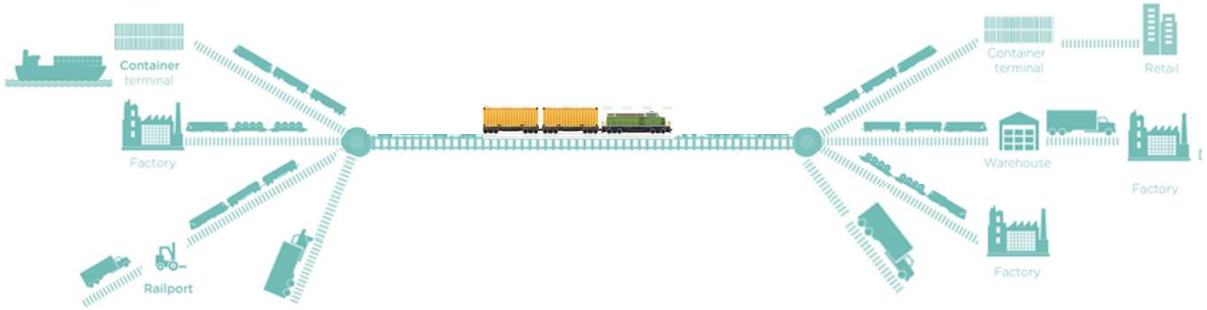
Massive & homogeneous loads

No consolidation needed

Competitive
but

No growth, no modal shift potential

Rail freight products : 2. Intermodal



N to N connections via 1 to 1 connection between rail connected terminals

Container loads from rail, water, road connections

↓

Consolidation needed by first/last mile to rail sidings / feedernetwork / shunting & transhipment

↓

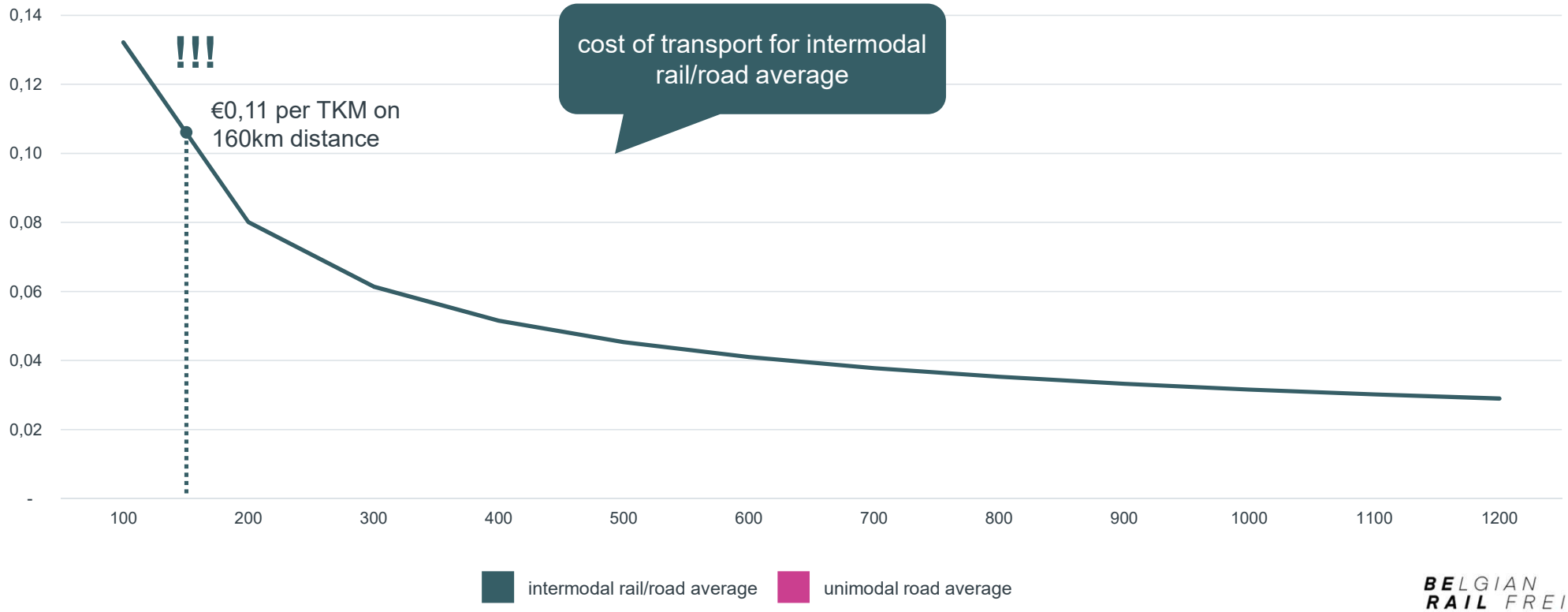
Not competitive on short distance
but

great modal shift potential

cost GAP on the short distance between multimodal and trucking in EU

cost functions by distance

in € per ton-kilometer & km



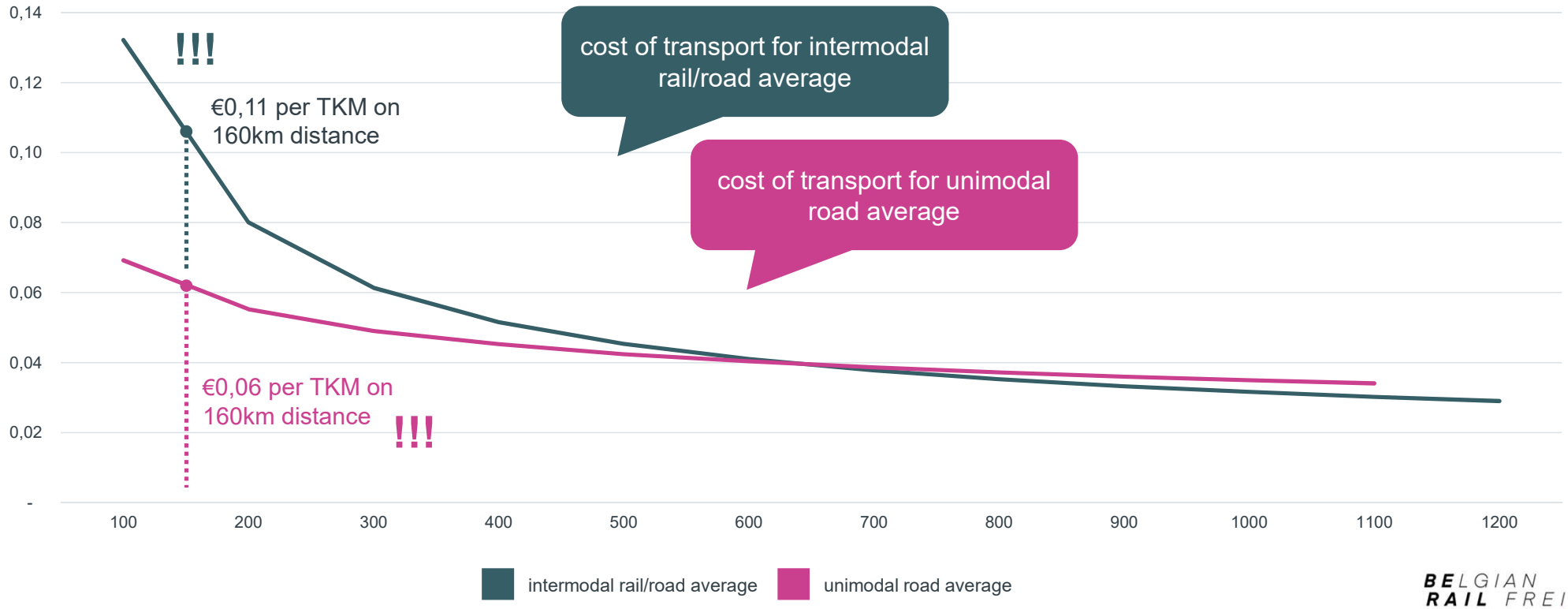
BELGIAN RAIL FREIGHT FORUM

Source: Calculated based on Zgonc et al., (2019), The impact of distance on mode choice in freight transport, European Transport Research Review

cost GAP on the short distance between multimodal and trucking in EU

cost functions by distance

in € per ton-kilometer & km

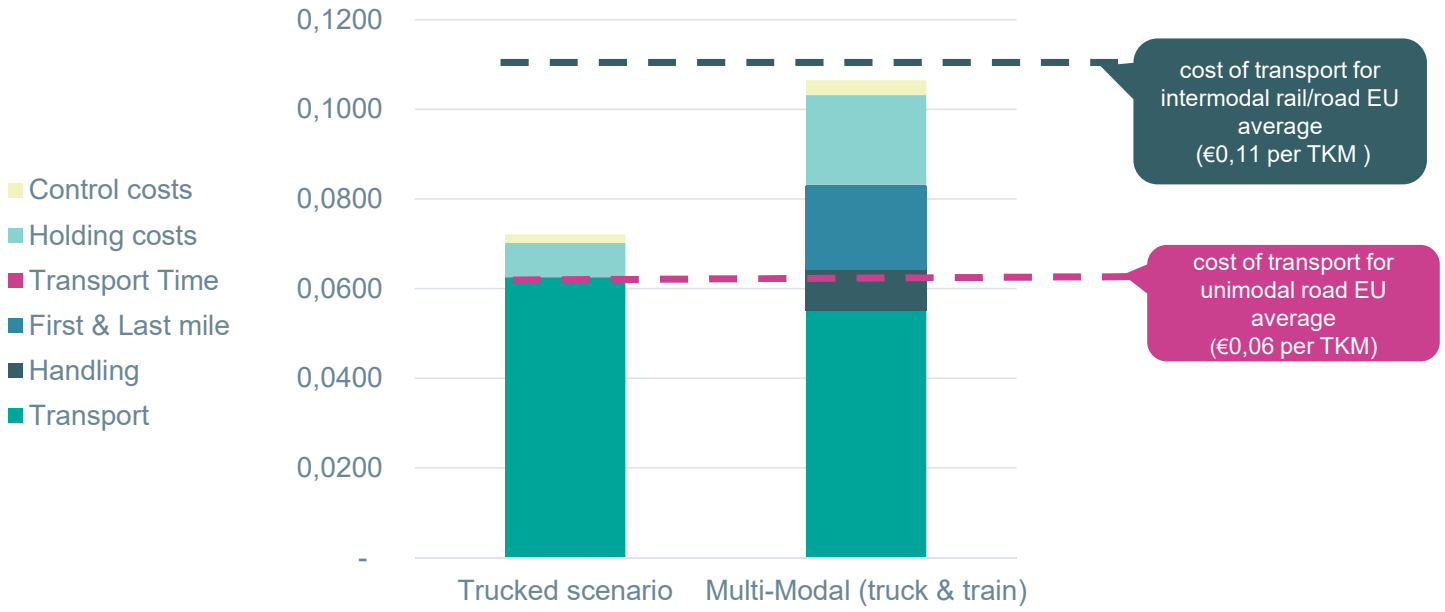


Source: Calculated based on Zgonc et al., (2019), The impact of distance on mode choice in freight transport, European Transport Research Review

cost GAP on the short distance between multimodal and trucking in BE is due to costs associated with the consolidation of volume

Total logistics cost - In € per Ton KM

Intermodal (1) – Average distance of 160 km

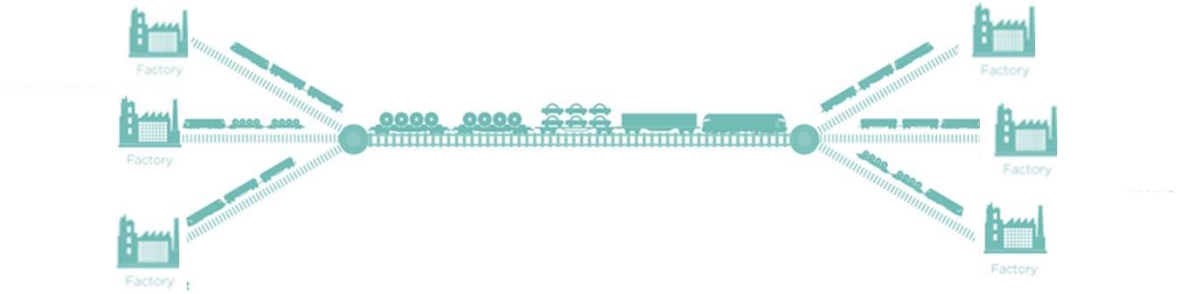


Average cost gap in Belgium smaller than in EU (probably) due to dense network of rail & roads

(1) Based on Vannieuwenhuyse, B., et al, (2019), Haalbaarheidsstudie maatregelenpakket voor een versnelde modal shift naar het goederenspoorvervoer, in opdracht van de Vlaamse overheid, Departement Mobiliteit en Openbare Werken, Afdeling Beleid, ir. Ilse Hoet.

BELGIAN RAIL FREIGHT FORUM

Rail freight products : 3. Single Wagon Load



N to N connections via 1 to 1 connection between rail connected major shunting yards

Heterogeneous loads from rail connected factories

↓

Consolidation needed by first/last mile to rail sidings / feedernetwork / shunting

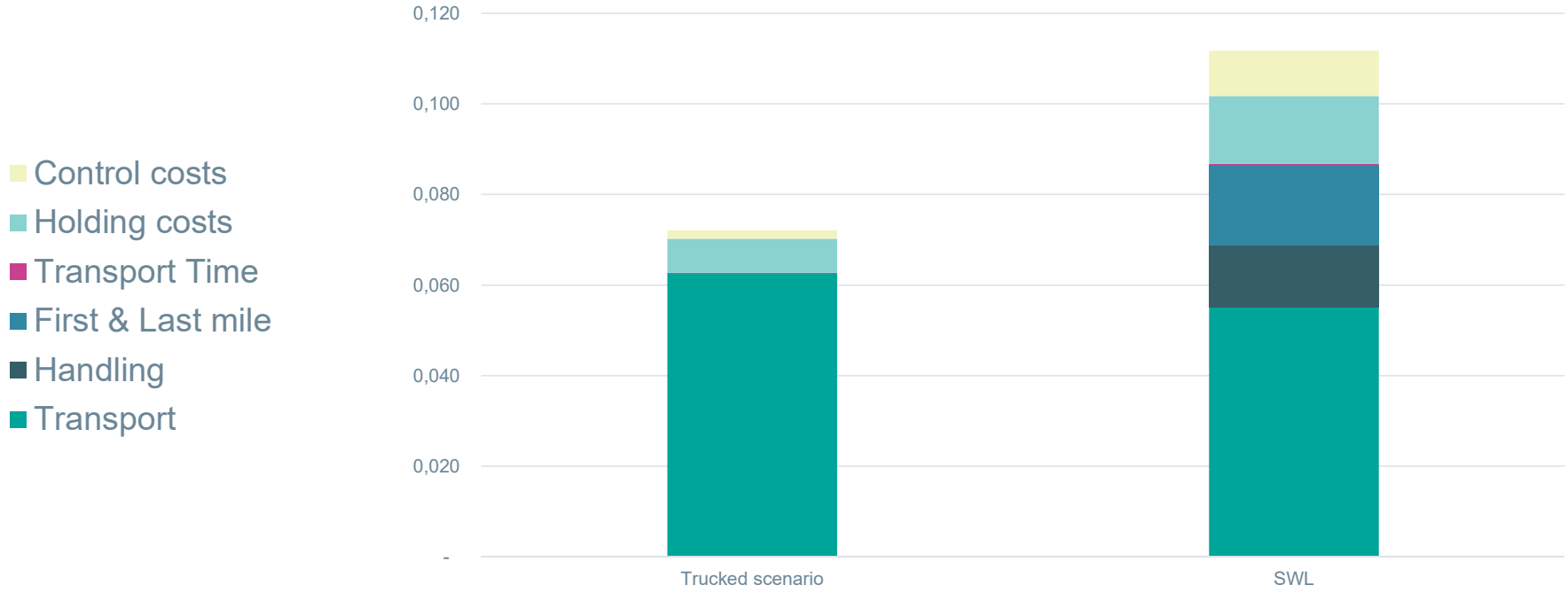
↓

Not competitive on short distance
but

limited modal shift potential

cost GAP on the short distance for single wagon load in BE increases further primarily for costs associated with the consolidation of volume

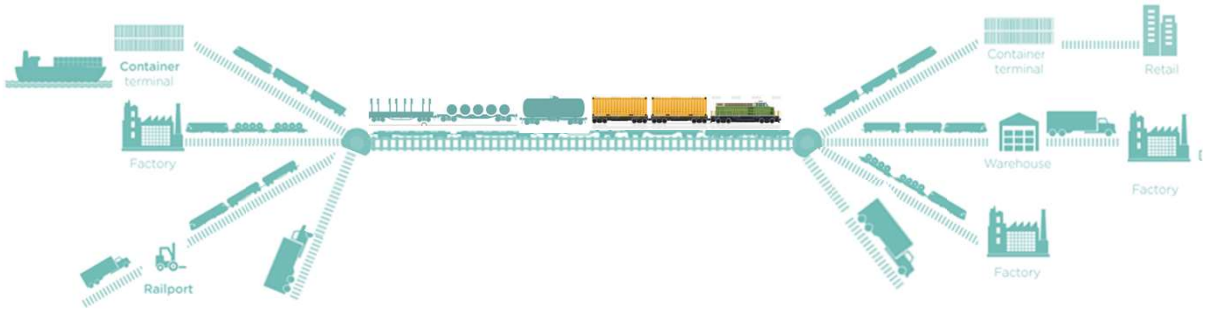
Total logistics cost - In € per Ton KM



(1) Based on Vannieuwenhuyse, B., et al, (2019), Haalbaarheidsstudie maatregelenpakket voor een versnelde modal shift naar het goederenspoorvervoer, in opdracht van de Vlaamse overheid, Departement Mobiliteit en Openbare Werken, Afdeling Beleid, ir. Ilse Hoet.

BELGIAN RAIL FREIGHT FORUM

Rail freight products : 4. Mixed trains (swl & intermodal)



N to N connections via 1 to 1 connection between rail connected terminals & shunting yards

Heterogeneous & container loads from rail, water, road connections

↓

Consolidation needed by first/last mile to rail sidings / feedernetwork / shunting & transhipment

↓

Not competitive on short distance
but

huge modal shift potential

5. Reducing the consolidation cost in Belgium is one of the keys to more modal shift

How to reduce the consolidation cost in Belgium ?

1. **Cost reductions & productivity gains through better Infrastructure & capacity management (working groups Infra Investment & Infra Service Level Agreement of Masterplan)**

2. **Cost reductions & productivity gains by Railway Companies (conclusions kick-off seminar Masterplan)**

3. **Consolidation/massification of volume by supporting :**

- **Shunting :** Composing trains equivalent to 50 trucks requiring marshalling of wagons etc
- **First & Last Mile :** < 15 km required to deliver door to door service by rail or other mode
- **Feeder network :** < 150 km trains need support to sustain a sufficient fine maize network within Belgium
- **Transshipment :** extra handling required to put goods on/off rail from other transportmodi

WITHOUT MEASURES

=

VERY LIMITED INCREASE OF MODAL SHIFT IN BELGIUM

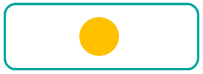
BELGIAN RAIL FREIGHT FORUM

6. Evaluation of the current support programs

- Quantitative : Closing the cost gap
- Qualitative : Necessary criteria for effectiveness

General evaluation of the incentive schemes

Do current or proposed incentive schemes address the consolidation challenge for BE modal shift ?

	Single Wagon Load (SWL) Beneficiary = Industry via RU	Combined Transport (CT) Beneficiary = CT Operator & Terminals	Maritime Bundling Beneficiary = RU	Proposal Febetra Beneficiary = Road transporter
First & Last Mile				
Shunting				
Feeder network				
Transhipment	N.A.			

The program addresses the cost difference
The program addresses the cost difference partially but could be improved
The program does not address the cost difference

Mixed trains: combining train load, single wagon load and / or intermodal services

BELGIAN RAIL FREIGHT FORUM

General evaluation of the incentive schemes

Do current or proposed incentive schemes address the consolidation challenge for BE modal shift ?

	Single Wagon Load (SWL)	Combined Transport (CT)	Maritime Bundling	Proposal Febetra
	Beneficiary = Industry via RU	**Beneficiary = CT Operator & Terminals**	**Beneficiary = RU**	**Beneficiary = Road transporter**
First & Last Mile	Yes for rail connected sidings but existing budget ceilings are overrun and further volume growth is not supported resulting in a status quo	No	Yes for maritime units	Yes
Bundling	Yes, it helps maintaining a dense network, but could be improved if mixed trains would be allowed	Yes but could be improved if mixed trains would be allowed	Yes for maritime units	Yes
Short Distance trains	Yes but also provides an incentive for longer distances which may be less needed	Yes but also for longer distances (less needed) & existing budget ceilings are overrun and further volume growth is not supported resulting in a status quo	Yes but international, long distance connections are also in focus which may be less needed	No, yet it requires a dense network of short distance trains in Belgium which can be set up if the current incentive schemes are adapted
Transhipment	N.A.	Partially	No	Yes

The program address the cost difference
The program addresses the cost difference partially but could be improved
The program does not address the cost difference

Mixed trains: combining train load, single wagon load and / or intermodal services

BELGIAN RAIL FREIGHT FORUM

Other qualitative criteria for incentive schemes

the effectiveness of future programs to realise the ambition for rail

1. **Open to new types of rail way production**
   As to foster innovative offerings as to better answer changed customer demands

2. **Credible impact on decision making**
   And should therefore cover sufficient scale with the key decision makers in the supply chain as the beneficiary

3. **Based on a logistic systems view for Belgium**
   That enhances proper coverage of the whole territory and thus primarily focuses on the short distance logistic services

4. **Stimulate cooperation between parties**
   Very much needed to share capacity and data as to increase asset utilization and productivity

5. **Lead to structural change**
   As to ensure a sustained modal shift

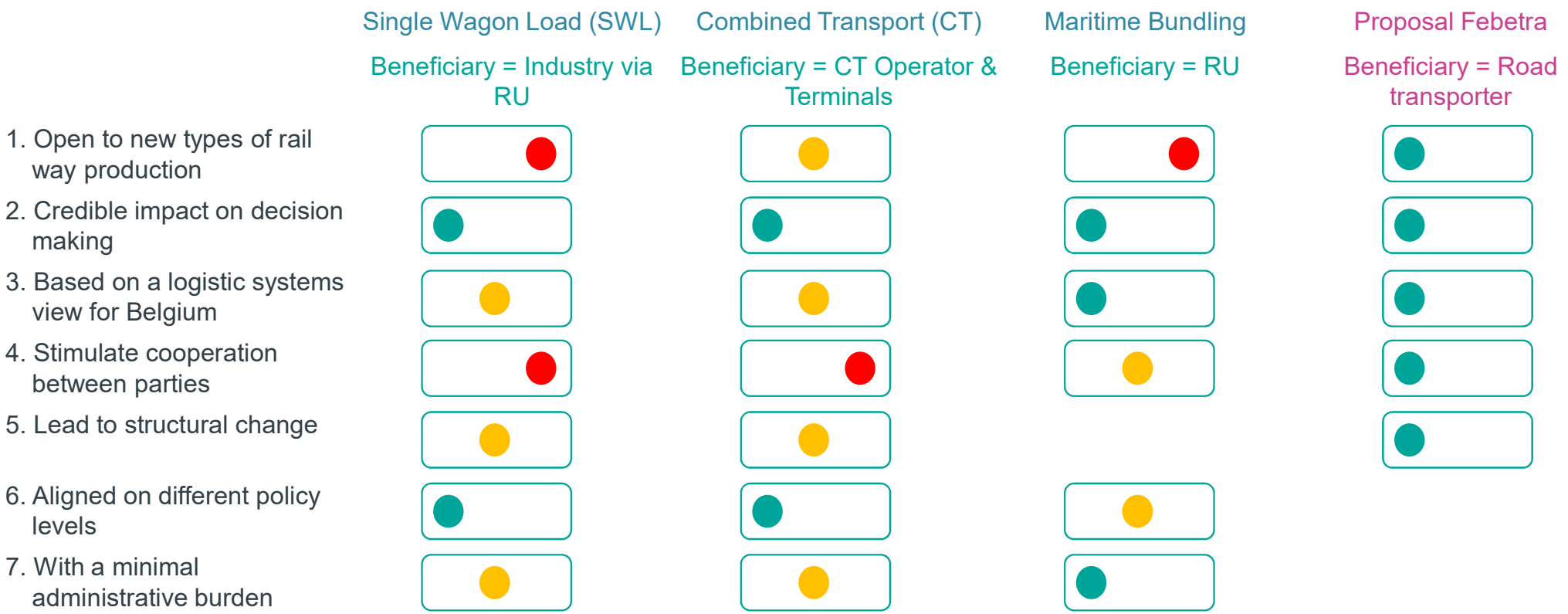
6. **Aligned on different policy levels**
   And thus compatible with EU regulation, thereby respecting the division of political powers in Belgium

7. **With a minimal administrative burden**
   That is transparent and easy to control for the government and simple to administer by the beneficiary

8. **Ensure fair competition**
   With respect for national and EU competition rules

BELGIAN RAIL FREIGHT FORUM

qualitative: Current programs match these criteria only partially



The program matches the criteria
The program matches the criteria but could be improved
The program does not match the criteria

BELGIAN RAIL FREIGHT FORUM

qualitative: Current programs match these criteria only partially

AS IS	Single Wagon Load (SWL)	Combined Transport (CT)	Maritime Bundling	Proposal Febetra
	Beneficiary = Industry via RU	**Beneficiary = CT Operator & Terminals**	**Beneficiary = RU**	**Beneficiary = Road transporter**
Open to new types of rail way production	Not open for mixed trains (i.e. SWL trains with both conventional and intermodal wagons) as only conventional wagons are eligible.	Mixed trains with both conventional and intermodal wagons are only eligible for the CT subvention (for the intermodal part), and not for the SWL subvention.	yes but limited to maritime containers	Open to all types of transport
Credible impact on decision making	Prevents a reverse modal shift and has a huge positive effect for the industry	Prevents a reverse modal shift in national short distance combined transport and resulted in new traffic (LORO/RORO/…)	New traffic has resulted (shuttles and international connections)	Is highly likely given that the beneficiary of the support is the decision maker for the choice of the transport mode
Based on a logistic systems view for Belgium	Yes but current model is in favour of long distances as formula is based on kilometres	Yes but current model is in favour of long distances as formula is based on kilometres	Indeed as it focusses on bundling volumes in the ports	Focus on modal shift within Belgium assuming is that it will be supported by a system of high frequent short distance rail / IWW connections

The program matches the criteria
The program matches the criteria but could be improved
The program does not match the criteria

BELGIAN RAIL FREIGHT FORUM

qualitative: Current programs match these criteria only partially

AS IS	Single Wagon Load (SWL)	Combined Transport (CT)	Maritime Bundling	Proposal Febetra
Stimulate cooperation between parties	No incentive for open access trains or asset sharing. RU is the beneficiary for their own traffic	No incentive for open access trains or asset sharing. RU is the beneficiary for their own traffic	Various parties are working together to develop the opportunities but no stimulus for open access trains	Cooperation between shippers, transporters, terminals and RU/IWW is crucial for reaching its potential
Lead to structural change	Provided above concerns are addressed and critical mass can be obtained, structural change is possible and dependency on subsidies diminishes	Provided above concerns are addressed and critical mass can be obtained, structural change is possible and dependency on subsidies diminishes	Awaiting the 1st year evaluation results	Provided that the support for the adaptation of assets is part of the proposal
Aligned on different policy levels	Compliant with EU regulation	Compliant with EU regulation	Compliant with EU regulation Complimentary to CT as longs as modalities of support remain different and reporting is aligned	This will depend from the regulatory design of the support program
With a minimal administrative burden	Quarterly declarations and checks could be more agile	Quarterly declarations and checks could be more agile	Quarterly declarations and checks are agile	This will depend from the regulatory design of the support program

The program matches the criteria
The program matches the criteria but could be improved
The program does not match the criteria

BELGIAN RAIL FREIGHT FORUM

7. Benchmark with other EU-countries :

Support budgets & modal shift in leading European countries

Belgium risks to miss the train in Europe

	Modal share	*€ Mio per year (1)*	*€ Mio Subvention per Bln Ton KM*	
Switzerland	35%	259	22,2	The Heroes
Austria	32%	310	13,9	
Germany	18%	563	5,0	Shaping up
Italy	14%	100	4,5	
France	10%	195	5,8	
Belgium	**9%**	**17**	**2,4**	Lagging behind
Netherlands	6%	15	2,3	

(1) Annual budgets for non-infrastructure support mechanisms such as: reduction of TAC, SWL and Intermodal operational support, support to operators for development of connections

BELGIAN RAIL FREIGHT FORUM

8. Conclusions :

the modal shift in Belgium requires the redesign of incentives

- The highest need and potential for modal shift in Belgium is on the **short distance** transportation services.
- Rail solutions, in particular multimodal ones –**can be** competitive with the unimodal road scenario on much shorter distances **if the right conditions are in place**
- Creating the right conditions is a **joint responsibility** of Railway Undertakings, the Infrastructure Manager and Authorities
- Support mechanisms are a crucial for modal share as demonstrated in other EU countries
- modal shift in Belgium can really grow but **without the right support mechanisms, reversed modal shift is also likely**(1)

(1) From: Bart Jourquin, 2019, Estimating Elasticities for Freight Transport Using a Network Model: .

BELGIAN RAIL FREIGHT FORUM

the modal shift in Belgium requires the redesign of incentives

Improving the current schemes while rolling out the Febetra proposal, can boost the modal shift in Belgium

1. focus **incentives to lower consolidation cost** of rail : marshalling/shunting, first-last mile, feeder network, transshipment

2. **cover the full supply chain** and thus also incentives for trucking or other players to go intermodal

3. make incentive schemes **more flexible (not single railway product approach**)

4. Incentives budgets should **increase with the volume shifted** until build up the economic efficient volume

5. Other alternatives : e.g. direct cost reductions of Track Acces Charges, investment incentives in hardware & innovation, …

or

allow railways to benefit from the internalisation of its external benefits

BELGIAN RAIL FREIGHT FORUM

Next steps