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„Analyses of cost increases in rail freight traffic due to regulatory interventions“

A study on behalf of
Interessensgemeinschaft der Bahnspediteure e.V. (IBS),
UIRR International Union for Road-Rail Combined Transport, Brussels

Karlsruhe, 17 April 2015

Agenda

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1. Introduction / Objectives of the study
2. Cost structures road and rail freight traffic
3. Selection and calculation of traffic
4. Regulation in rail freight traffic and effects on cost situation
5. Effects on the competitiveness of rail freight traffic

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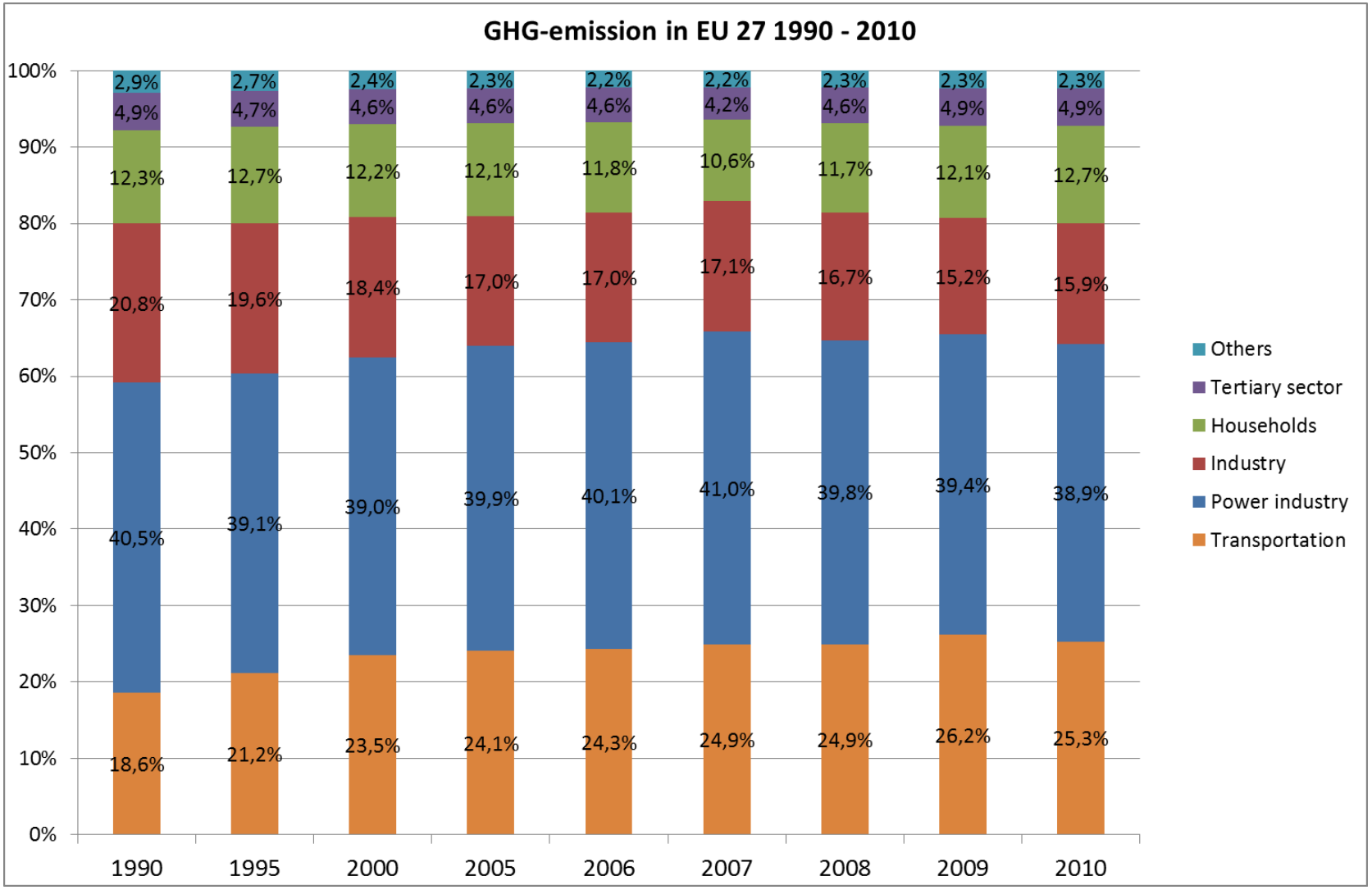
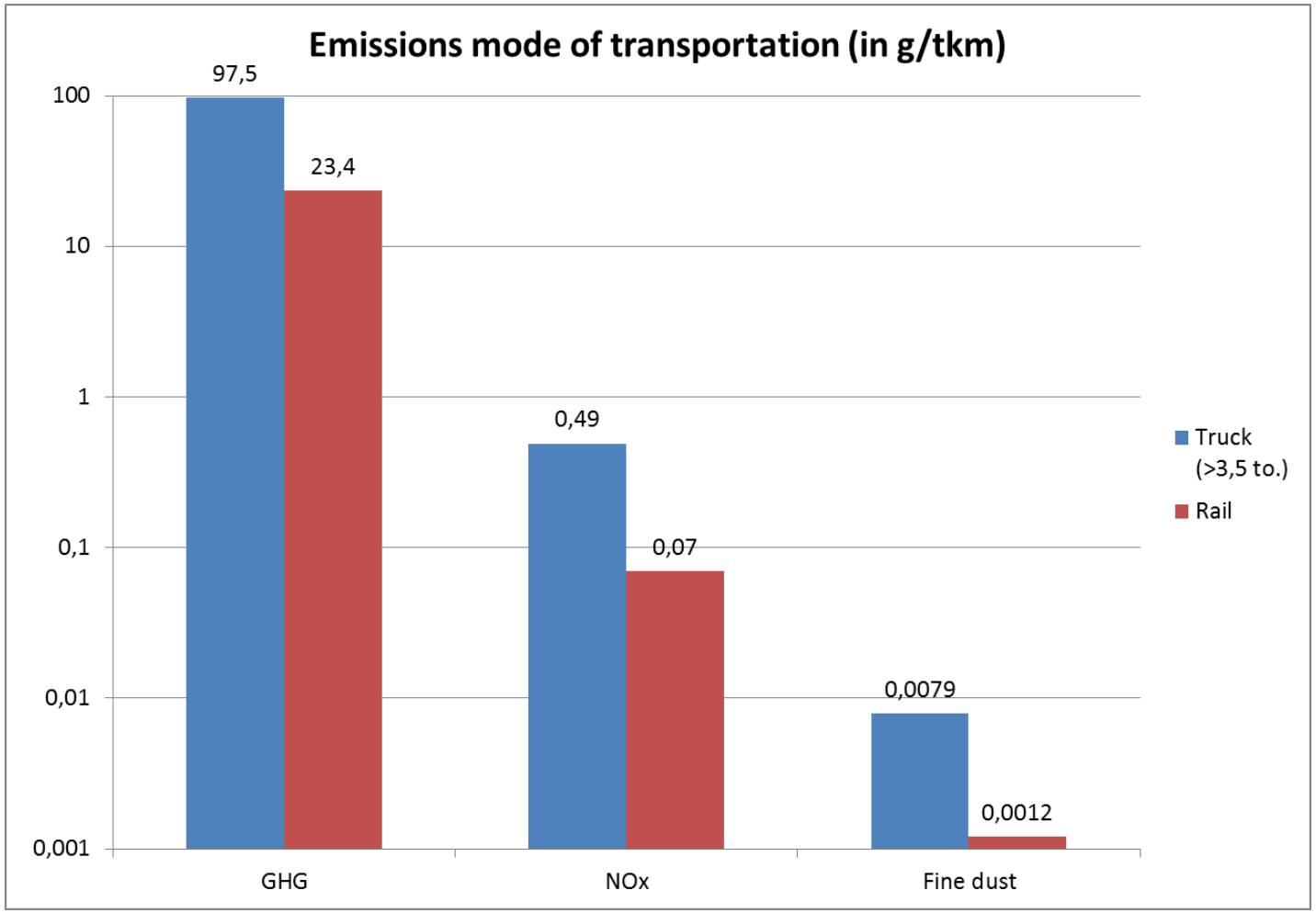
The share of the transportation sector on total GHG-emissions in the EU rises continuously



Source: According to Richter, N. (2012), Daten zum Verkehr, Publikation des Umweltbundesamts, Dessau, S. 46.

Rail freight traffic is ecologically friendlier…



Logarithmic scaling

Source: Richter, N. (2012), Daten zum Verkehr, Publikation des Umweltbundesamts, Dessau, S. 14.

…and safer as road freight traffic.

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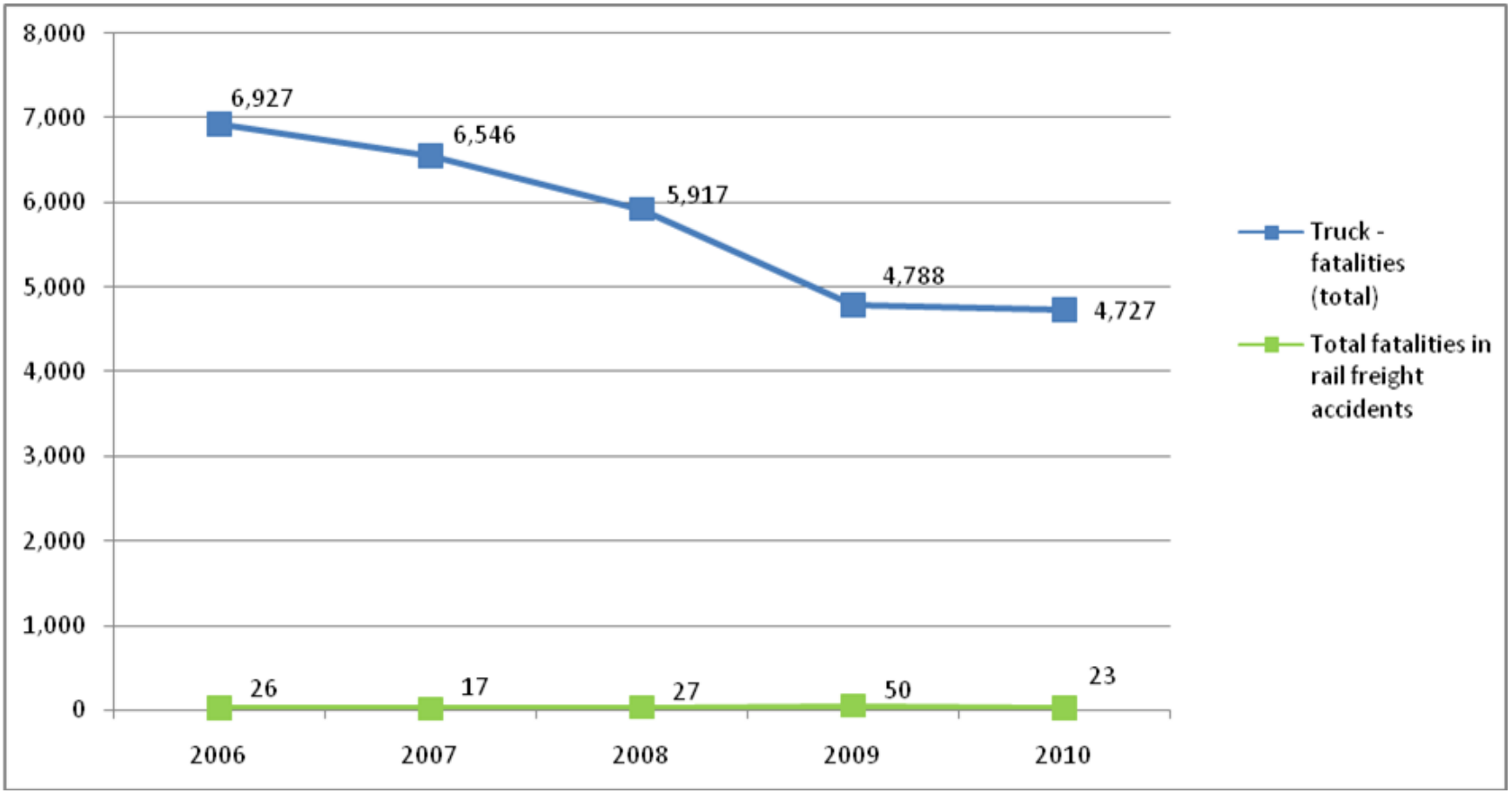
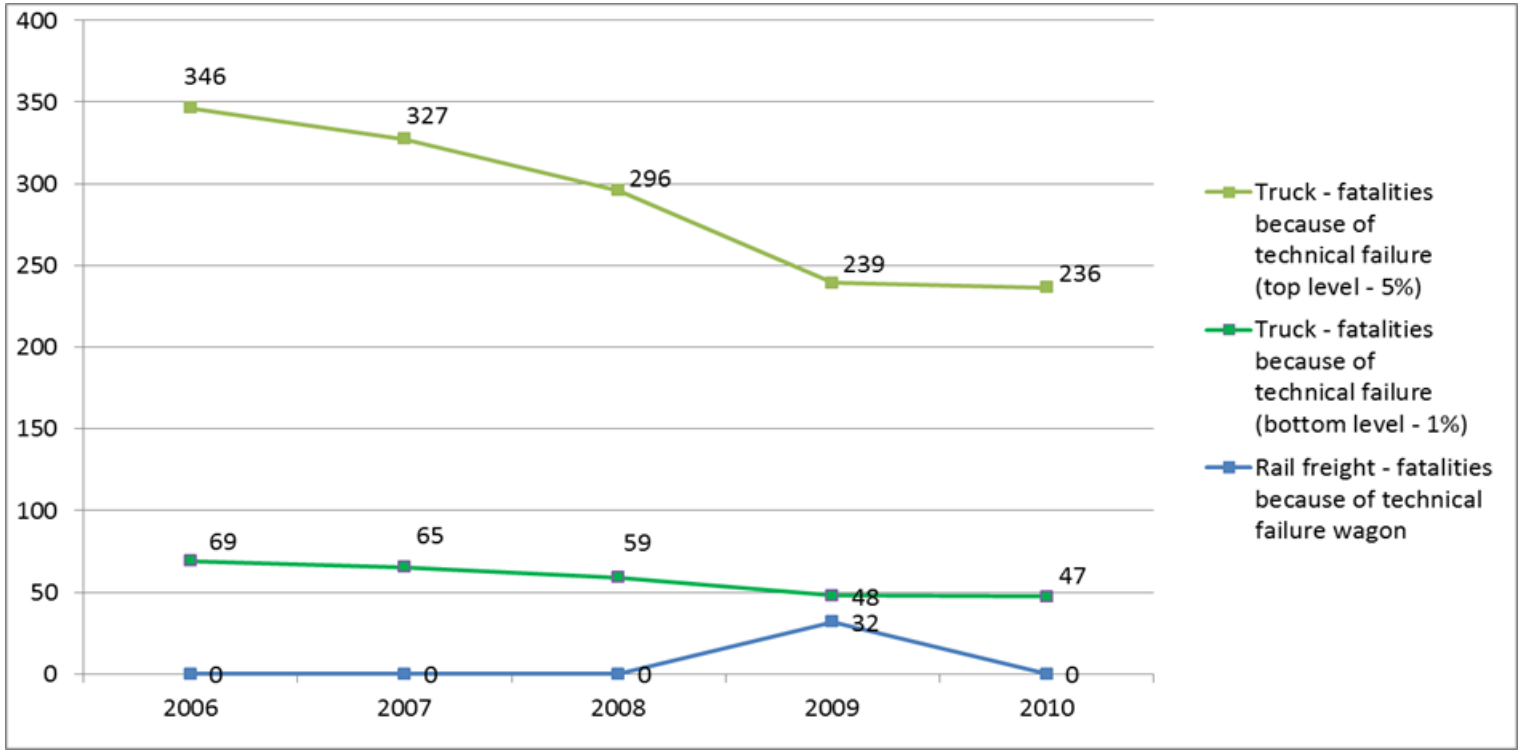
Total number of persons killed in road and rail freight accidents between 2006 and 2010 in the EU



Source: Pace, J.F., et al. (2012), Basic Fact Sheet Heavy Good Vehicle and Buses, Deliverable D3.9 of the EC FP7 project DaCoTa and authors' evaluation of ERAIL European Railway Accident Information Links, www.erail.era.europa.eu/investigation.aspx

The amount of fatalities caused by technical failures of trucks is higher than fatalities caused by rail freight accidents (technical defects wagon)

Comparison Truck vs. Rail Freight
Amount of fatalities EU 27* due to technical failures truck/wagon



* without Bulgaria Latvia, Malta and Cyprus, Source: European Road Safety Oberservatory – Traffic Safety Basis Facts 2011 – DaCoTA research on www.erail.era.europa.eu/investigation.aspx

Given the advantages of rail freight traffic there are high expectations of this mode of transportation by public and politics

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Examples for expectations / political ambition on modal shift

EU White Paper

- 2011 White Paper EU-Commission
- Modal shift for 30% of truck loads over 300km to rail until 2030
- Modal shift of 50% of truck loads over 300km to rail until 2050

Shift²Rail

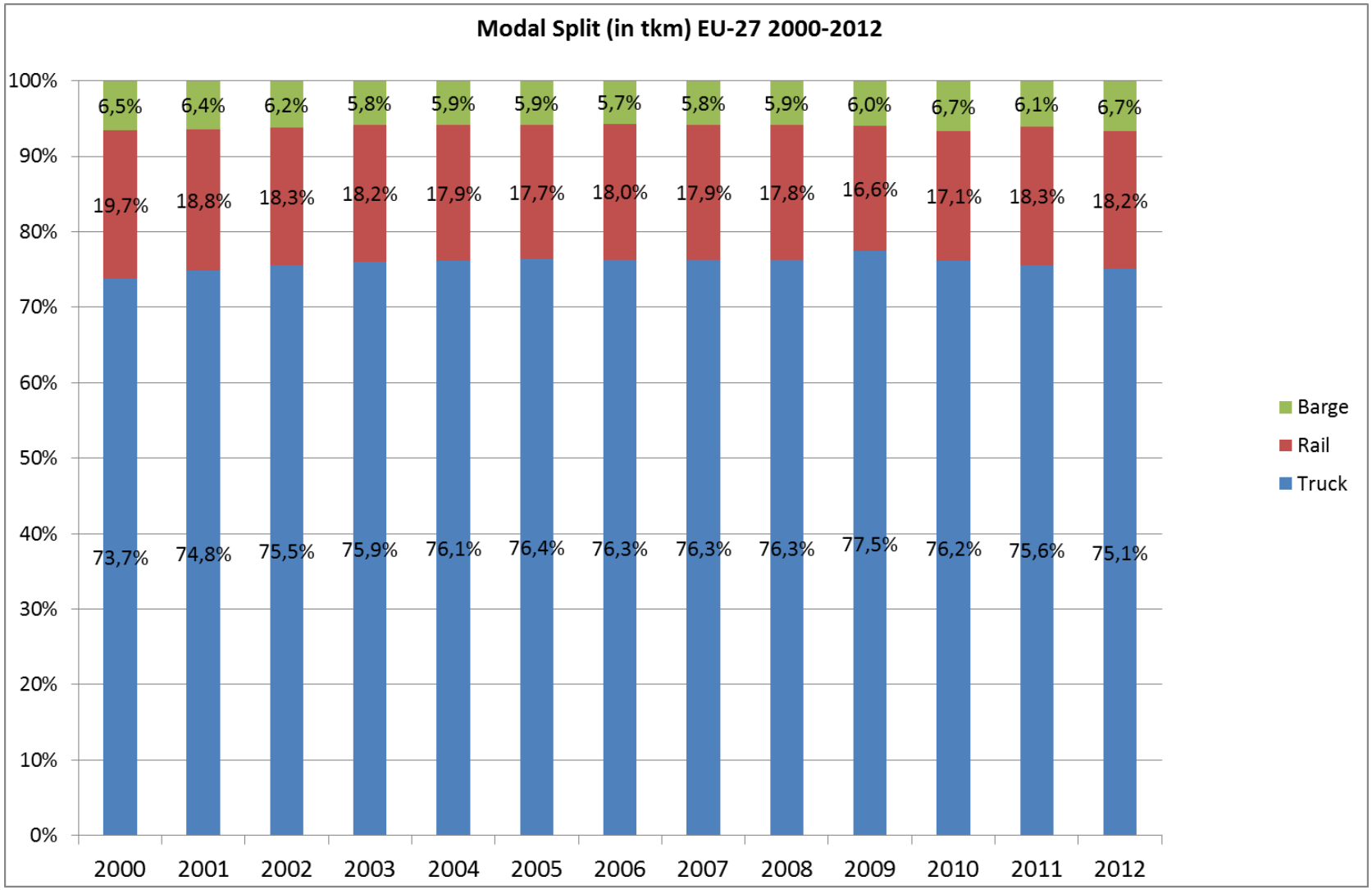
- EU-Commission initiates research programme for rail „Shift²Rail“
- High budget of appr. 450 Mio. €, but the lion’s share goes to public transport and infrastructure

„Klimaschutz 2020“

- Initiative of German Government launched on 03.12.2014.
- Reduction of GHG-emission of 40% in comparison to 1990.
- High focus on measures in transportation (e.g. modal shift, strengthening of rail freight traffic,…)

Source: Europäische Kommission (2011): Weissbuch „Fahrplan zu einem einheitlichen europäischen Verkehrsraum – Hin zu einem wettbewerbsorientierten und ressourcenschonenden Verkehrssystem“, Brüssel; Homepage Shift2Rail, Shift2Rail – The Rail Joint Undertaking, http://www.shift2rail.org.; Umweltbundesamt (2014), Deutschlands Engagement für den Klimaschutz, https://www.klimaschutz.de/de/thema/klimaschutzpolitik-deutschland-deutschlands-engagement-f-r-den-klimaschutz, abgerufen am 10.12.2014.

But reality looks different today: Share of rail in modal split in the EU declines



Source: : Eurostat, http://epp.eurostat.ec.europa.eu/portal/page/portal/transport/data/main_tables, abgerufen am 06.11.2014.

The current situation in single wagon load is also a big challenge

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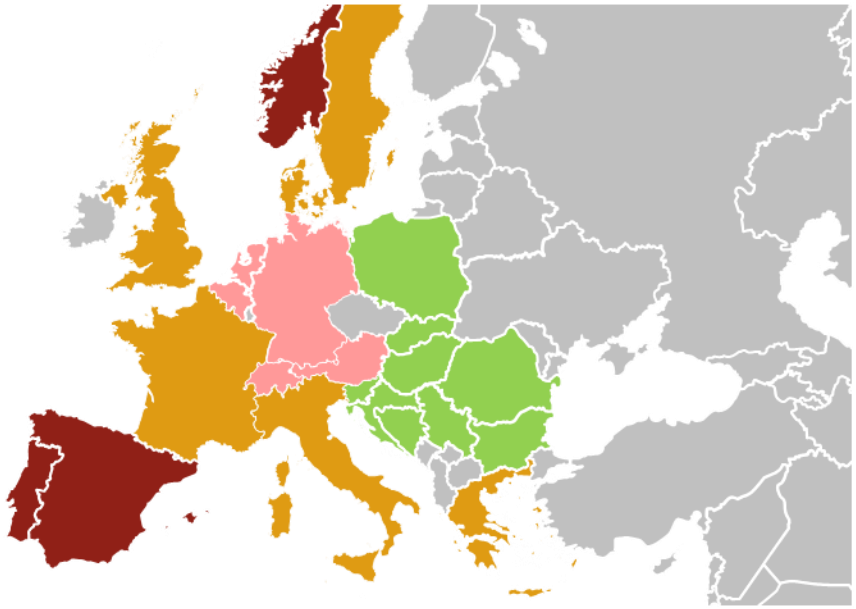

- Cut-off single wagon load
- Withdrawal of single wagon load
- Restructuring of single wagon load
- Reduction of infrastructure quality

Share of single wagon load in total rail freight traffic (in % of tkm)

>40%	30% bis 40%	20% bis 30%	10% bis 20%	< 10%
▪ Germany ▪ Czech Republic	▪ Austria ▪ Slovakia ▪ Slovenia	▪ Belgium ▪ Sweden ▪ Switzerland	▪ France ▪ Poland ▪ Romania	▪ UK ▪ Italy

Source: :Heinrici, T. (2014), Rettungsplan für Einzelwagen, DVZ vom 19.06.2014

Additionally there are more and more regulatory interventions in rail freight traffic which increase costs for rail freight

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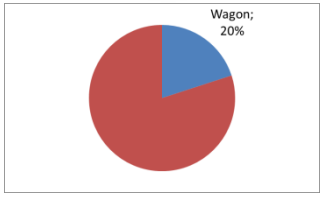
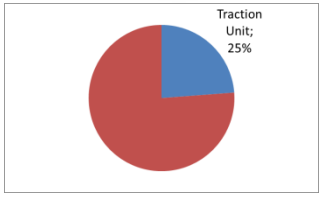
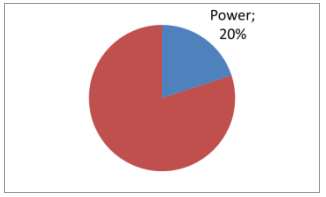
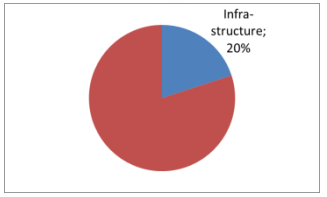
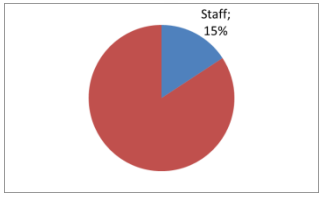
Wagon	Traction unit	Energy traction power	Infrastructure	Staff
▪ ECCM* ▪ EWT* ▪ EVIC* ▪ ECM* ▪ RSRD²* ▪ Noise reduction (K-/LL-blocks)	▪ ETCS ▪ Admission procedures	▪ EEG-Umlage ▪ Electricity tax	▪ Low investments ▪ Rising infra-structure charges ▪ Noise related price system ▪ Quality of infrastructure ▪ Profit transfer DB Netz to federation	▪ EU-driver licence ▪ New examination regulations for drivers
Effect on	**Effect on**	**Effect on**	**Effect on**	**Effect on**
				

Additional cost pressure for RU

ECCM = European Common Criteria for Maintenance, EWT = European Wheel Set Traceabililty, EVIC = European Visual Inspection Catalogue, ECM = Entity in Charge of Maintenance, RSRD² = Rolling Stock Reference Database)

Objectives of the study

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- The members of IBS and UIRR realise that competitiveness of rail freight declines in comparison to truck.
- Particularly single wagon load traffic is in strong competition with truck load. But many european countries turn away from single wagon load. Network coverage is declining and costs are rising.
- Furthermore cost increases for infrastructure charges, energy supply, wagons, traction units and staff endanger the competitiveness of rail freight.
- Cost increases due to regulatory measures are in objection to the political aims to raise the share of rail freight in modal split out of ecological and safety reasons.
- To promote this fundamental challenge publicly IBS and UIRR have assigned hwh to conduct an analysis about regulatory interventions and their effects on the cost situation of railway undertakings.
- The study shows - using the example of four real traffic relations/lines? – the cost situation between rail and truck traffic and illustrates which additional costs arise from the regulatory interventions.

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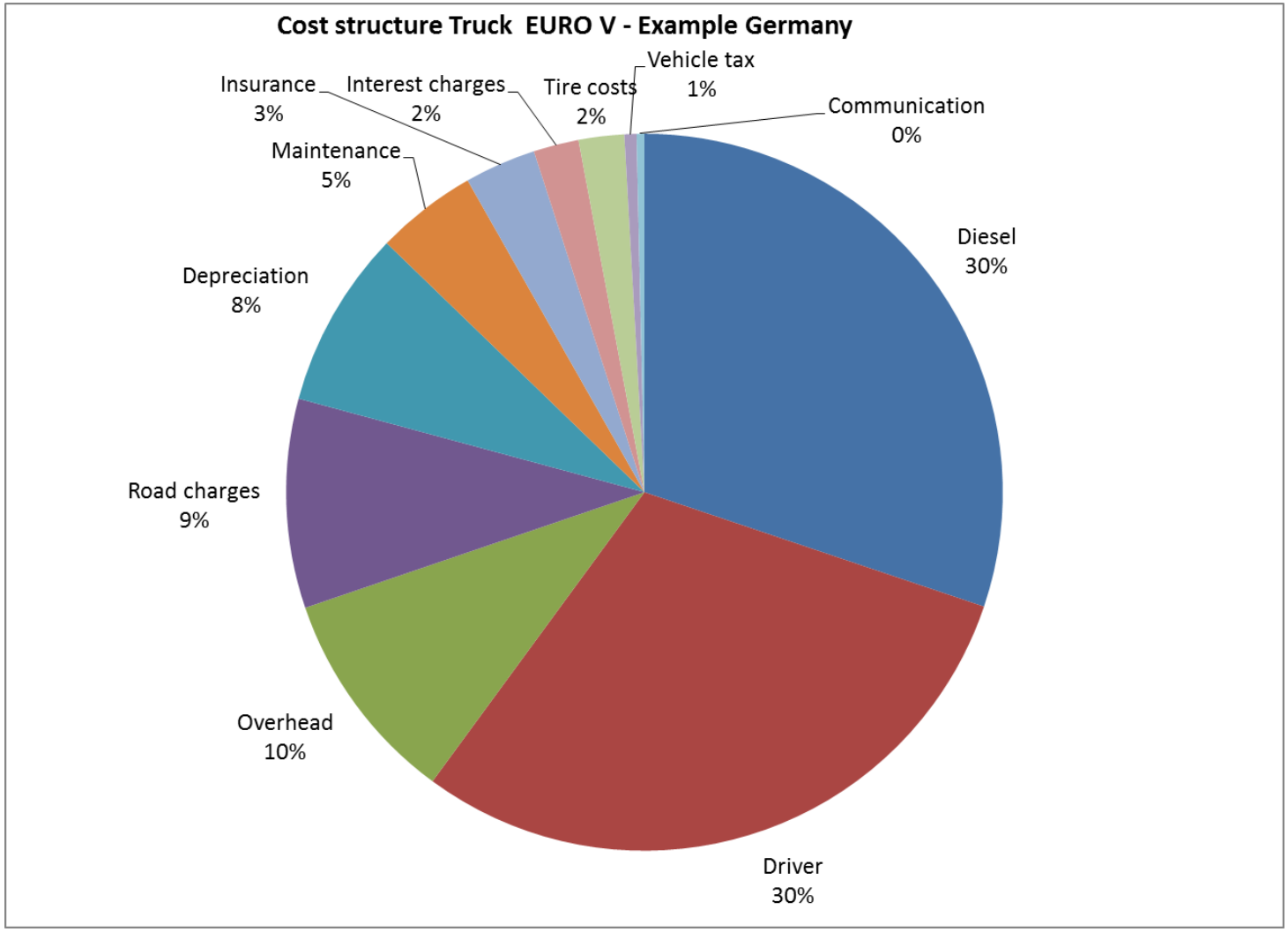
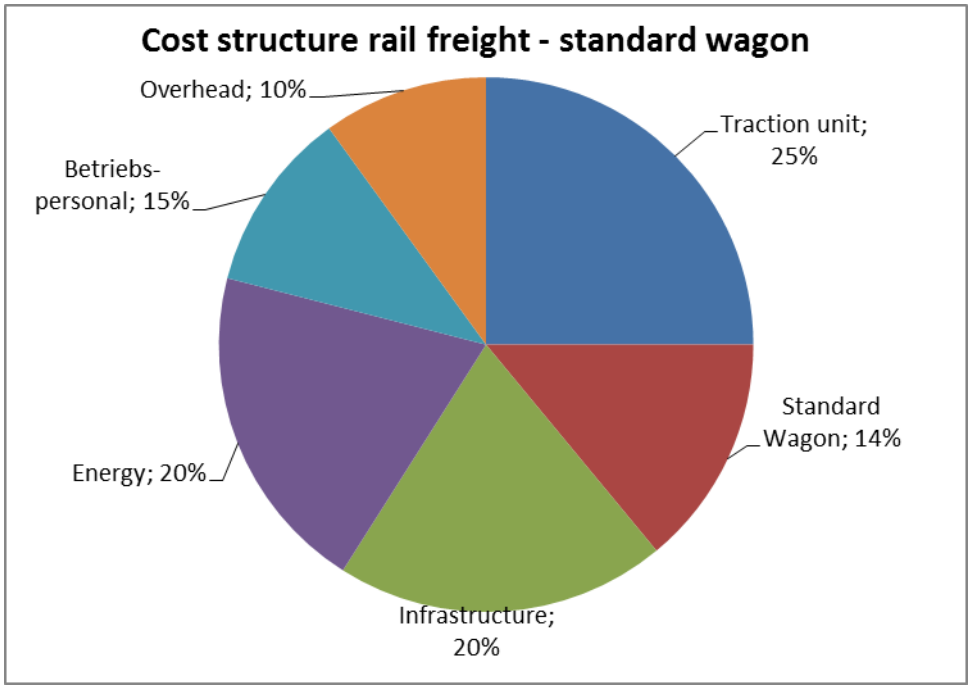
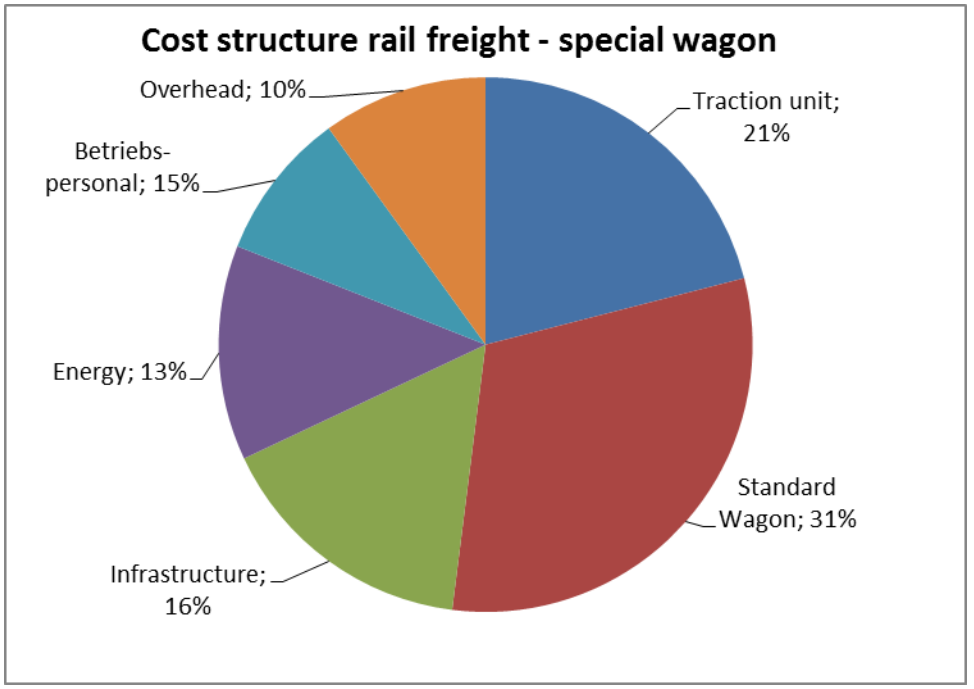
In truck traffic diesel and driver costs stand for appr. 60% of total costs



Source: hwh

In Rail freight traffic costs for traction unit and wagons, followed by energy and infrastructure charges are the highest





Source: hwh

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The cost analyses were carried out using the examples of four real existing rail freight traffic/relations/lines?

	VTG Rail Logistics	BLG AutoRail	Logistik auf Schienen	Lokomotion Gesellschaft für Schienentraktion mbH
Traffic				
Origin	Lingen (DE)	Wolfsburg (DE)	Wesseling (DE)	Köln (DE)
Destination	Savinesti (RO)	Bratislava (SK)	Livorno (IT)	Verona (IT)
Goods	Tow	Cars	Butadiene	Intermodal
Volumes p.a.	10.000 to. p.a.	3.344 cars p.a.	736 to. p.a.	
Wagon	Habis	Laaers	Zags	Intermodal
Volumes per wagon	50-55 to.	12 cars	52,62 to.	
Route	Truck from Lingen to Nordhorn - Handling - Rail to Bad Schandau - Holic - Rajka - Oradea - Handling - Truck to Savinesti	Wolfsburg - Falkenberg (Shuting) - Bad Schandau - Holic - Bratislava	Cologne, Basel, Chiasso to Livorno	Via Brenner route

The cost analyses were carried out using the examples of four real existing rail freight traffic/relations/lines? (2)

Lingen (DE) – Radauti (RO)
VTG Rail Logistics GmbH

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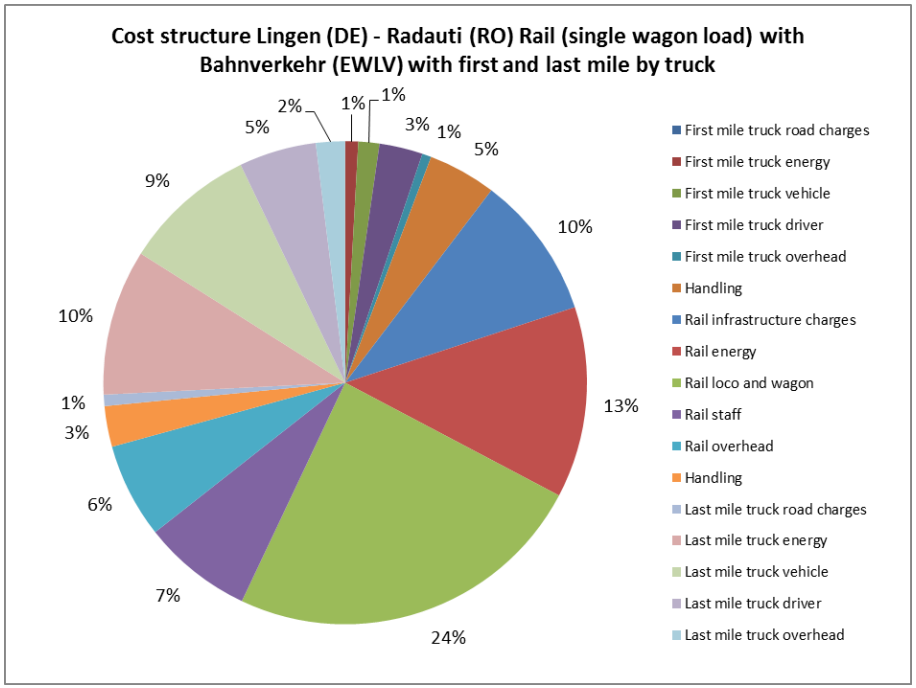
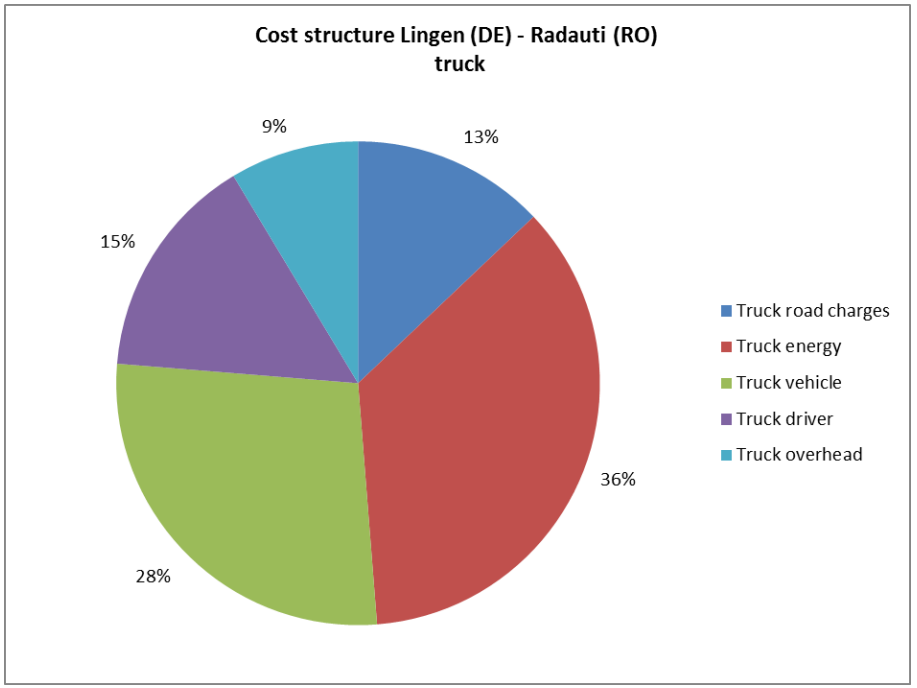
Rail and Truck



- 11 % Truck and Handling (German driver)
- 24 % Costs for Loco and wagon
- 13 % Costs for energy rail
- 10 % Costs for infrastructure charges rail
- 31 % Handling and truck in Romania (RO-driver)

Appr. 40 % costs non-rail-related (truck and handling)

Truck only



- 36 % Costs for diesel
- 28 % Costs for vehicle
- 15 % Costs for driver (RO-driver)
- 13 % Costs for road charges

Source: hwh

Wolfsburg (DE) – Bratislava (SK)
BLG Auto Rail GmbH

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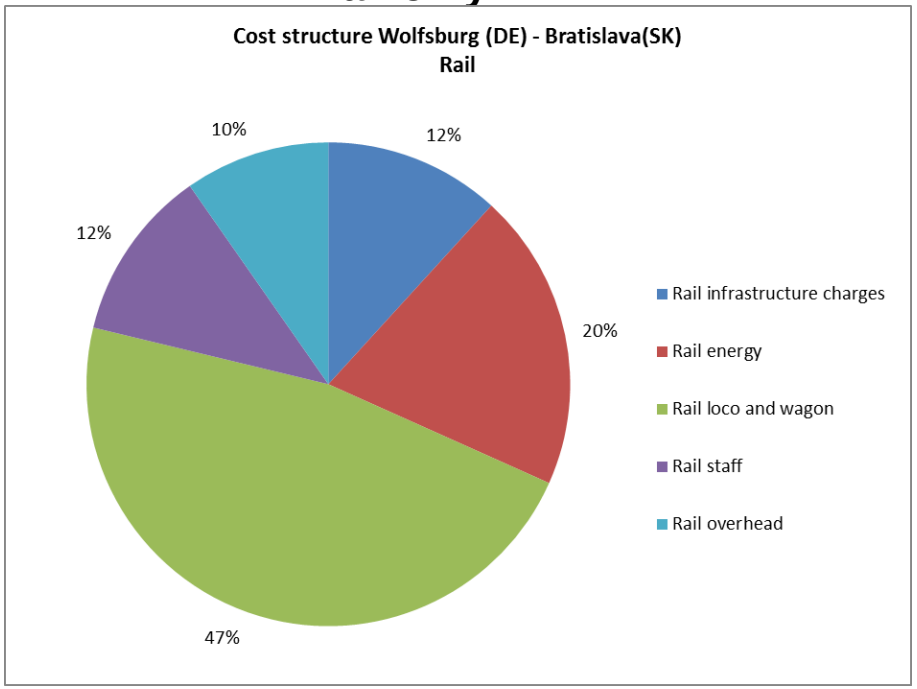
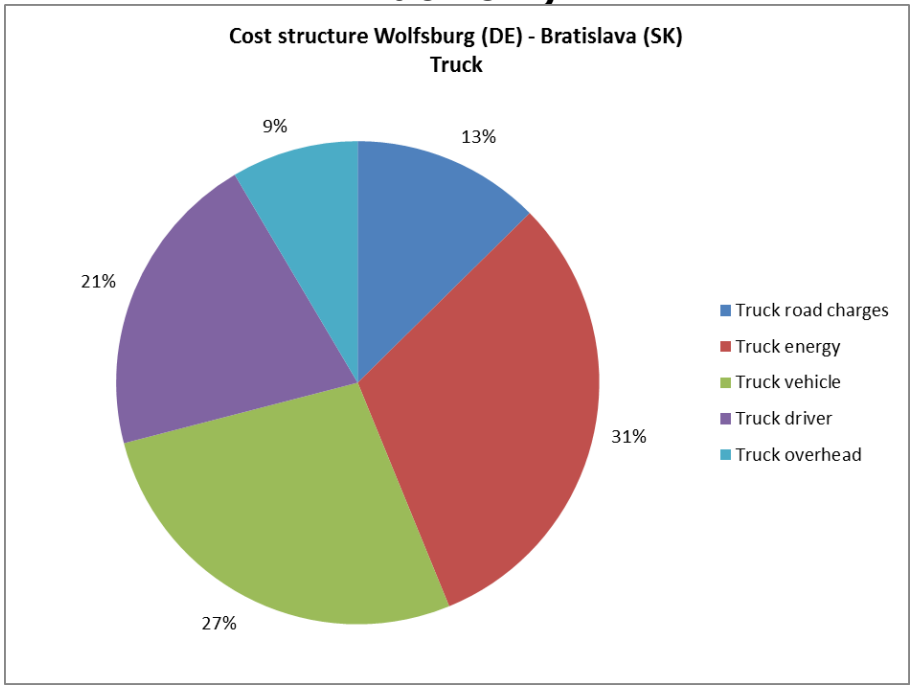
Rail only



- 47 % Costs for loco and wagon
- 20 % Costs for energy
- 12 % Costs for infrastructure charges
- 12 % Costs for staff

High share of costs for loco and wagon due to special equipment (car transport wagons)

Truck only



- 31 % Costs for diesel
- 27 % Costs for vehicle
- 21 % Costs for driver (SK-driver)
- 13 % Costs for road charges

High share of costs for truck due to special equipment

Source: hwh

Köln Wesseling (DE) – Livorno (IT)
LaS Logistik auf Schienen GmbH

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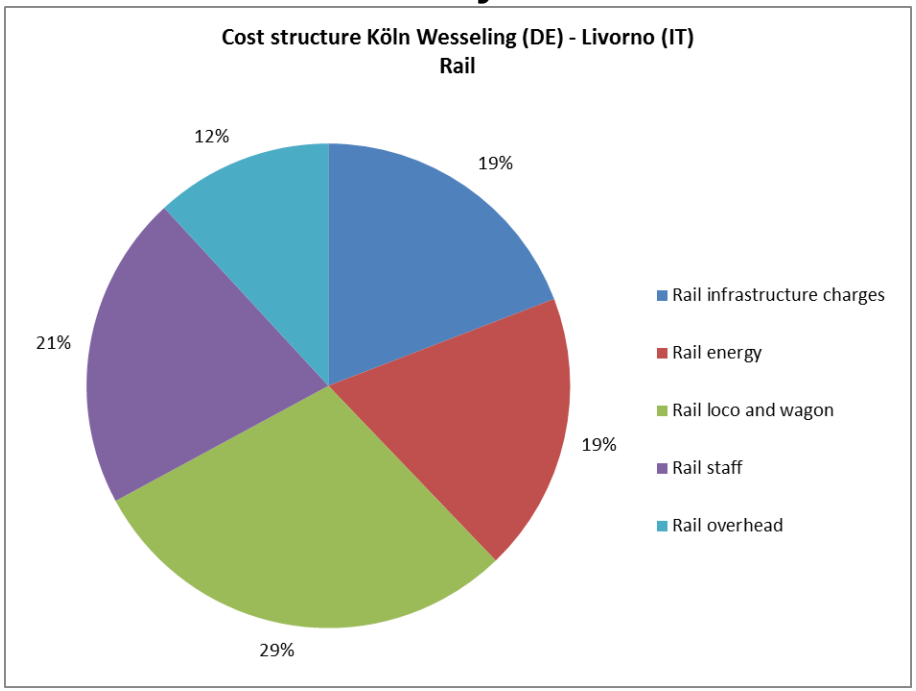
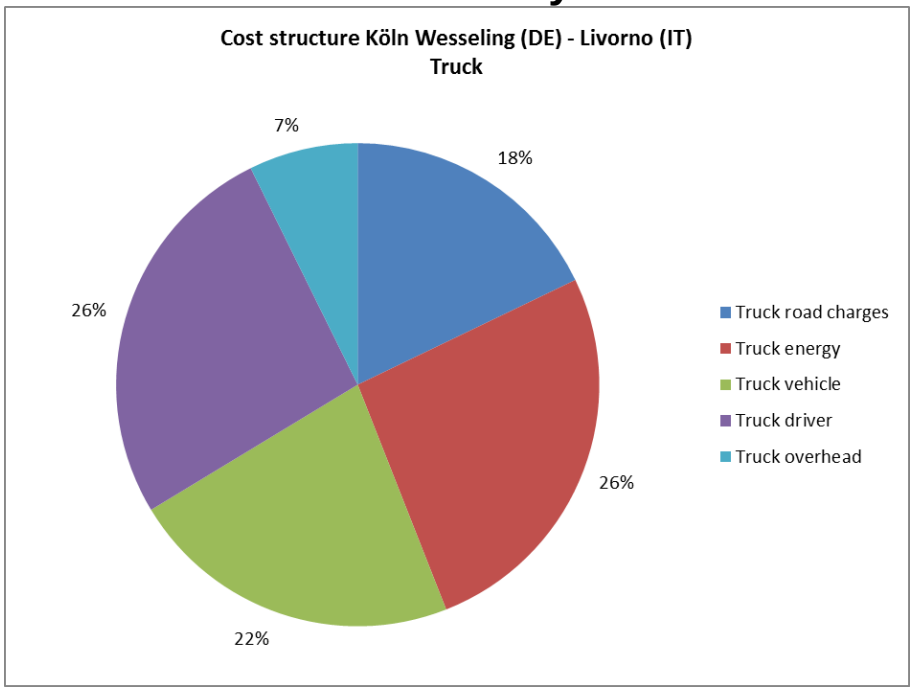
Rail only



- 29 % Costs for loco and wagon
- 21 % Costs for staff
- 19 % Costs for energy
- 19 % Costs for infrastructure charges

➔ High share of costs for staff due to high wages Switzerland and two loco drivers in Italy

Truck only

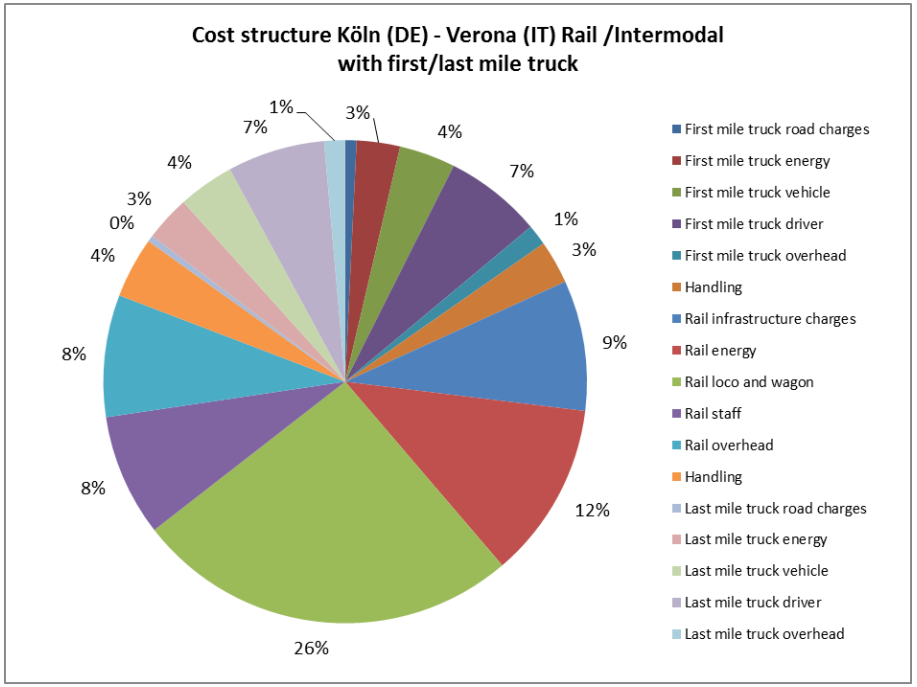


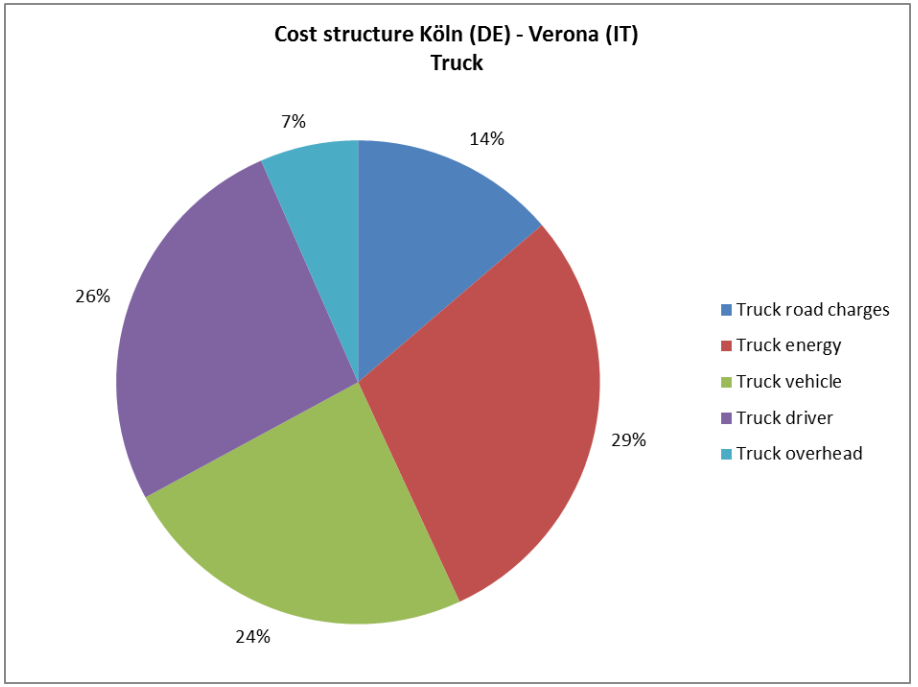
- 26 % Costs for diesel
- 26 % Costs for driver (DE-driver)
- 22 % Costs for vehicle
- 18 % Costs for road charges

➔ High share of costs for driver due to high wages in Germany

Source: hwh

Köln (DE) – Verona (IT)
Lokomotion Gesellschaft für Schienentraktion mbH





- 19 % Truck and Handling (DE-driver)
- 26 % Costs for loco and wagon
- 12 % Costs for energy rail
- 9 % Costs for infrastructure charges rail
- 8 % Costs for staff rail
- 19 % Handling and truck (IT-driver)

Appr. 38 % Costs non related to rail

- 29 % Costs for diesel
- 26 % Costs for driver (DE-driver)
- 24 % Costs for vehicle
- 14 % Costs for road charges

Source: hwh

Due to the specific cost structure rail freight traffic should have advantages in comparison to truck traffic

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Rail	Truck
- Costs for loco and wagon major cost components of rail traffic, followed by energy and infrastructure charges	- Share of costs for diesel around 1/4 to 1/3 of total costs. - High share of costs for driver from 15% to 26% dependent on nationality of driver
Strong dependency on cost developments for loco and wagon, but also energy and infrastructure charges	**Strong dependency on cost developments of diesel and staff wages**

Rail should have advantages compared to truck in the long-run due to rising costs for diesel and driving staff.
But: Sharp decline of diesel price strengthens competitiveness of truck.

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There are more and more regulatory interventions in rail freight traffic which increase costs for rail freight

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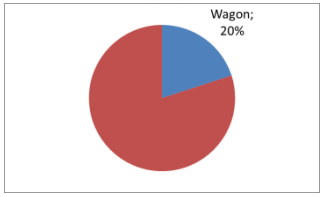	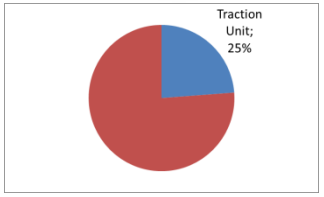	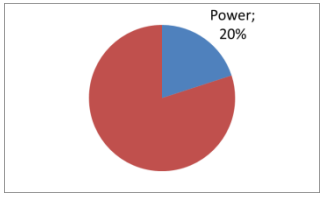	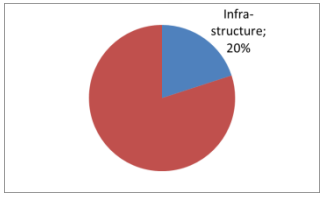	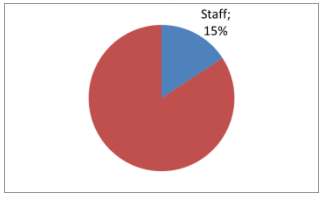

Additional cost pressure for RU

ECCM = European Common Criteria for Maintenance, EWT = European Wheel Set Traceabililty, EVIC = European Visual Inspection Catalogue, ECM = Entity in Charge of Maintenance, RSRD² = Rolling Stock Reference Database)

Regulatory interventions Wagons

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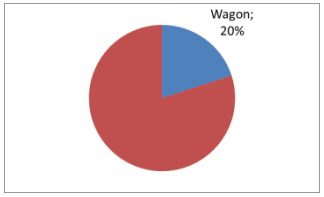	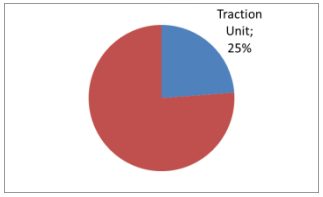	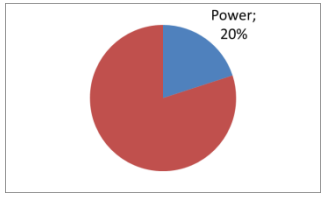	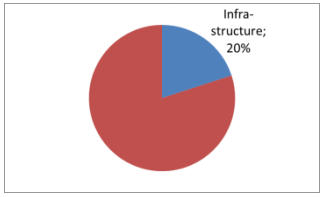	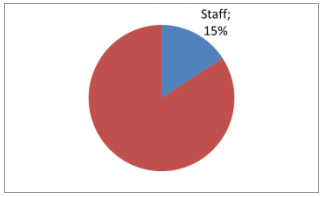

Additional cost pressure for RU

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Regulatory interventions
Wagons

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Regulatory interventions:

- European Common Criteria for Maintenance (**ECCM**)
- European Wheel set Traceability (**EWT**)
- European Visual Inspection Catalogue (**EVIC**)
- Entity in Charge of Maintenance (**ECM**)
- Rolling Stock Reference Database - **RSRD**
- Noise reduction measures as suspension for loud wagons in Switzerland from 2020 on.
- In Germany regulatory intervention that by 2016 half of the fleet has to be retrofitted with silent brakes

Source: UIP International Union of Wagon Keepers,"Economic Impact of New Rules and Regulations" Final Report, Brussels

Effects of regulatory interventions on the costs for wagons

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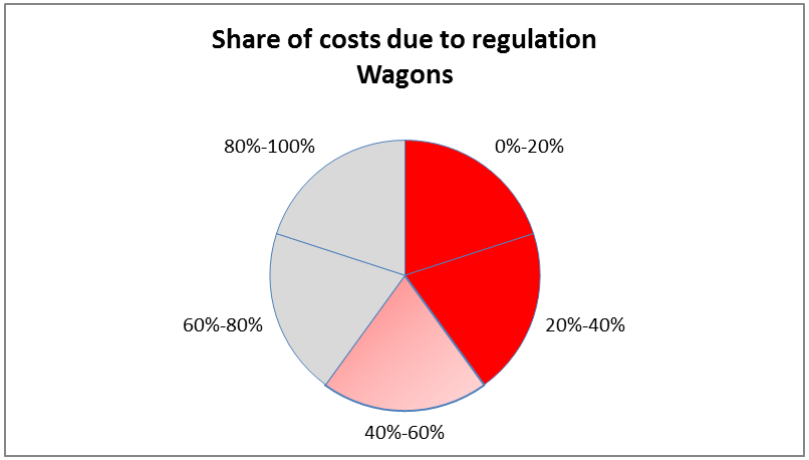
Effects of intervention on costs for wagons[1]

- Plus 1,7 % to 9,5 % for wagons equipped with cast iron brakes (that means only cost effects due to ECM, EWT, EVIC, RSRD and without costs for retrofitting brake blocks).
- Plus 10,1 % to 43,1 % for new builds with K-blocks (TSI wagon, no costs for retrofitting but higher operational costs).
- Plus 14,8 % to 45,9 % for existing wagons with retrofitting on LL-brake blocks.
- Plus 29,8 % to 62,8 % for existing wagons with retrofitting with K-brake blocks.

Share of costs due to regulation wagon



Scenario for development costs of wagon 2020

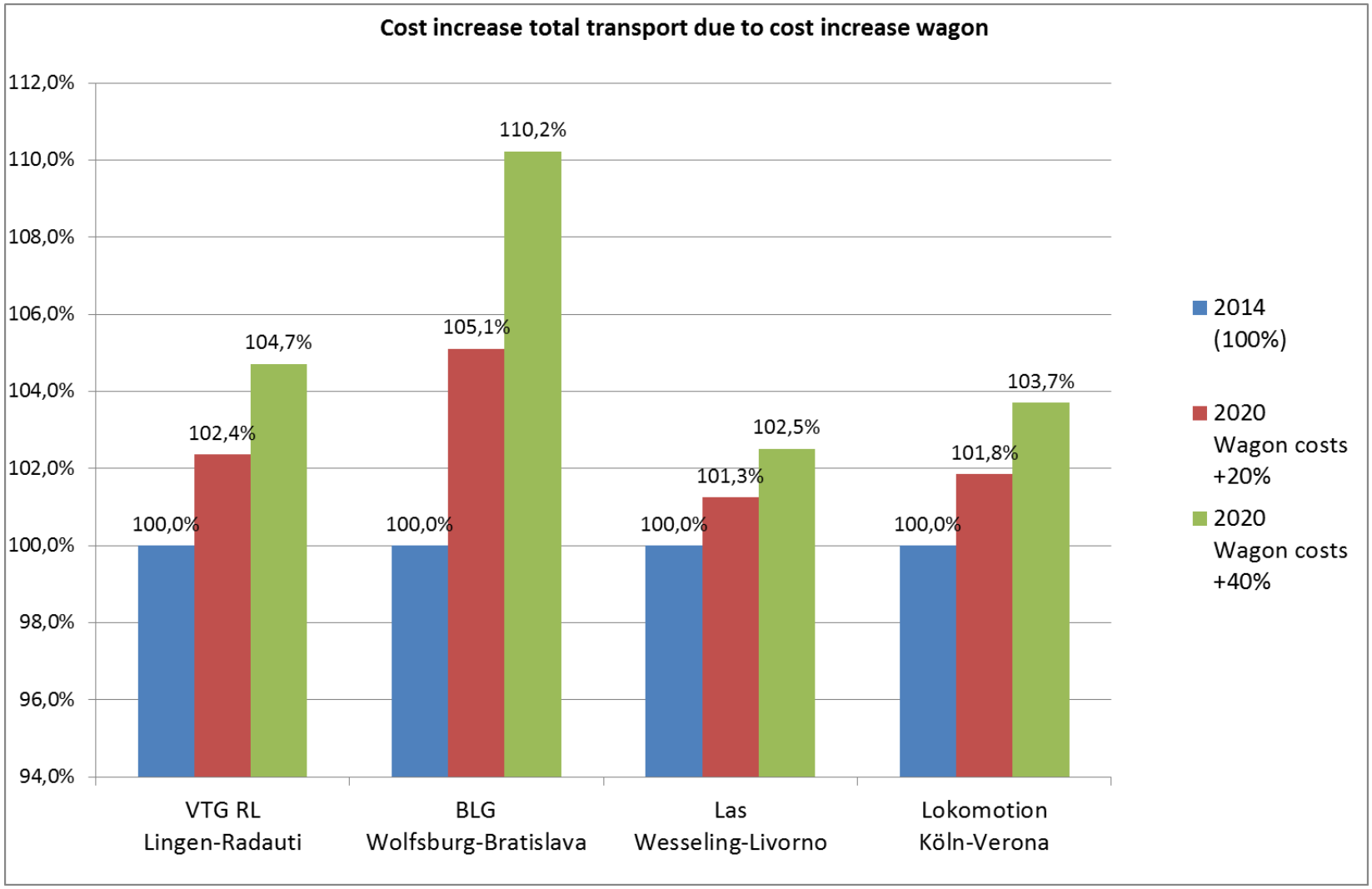
- **Scenario 1: Cost increase + 20%**
  New build wagon with K-blocks

  (Mileage 60.000 km p.a.; fleet of 1.000 wagons)

- **Scenario 2: Cost increase + 40%**
  Retrofitting of existing car with K-blocks
  (Mileage 120.000 km p.a.; fleet of 5.000 wagons)

[1] UIP International Union of Wagon Keepers,"Economic Impact of New Rules and Regulations" Final Report, Brussels

Wagons:
Regulatory interventions show significant increase of total costs from +1,3% to +10,2% depending on type of traffic and wagon



Source: hwh

Regulatory interventions Locomotives

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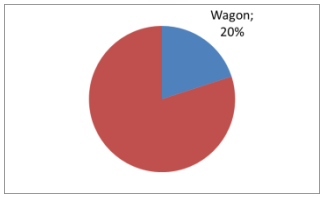
Wagon

- ECCM*
- EWT*
- EVIC*
- ECM*
- RSRD²*
- Noise reduction (K-/LL-blocks)

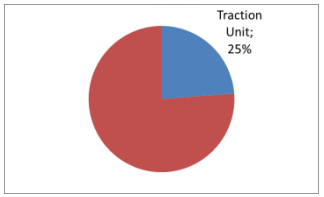
Effect on



Traction unit

- ETCS
- Admission procedures

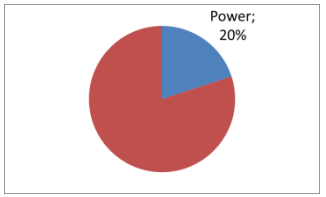
Effect on



Energy traction power

- EEG-Umlage
- Electricity tax

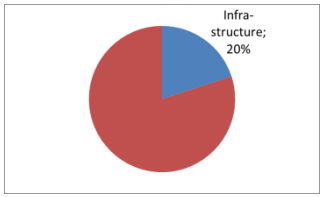
Effect on



Infrastructure

- Low investments
- Rising infra-structure charges
- Noise related price system
- Quality of infrastructure
- Profit transfer DB Netz to federation

Effect on

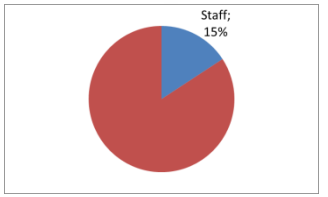


Additional cost pressure for RU

Staff

- EU-driver licence
- New examination regulations for drivers

Effect on



ECCM = European Common Criteria for Maintenance, EWT = European Wheel Set Traceabililty, EVIC = European Visual Inspection Catalogue, ECM = Entity in Charge of Maintenance, RSRD² = Rolling Stock Reference Database)

Regulatory interventions for traction unit due to introduction of ETCS and still non-harmonized admission procedures

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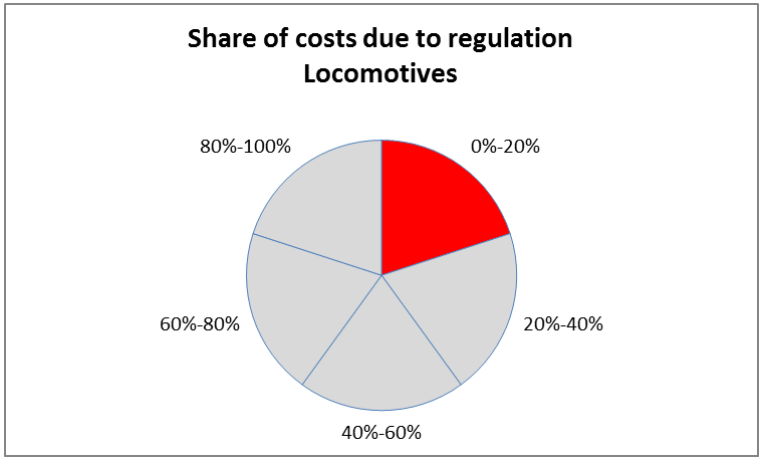
Regulatory intervention

- Introduction of European Train Control System ETCS
- National admission procedures for traction units

Effects on costs for loco [1]

- Costs for retrofitting loco with ETCS appr. 400.000 €. This corresponds to a rise of costs of appr. 18% for a loco but with no effects on productivity– at least today.
- Additional costs for international admission of locos appr. 1,5 Mio. € to 2,0 Mio. € per class.

Share of costs due to regulation locomotives

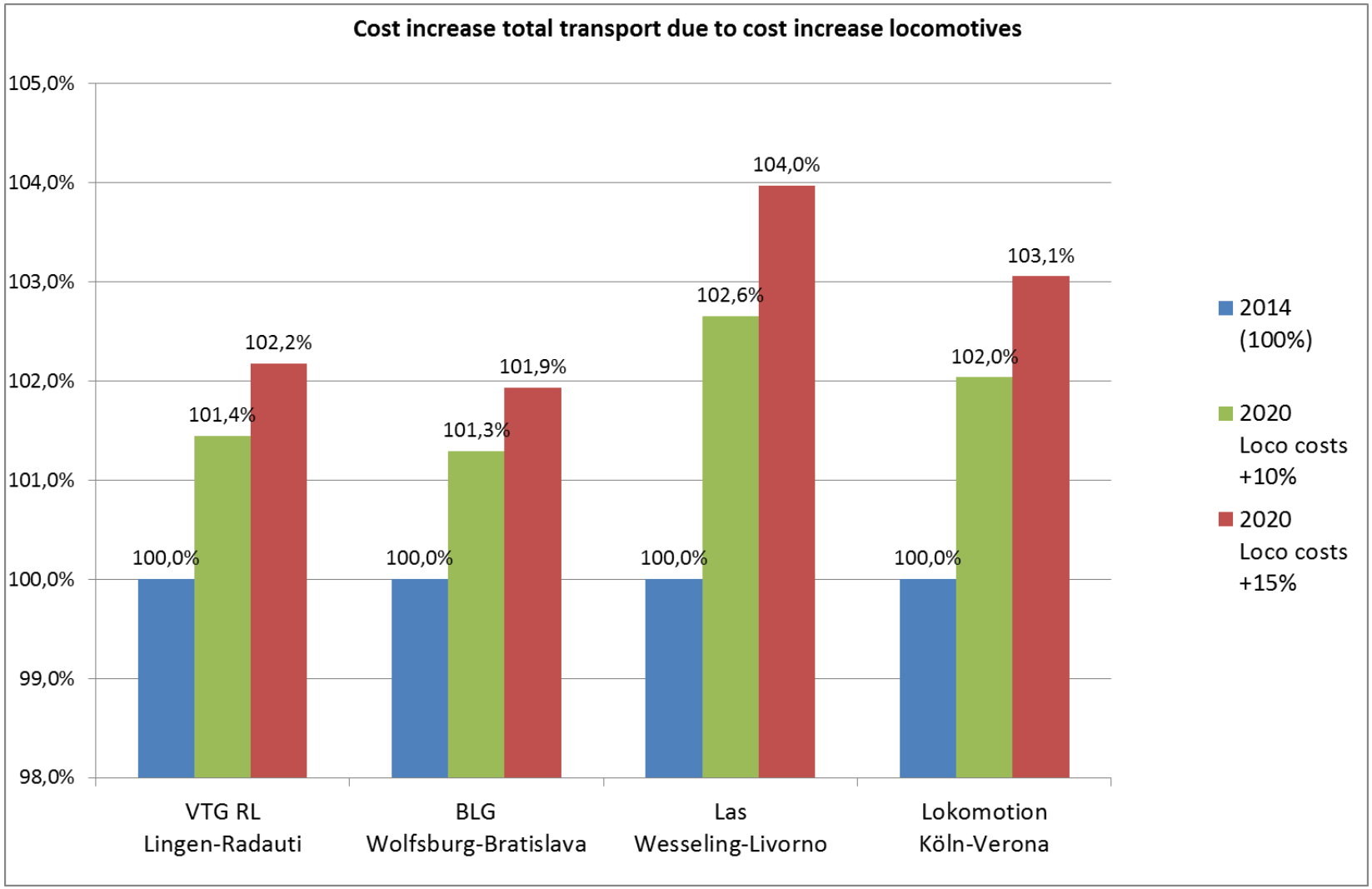


Scenario for development costs of loco 2020

- **Scenario 1: cost increase + 10%**
- **Scenario 2: cost increase + 20%**

[1] Verband Deutscher Verkehrsunternehmen VDV (2012), Positionspapier „Der Schienengüterverkehr muss wettbewerbsfähig bleiben“, Köln

Locos
Regulatory interventions show significant increase of total costs from +1,4% to +4% depending on type of traffic



Source: hwh

Regulatory interventions
Energy Traction power

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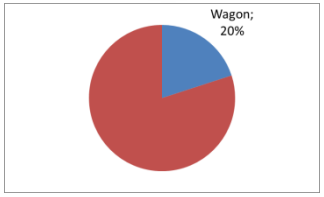
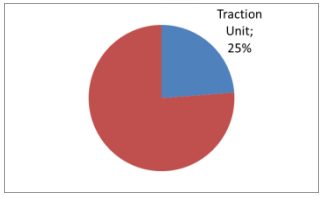
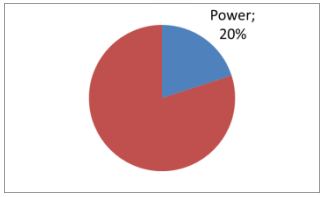
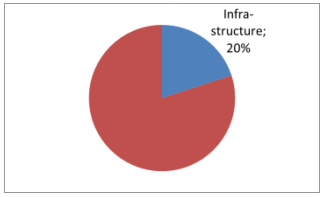
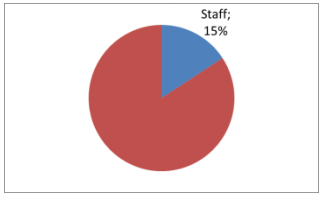
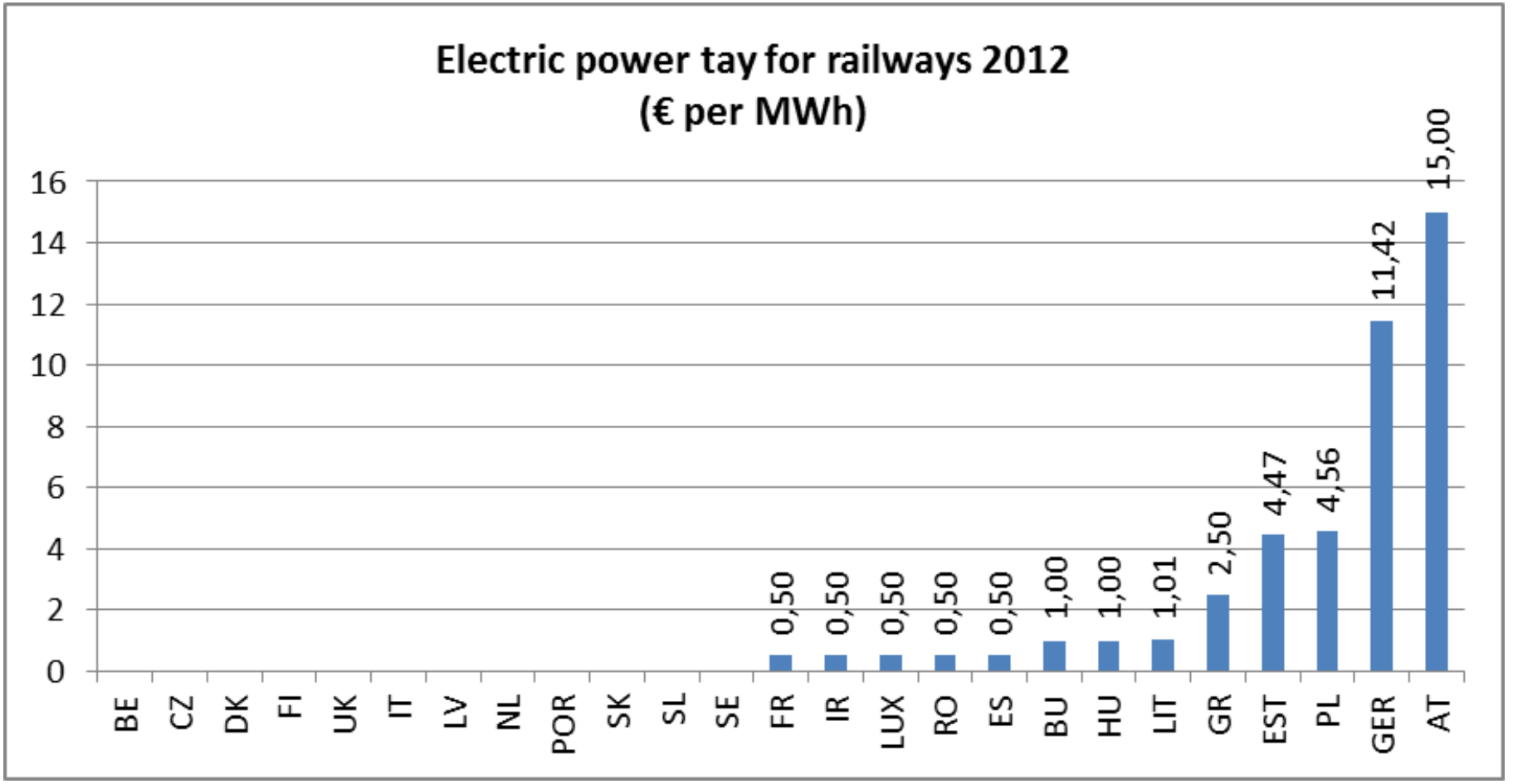
Wagon	Traction unit	Energy traction power	Infrastructure	Staff
▪ ECCM* ▪ EWT* ▪ EVIC* ▪ ECM* ▪ RSRD²* ▪ Noise reduction (K-/LL-blocks)	▪ ETCS ▪ Admission procedures	▪ Renewable energy law (EEG) ▪ Electricity tax	▪ Low investments ▪ Rising infra-structure charges ▪ Noise related price system ▪ Quality of infrastructure ▪ Profit transfer DB Netz to federation	▪ EU-driver licence ▪ New examination regulations for drivers
Effect on	**Effect on**	**Effect on**	**Effect on**	**Effect on**
				

Additional cost pressure for RU

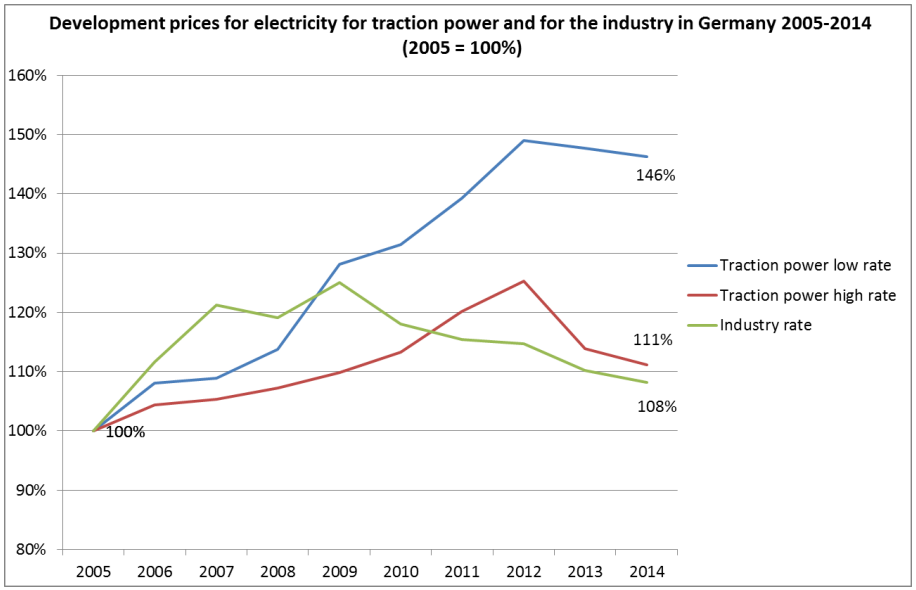
ECCM = European Common Criteria for Maintenance, EWT = European Wheel Set Traceabililty, EVIC = European Visual Inspection Catalogue, ECM = Entity in Charge of Maintenance, RSRD² = Rolling Stock Reference Database)

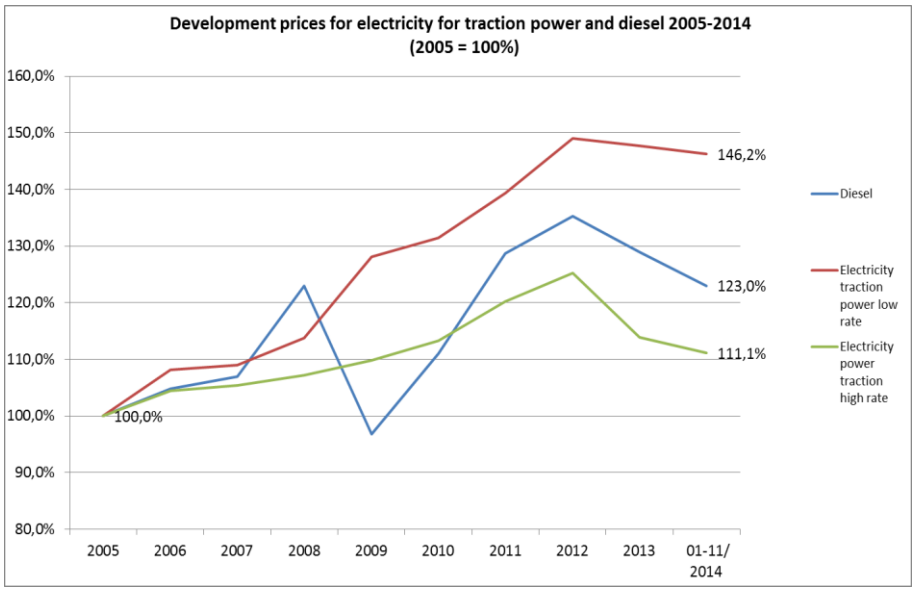
High taxes for electric power for railways especially in Austria and Germany



Source: Allianz pro Schiene, http://www.allianz-pro-schiene.de/presse/pressemitteilungen/2015/003-statistisches-bundesamt-schienengueterverkehr-verliert-marktanteileseitentitel/grafik-stromsteuer-eu-vergleich.pdf

Electric power for railways rises disproportionately high in comparison to electric power for industry or diesel prices





- Since 2005 rise of electric power for railways (during night time) of appr. 46% in Germany.
- During the same time price of electric power for industry rises only appr. 8%.

- Since 2005 rise of electric power for railways (during night times) of appr. 46% in Germany.
- During the same time price of diesel rises only by 11% (Nov. 2014).

Source: Eigene Darstellung in Anlehnung an Bundesnetzagentur (2013), Marktuntersuchung Eisenbahnen, Bonn, S. 42, Statista (2014), Entwicklung der Industriestrompreise in Deutschland seit 1995 http://de.statista.com/statistik/daten/studie/155964/umfrage/entwicklung-der-industriestrompreise-in-deutschland-seit-1995/, abgerufen am 11.12.2014; Statistisches Bundesamt (2014), abgerufen am 30.10.2014 unter https://www.destatis.de/DE/Publikationen/Thematisch/Preise/Energiepreise/Energiepreisentwicklung.html, Bundesnetzagentur (2013), Marktuntersuchung Eisenbahnen, Bonn, S. 42.

Regulatory interventions for electric power due to high taxes and in Germany renewable energy law (EEG)

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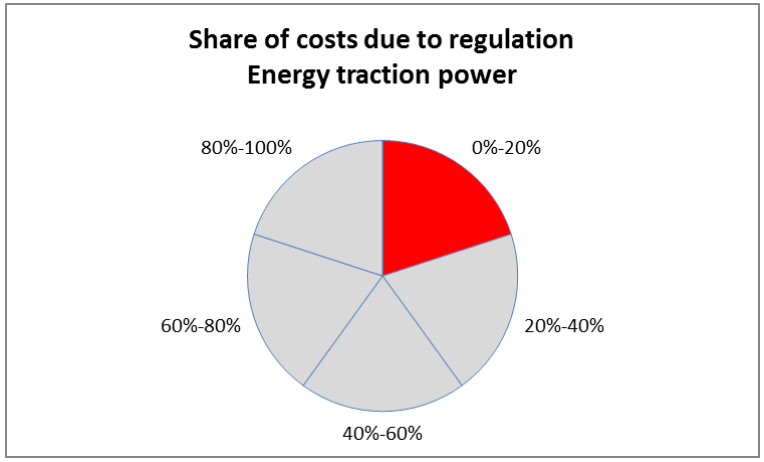
Regulatory intervention

- High tax for electric power for railways in Germany (1,14 Ct./kWh).
- Rise of costs for renewable energy law (EEG) for railways in 2014 in Germany (Share of railways in EEG-Umlage from 11% to 20%)

Effects on costs of energy

- Increased costs for railways in Germany due to EEG- Umlage/imposition (appr. + 4% on energy costs)
- Sum of taxes on electric power for railways adds up to 2,44 Ct./kWh.
- With a price of 13,34 Ct./kWh this corresponds to a share of 18%.

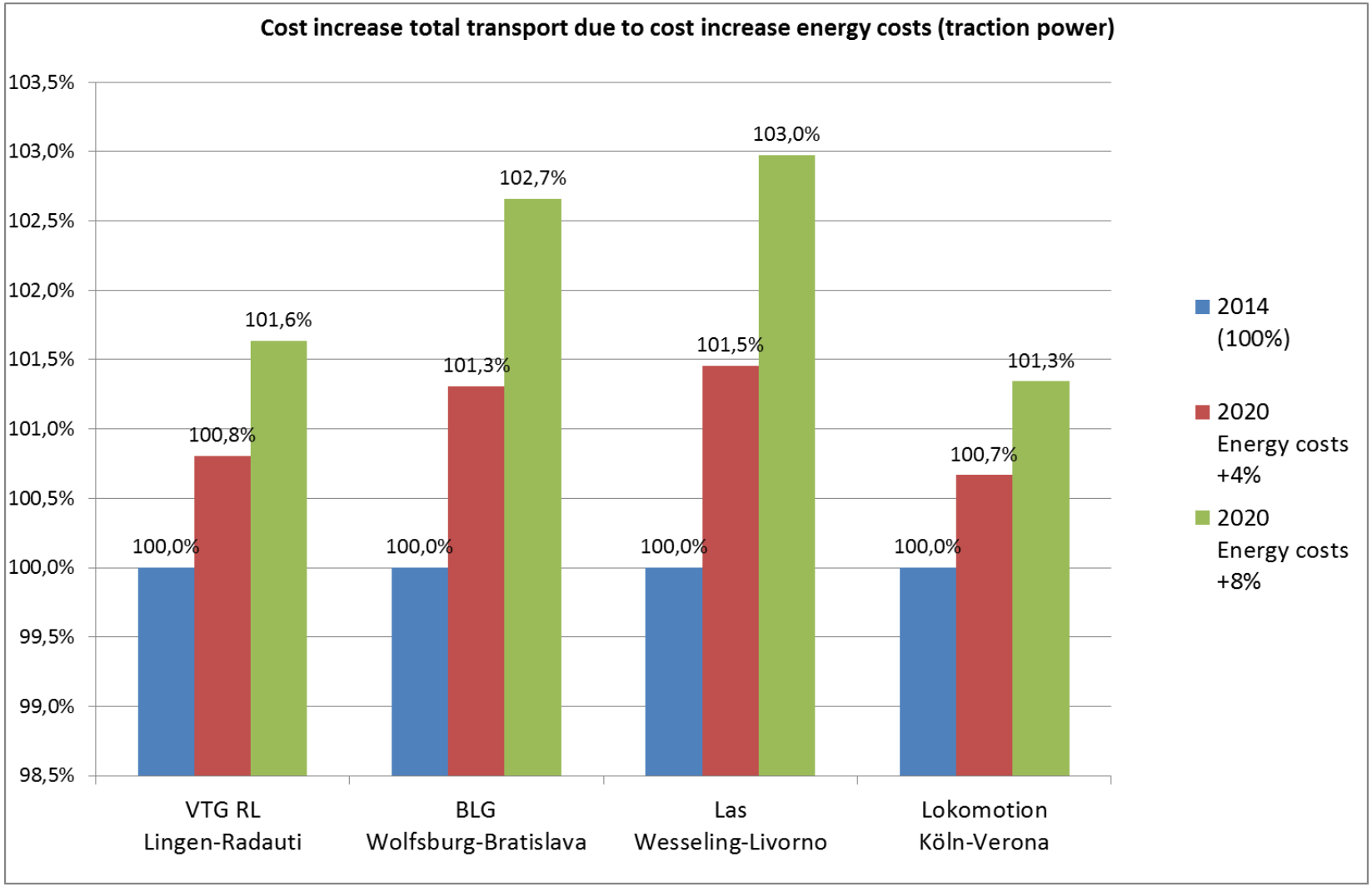
Share of costs due to regulation energy



Scenario for development energy 2020

- **Scenario 1: Cost increase + 4%**
- **Scenario 2: Cost increase + 8%**

Electric energy
Regulatory interventions show increase of total costs from +0,7% to +3% depending on type of traffic



Source: hwh

Regulatory interventions Infrastructure

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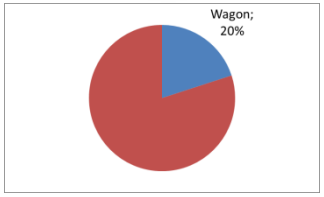
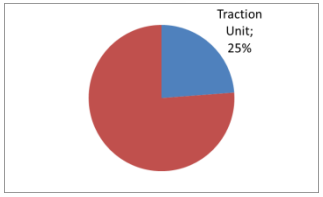
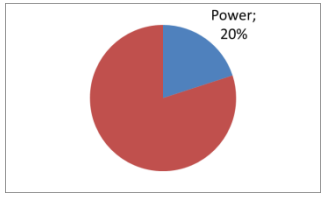
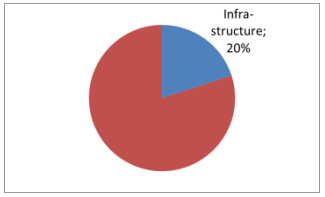
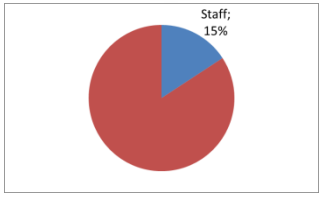
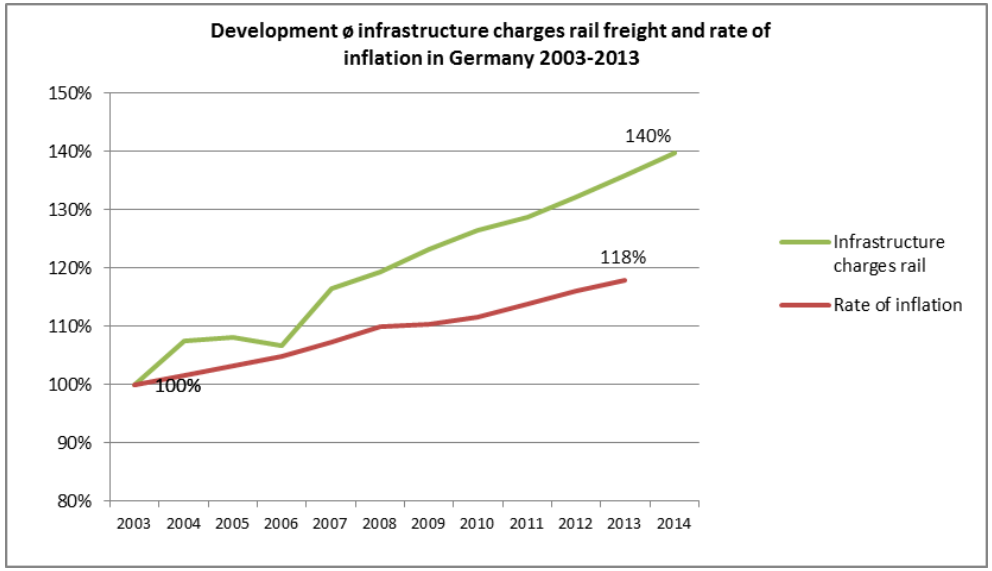
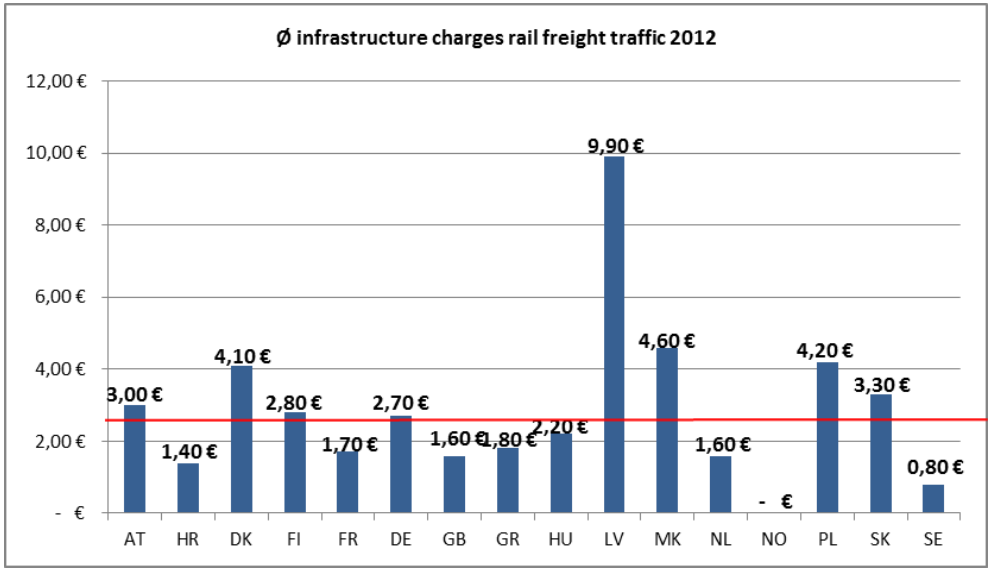
Wagon	Traction unit	Energy traction power	Infrastructure	Staff
▪ ECCM* ▪ EWT* ▪ EVIC* ▪ ECM* ▪ RSRD²* ▪ Noise reduction (K-/LL-blocks)	▪ ETCS ▪ Admission procedures	▪ EEG-Umlage ▪ Electricity tax	▪ Low investments ▪ Rising infra-structure charges ▪ Noise related price system ▪ Quality of infrastructure ▪ Profit transfer DB Netz to federation	▪ EU-driver licence ▪ New examination regulations for drivers
Effect on	Effect on	Effect on	Effect on	Effect on
				

Additional cost pressure for RU

ECCM = European Common Criteria for Maintenance, EWT = European Wheel Set Traceabililty, EVIC = European Visual Inspection Catalogue, ECM = Entity in Charge of Maintenance, RSRD² = Rolling Stock Reference Database)

Infrastructure charges in Germany rise much higher than normal inflation or road charges



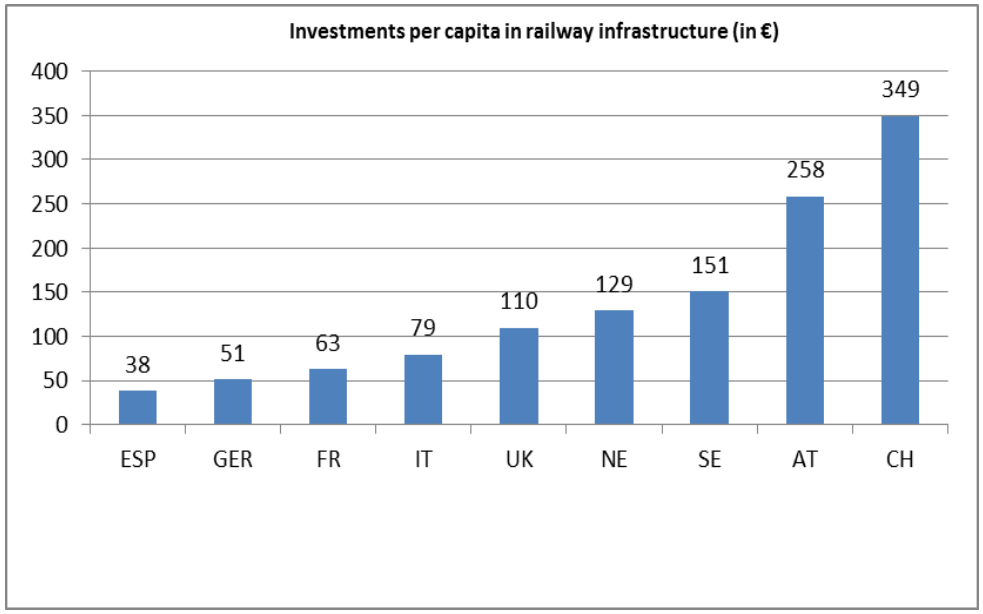


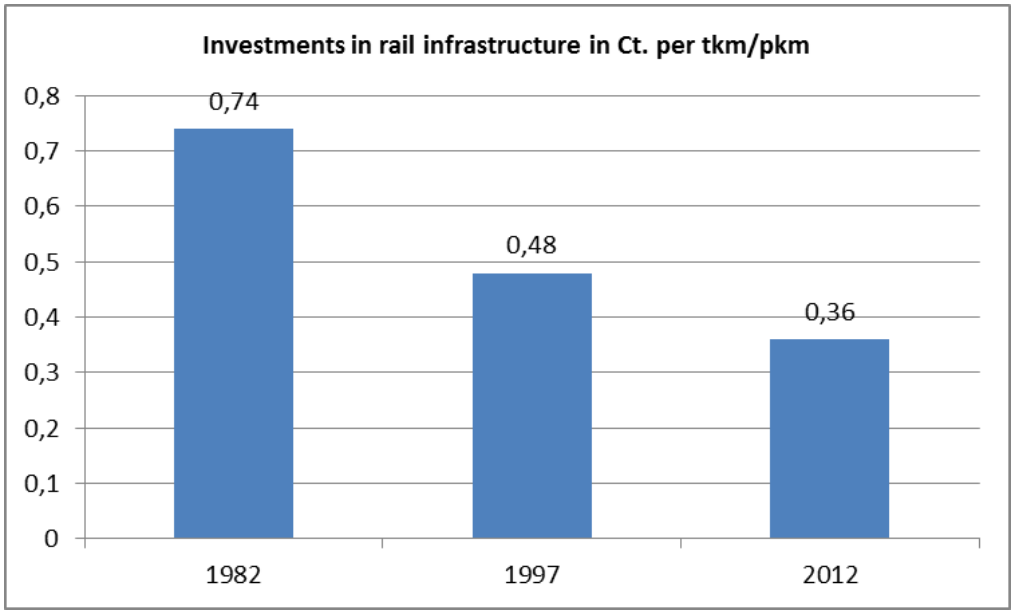
- Since 2003 rise in infrastructure charges for rail freight by 40%.
- In comparison normal inflation rate rises by only 18% in the same period.
- Road charges for trucks stayed constant between 2009-2014. Decline of road charges in 2015.

- Non-harmonized infrastructure charges in Europe with high differences in the level of prices from 0 € (NO) to 9,90 €/km (LV)

Quelle: Eigene Darstellung in Anlehnung an Bundesnetzagentur (2013), Marktuntersuchung Eisenbahnen, Bonn, 2013 und Statistisches Bundesamt (2014), Inflationsrate 2003 bis 2013; Richter, K.A. (2014), Europäische Bahnen 2014/15, Hamburg

Investments in railway infrastructure in Germany comparatively low





- Countries with high modal split of rail freight traffic also with high investments per capita in railway infrastructure

- In Germany investments per tkm and pkm have declined from 0,74 €/tkm/pkm in 1982 to 0,36 €/tkm/pkm in 2012 by half.

Source: Allianz pro Schiene Pressemitteilung vom 08.07.2013 auf Basis von BMVBS (Deutschland), VöV (Schweiz), BMVIT (Österreich), SCI Verkehr GmbH; Transcare, Pressemitteilung vom 23.01.2014.

Regulatory interventions in infrastructure charges are quite difficult to number, but presumably will be quite high

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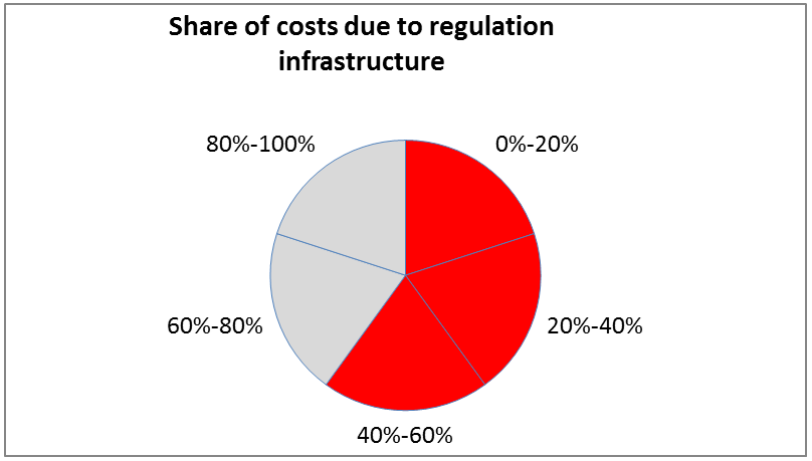
Regulatory interventions:

- Constant rise of infrastructure charges (2014/2015 + 2,4%) and stable resp. declining road charges in Germany.
- Introduction of noise supplement in infrastructure charges in Germany (since 2014 appr. 2,0%)
- Additional operating expenses for RU due to low quality of infrastructure (detours, capacity bottlenecks, temporary stops because of passenger trains,…)
- Low investments in the railway infrastructure and high focus on High speed lines (NBS Frankfurt-Köln, Stuttgart 21). Delays on important freight corridors like Karlsruhe-Basel, Oberhausen-Emmerich,…

Share of cost due to regulation infrastructure[1]

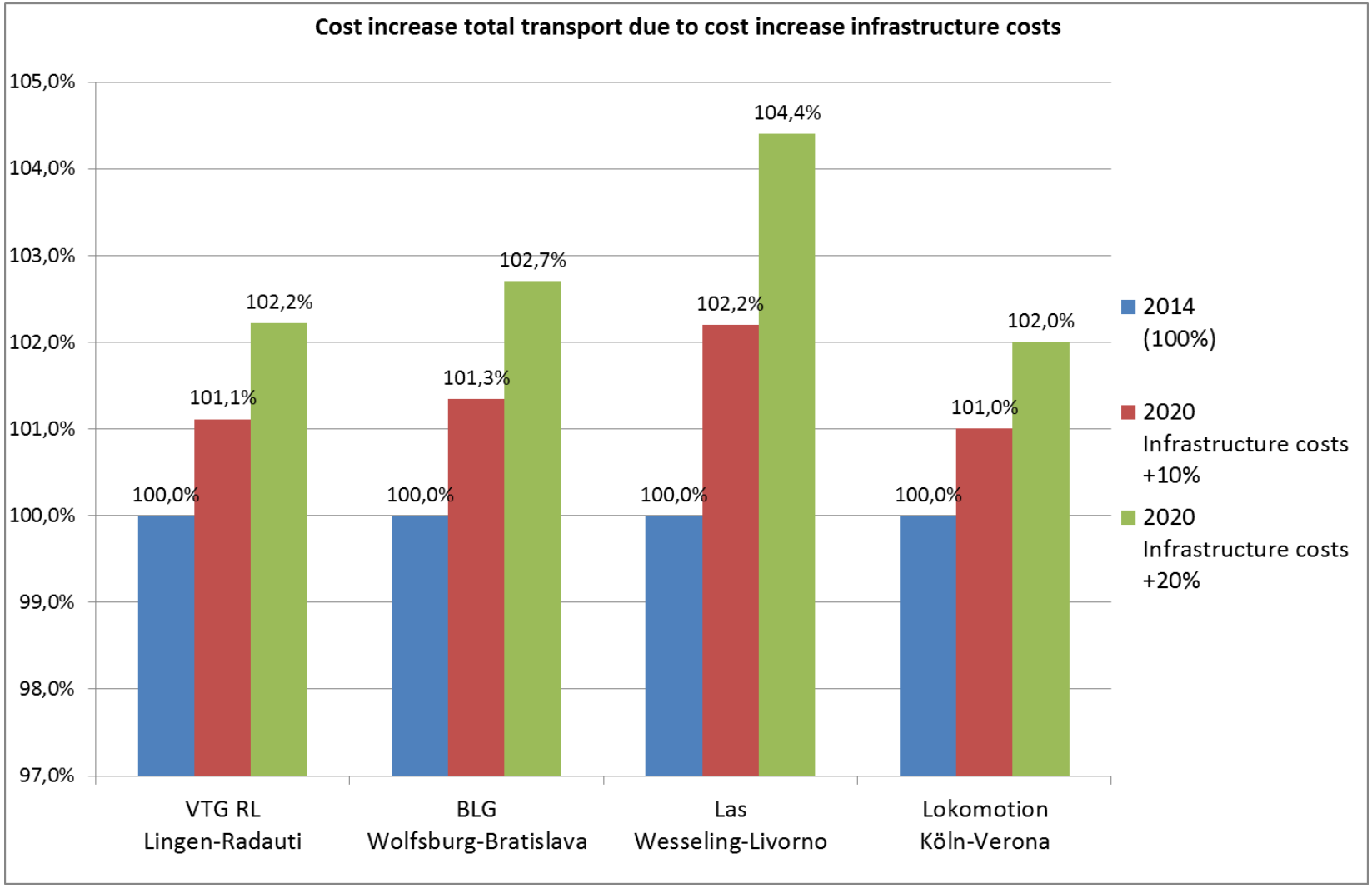


Scenario for development costs of infrastructure 2020

- **Scenario 1: Cost increase + 10%**
- **Scenario 2: Cost increase + 20%**

1 estimation

Infrastructure
Regulatory interventions show increase of total costs from +1% to +4,4% depending on type of traffic



Source: hwh

Regulatory interventions
Driving staff / shunting staff

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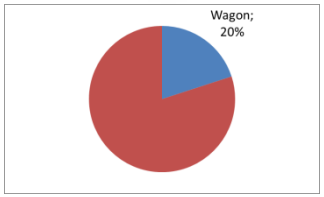
Wagon

- ECCM*
- EWT*
- EVIC*
- ECM*
- RSRD²*
- Noise reduction (K-/LL-blocks)

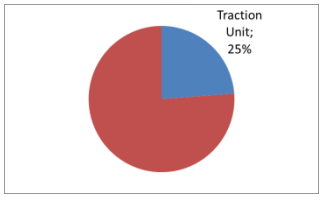
Effect on



Traction unit

- ETCS
- Admission procedures

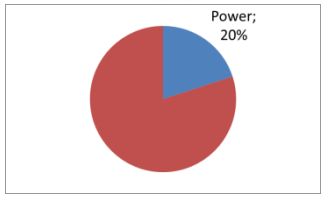
Effect on



Energy Traction power

- EEG-Umlage
- Electricity tax

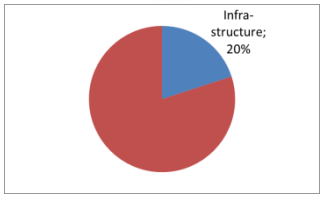
Effect on



Infrastructure

- Low investments
- Rising infra-structure charges
- Noise related price system
- Quality of infrastructure
- Profit transfer DB Netz to federation

Effect on

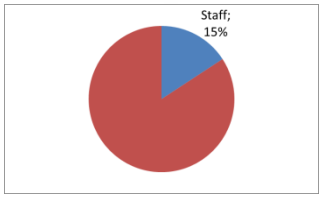


Additional cost pressure for RU

Staff

- EU-driver licence
- New examination regulations for drivers

Effect on



ECCM = European Common Criteria for Maintenance, EWT = European Wheel Set Traceabililty, EVIC = European Visual Inspection Catalogue, ECM = Entity in Charge of Maintenance, RSRD² = Rolling Stock Reference Database)

Additional costs for driving staff

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Additional costs for driving staff

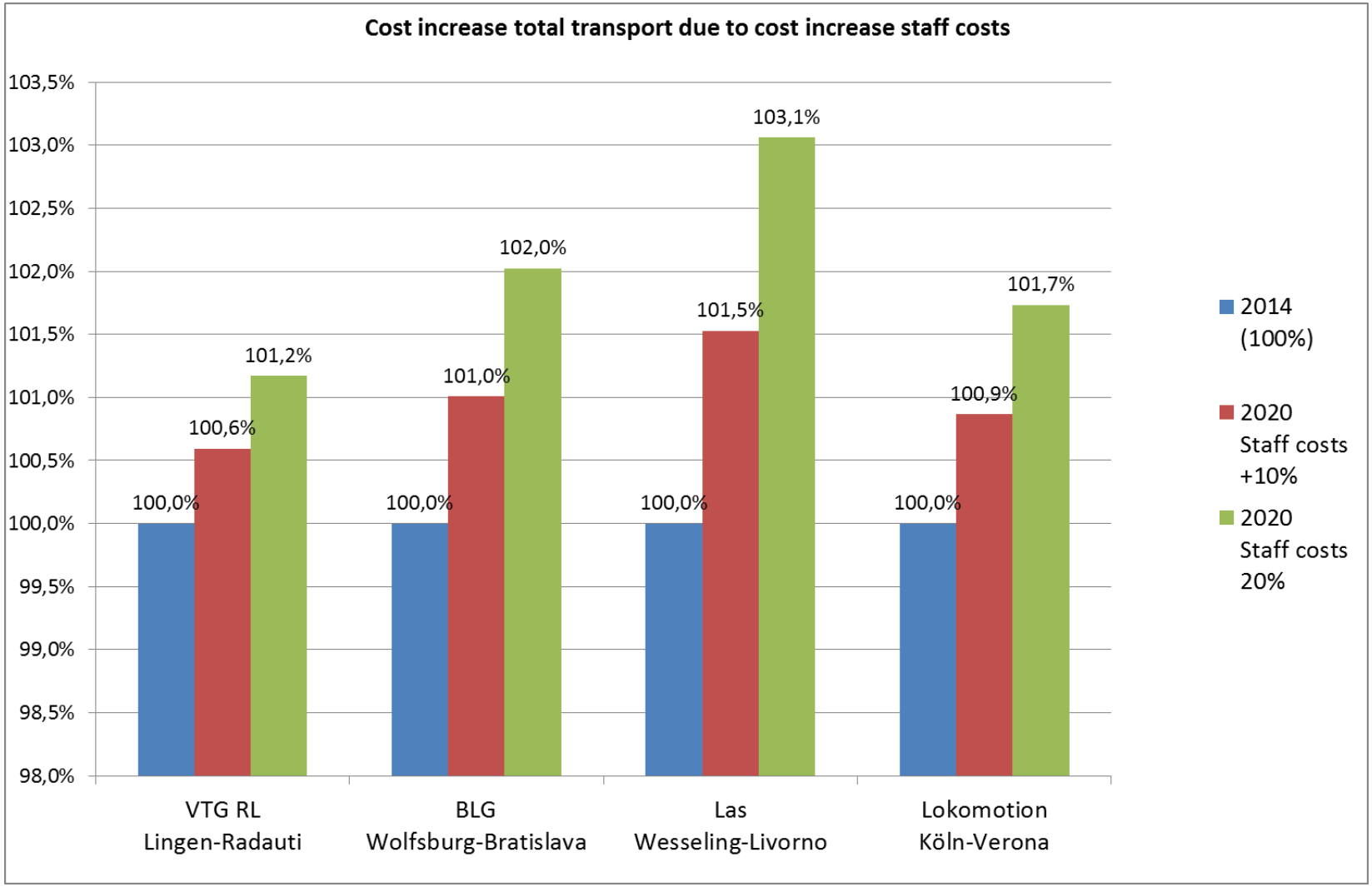
- Lack of drivers leads to higher wages
- EU-driving licence leads to costs for DB of only appr. 30 Mio. € [1].
- New regulations for examination of loco driver with three examinants instead of two (small cost increase but still another regulatory intervention)
- Historically no common education of loco drivers. Examination only for national network ➔ high costs for training drivers for driving in foreign countries
- No common language for railway operations ➔ high costs for training driver in a foreign language.

Scenario for development costs for staff 2020

- **Scenario 1: Cost increase + 10%**
- **Scenario 2: Cost increase + 20%**

[1] o.V.(2014), EU-Lokführerschein kostet Bahnen erneut Millionen, Artikel in der Rail Business Nr. 09/14 vom 24.02.2014

Staff
Additional costs for staff amount to 0,6% to 3,1% of total costs interventions



Source: hwh

Furthermore there are regulatory interventions which can not be assigned clearly to one of the cost components

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Further regulatory interventions

- Additional costs for railways appr. 1,5 Mrd. € by introduction of technical specification Interoperability (Telematics) according to VDV[1].
- Higher fees for public authorities for railways: increase from 100 € to 120 € per hour. Total costs for railways in Germany only 6,4 Mio. €[2] but still another example of regulatory interventions.

[1]Verband Deutscher Verkehrsunternehmen (VDV) (2012), Positionspapier: Der Schienenverkehr muss wettbewerbsfähig bleiben, Köln, S. 20-22.
[2] o.V. (2014), Höhere Gebühren für Behördenleistungen, Artikel in der RailBusiness Ausgabe 25/2014 vom 16.06.2014, S. 1

Agenda

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1 Introduction / Objectives of the study

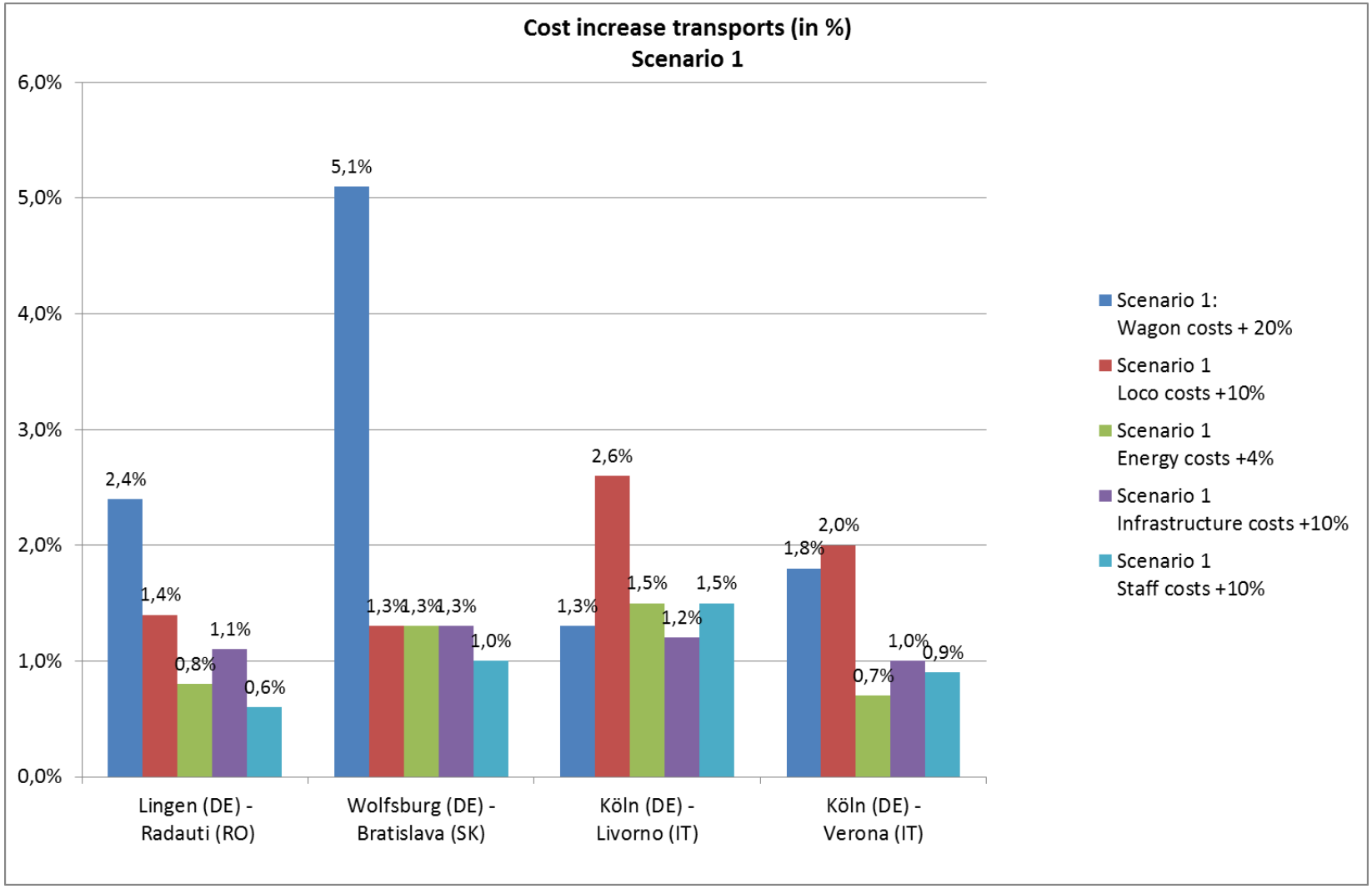
2 Cost structures road and rail freight traffic

3 Selection and calculation of traffic

4 Regulation in rail freight traffic and effects on cost situation

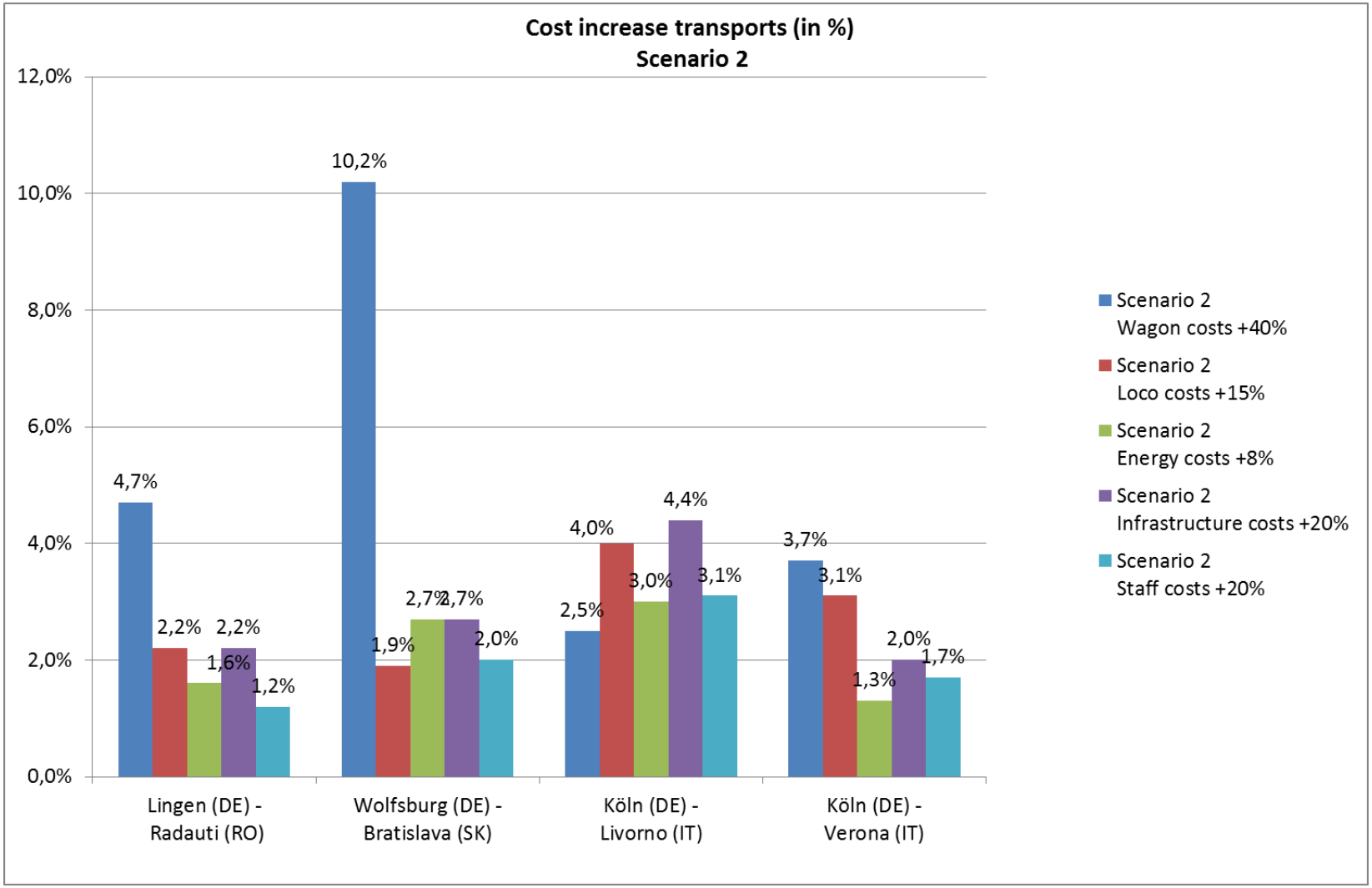
5 **Effects on the competitiveness of rail freight traffic**

High cost increases in scenario 1 especially due to higher costs for wagons and locos



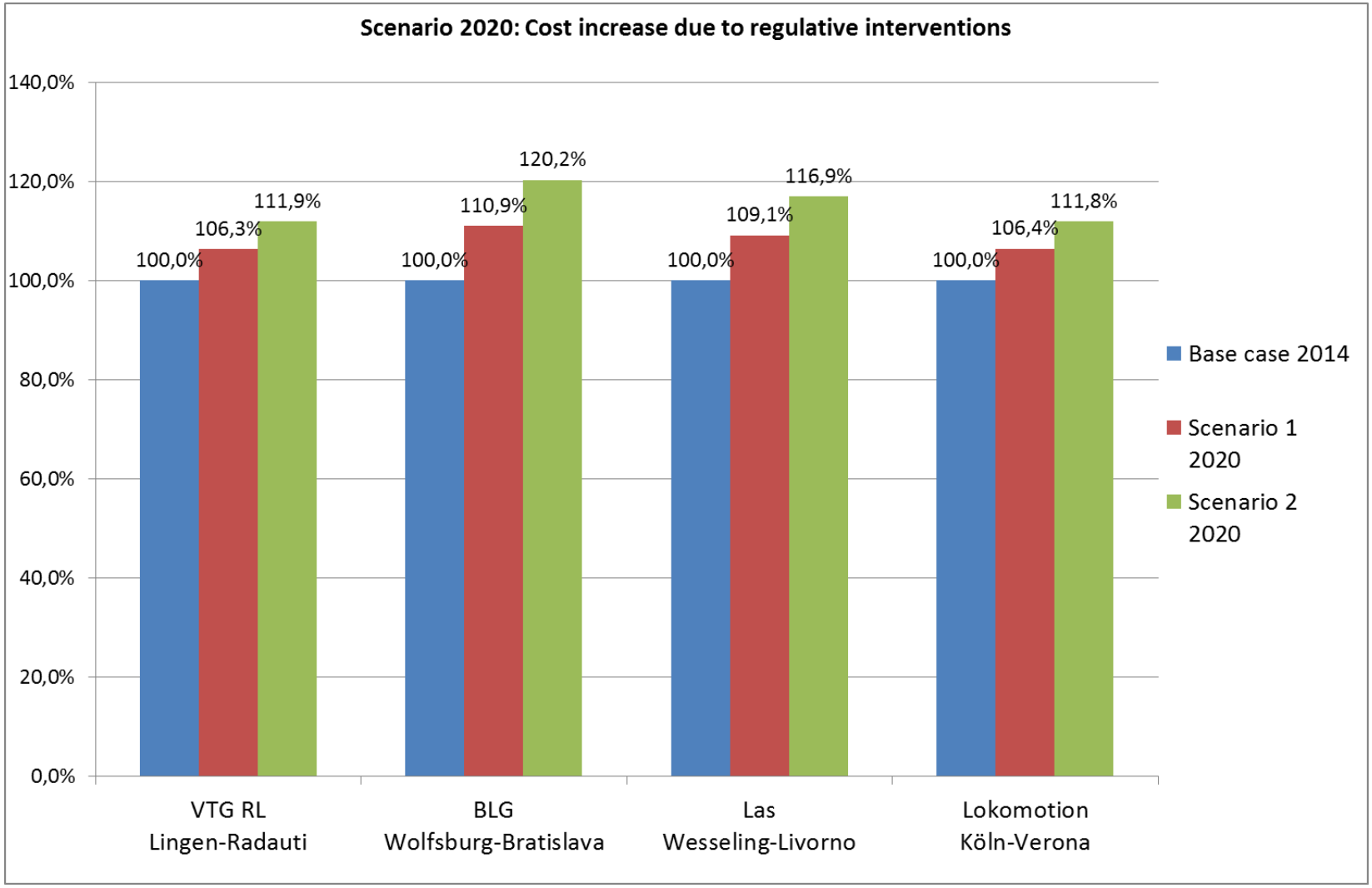
Source: hwh

Also in scenario 2 total costs of traffic show significant increase especially due to higher costs for wagons and locos



Source: hwh

Considering all additional costs due to regulatory interventions total costs increase by 6,3% to 20,2% depending on the traffic



Source: hwh

Conclusion

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- Cost increases due to regulatory interventions add up to quite a high amount. Cost increases to such extent cannot be compensated by RU via productivity increases. Nevertheless railway undertakings still need to enforce their activities to increase productivity.
- The situation for single wagon load is particularly critical as it is in direct competition with truck load. Profits of RU only to a small extent. Price increases due to cost increases are inevitable. This will lead to further modal shift to truck traffic.
- Therefore it can be assumed that due to the regulatory interventions politics will not fulfill their own objectives of a modal shift to rail – furthermore the regulatory interventions foil the objectives of politics.
- These inconsistent actions need to be reviewed fundamentally. The objectives of RU are not to weaken high requirements for noise reduction or security. But by means of more honesty in politics it should be considered that even well-intentioned regulatory interventions lead to less rail traffic if the cost situation of RU gets even worse.
- This might lead to a further shift of traffic to road. The experience shows that once lost traffic from railway to road never or hardly comes back to rail and the erosion of rail freight traffic in Europe carries on.