

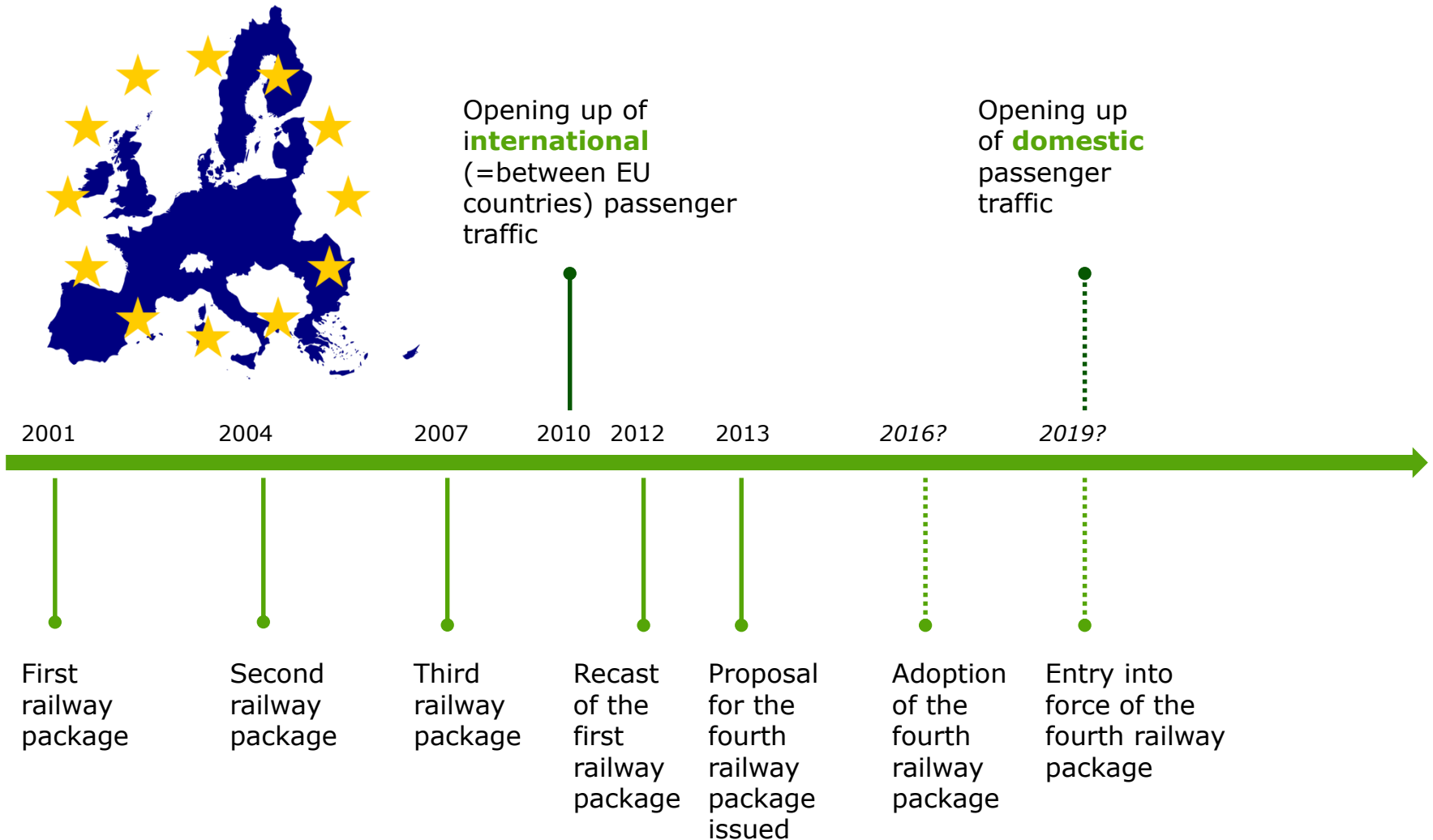


Liberalization of Rail Passenger Transport in the EU

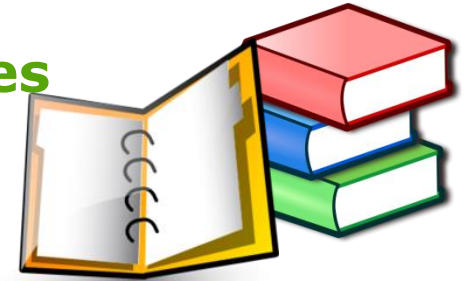
Päivi Minkkinen

April 21, 2016

An overview of the liberalization of EU rail passenger transport on a timeline



Summary of the different railway packages

**2001****First railway package**

- Rail infrastructure package
- Limited liberalization of international (between EU-countries) freight transport by 2003

2007**Third railway package**

- Liberalization of the international (=between EU countries) rail passenger services by 2010
- Certification of train crews
- Passenger rights

2004**Second railway package**

- Liberalization of rail freight market by 2007
- Technical and safety regulations

2012**Recast of the first railway package**

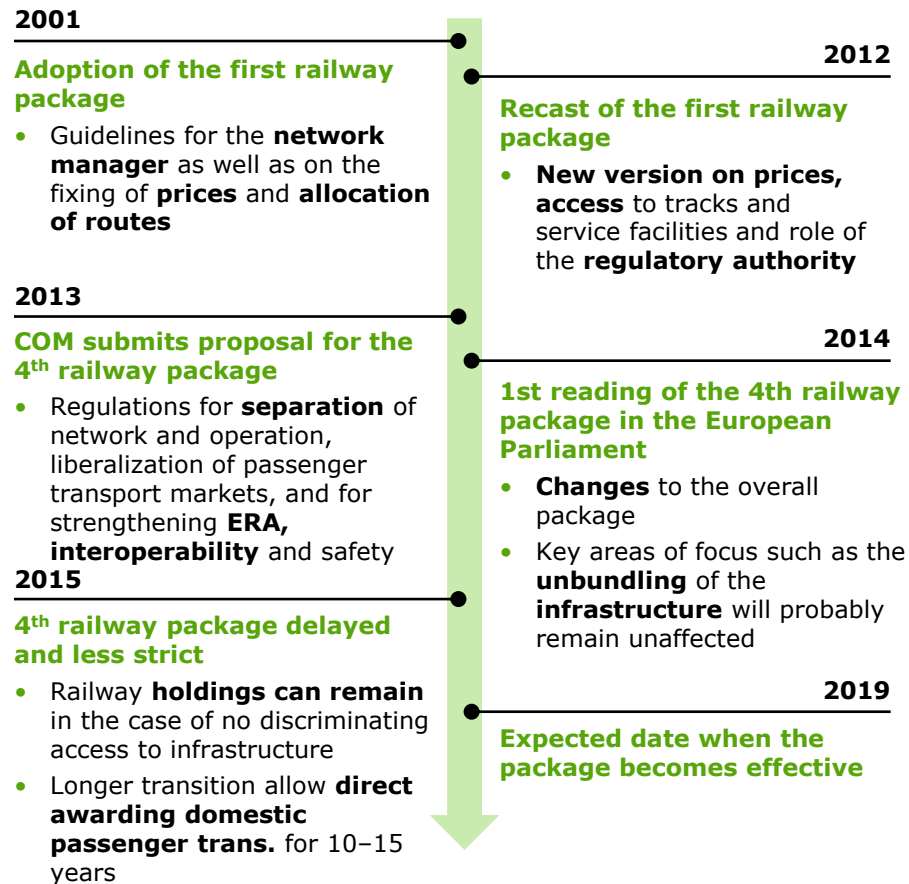
- Establishing single European rail area
- Access to rail-related services
- National regulatory bodies for rail transport

2016?**Fourth railway package**

- Completing a single European rail area
- Liberalization of domestic passenger traffic

The liberalization of EU-wide national rail passenger transport continues to be delayed and leaves significant room for interpretation

Railway liberalization schedule



Comments

Railway liberalization reforms have been **delayed** and **continuously** amended on the past years

- The implementation of **the recast of the 1st railway package** is delayed in most countries
- The **4th railway package** has also been **delayed** and **amended** several times over the past years
 - Due to **continuous criticism** from the EU member states **regulations** and **conditions** are becoming **increasingly softer** and **less binding**
- Formulations of **the directives** are very broad and leave **significant room** for **interpretation** – **directives** have been **implemented** in various ways, leading to different degrees of **liberalization** and levels of **competition**
- European Commission starts regularly **infringement proceedings** against states because of national railway politics

The state of the EU railways in 2015



Infrastructure management

- Separated from railway operations in 13 countries
- Integrated model in 13 countries

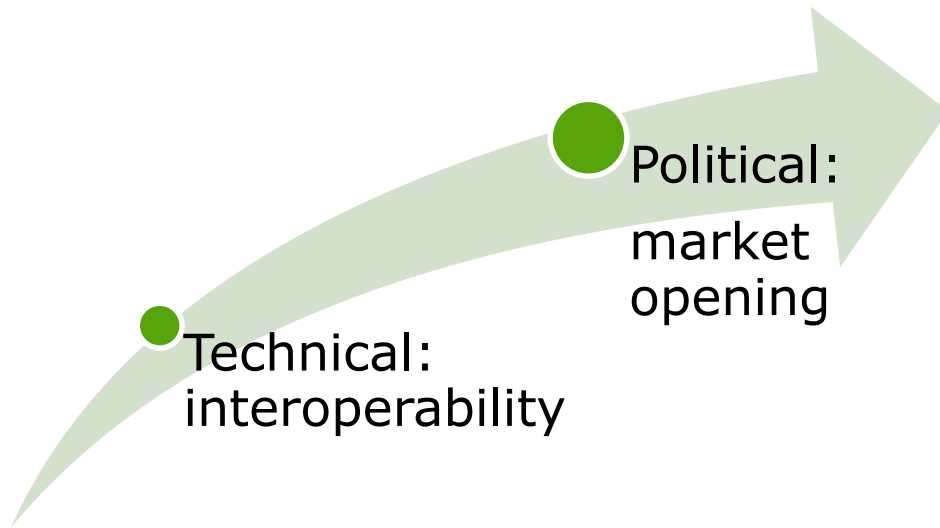
Domestic rail passenger markets

- Only partially liberalized
- Domestic rail passenger traffic liberalized in 10 EU countries
- Total liberalization only in 2 countries, UK and Sweden
- Entering domestic markets often difficult due to long-term franchising contracts with exclusive rights

Consolidation of open markets

- Large multi-modal companies: rail and bus/coach transport
- Actively looking for new markets, also acquisitions

The fundamental aim of the European Commission is to improve Europe's railways



Single European Rail Area

- More competitive rail sector
- Higher levels of safety and reliability
- Integrated rail network
- Increased efficiency of rail transport services

The fourth railway package completes the liberalization of rail passenger services

Technical part

- Technical interoperability: free movement of trains between EU-countries without national authorization processes
- EU-wide vehicle authorizations
- EU-wide safety certificates

Political part

- Opening up of domestic passenger markets by December 2019
- Enforcing independence of infrastructure managers from railway operators
- Mandatory competitive tendering for public service rail contracts
- Common rules on the award of public service contracts for rail passenger transport

Issues still under negotiation

- Timetable: entry into force and transition period
- Exemptions to mandatory competitive tendering
- Terms of validity for public service contracts currently in force and concluded during the transition period
- Protection of public service contracts against commercial traffic
- Transfer of rolling stock
- Social issues: transfer of staff
- Reciprocity

Public service contracts in general refer to rules related to public financing for organizing unprofitable passenger transport services

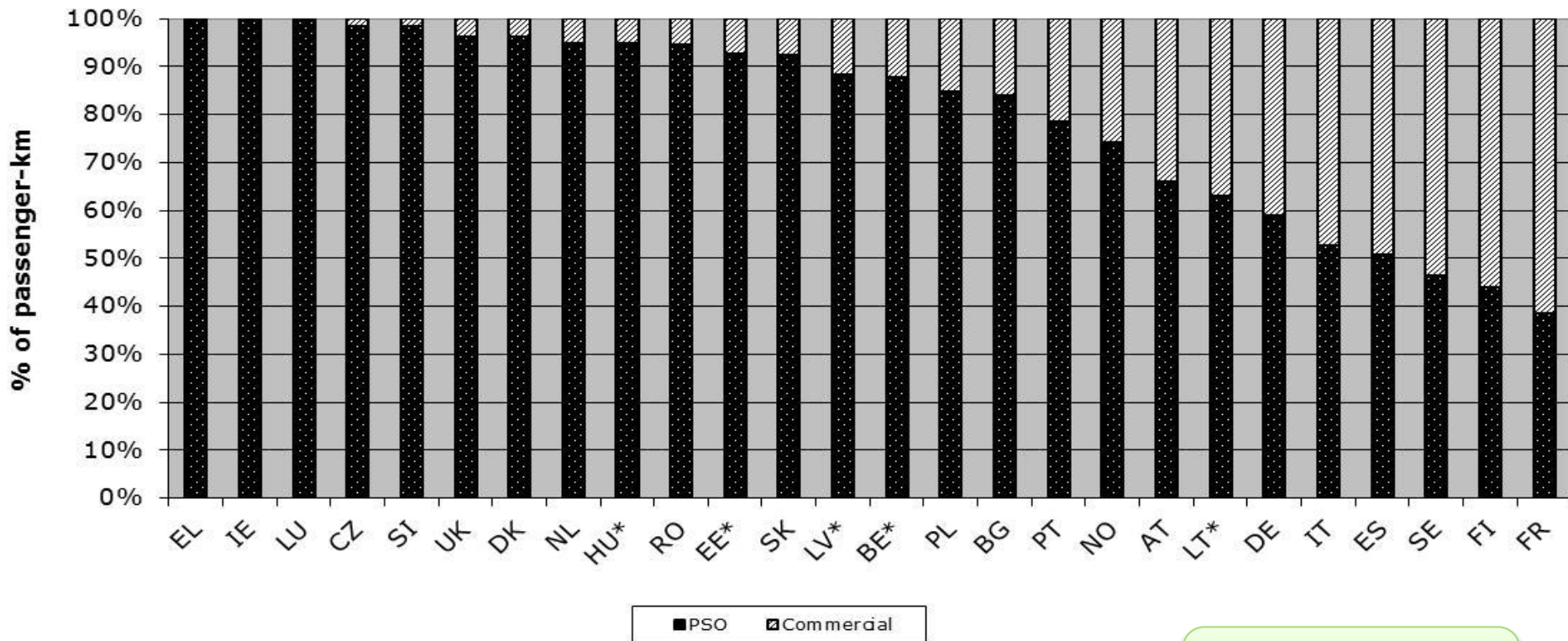
- Regulation on public passenger services by rail and road was adopted in 2007
- Public passenger transport = "Passenger transport services of general economic interest provided to the public on a non-discriminatory and continuous basis"
- Current regulation allows both for competitive tendering and direct awards
- After the fourth railway package will be adopted, competitive tendering will be the general rule. Proposal to have limited exemptions allowing direct awards based on efficiency criteria

Statistics

- *The share of domestic passenger transport is 94% of all passenger km in the EU*
- *Public service contracts comprise 62-65% of all passenger km in the EU (statistics from 2011-2012)*
- *All local and regional traffic and 2/3 of long-distance traffic are based on public service obligations*

In the EU, over half of the services are organized through public service contracts

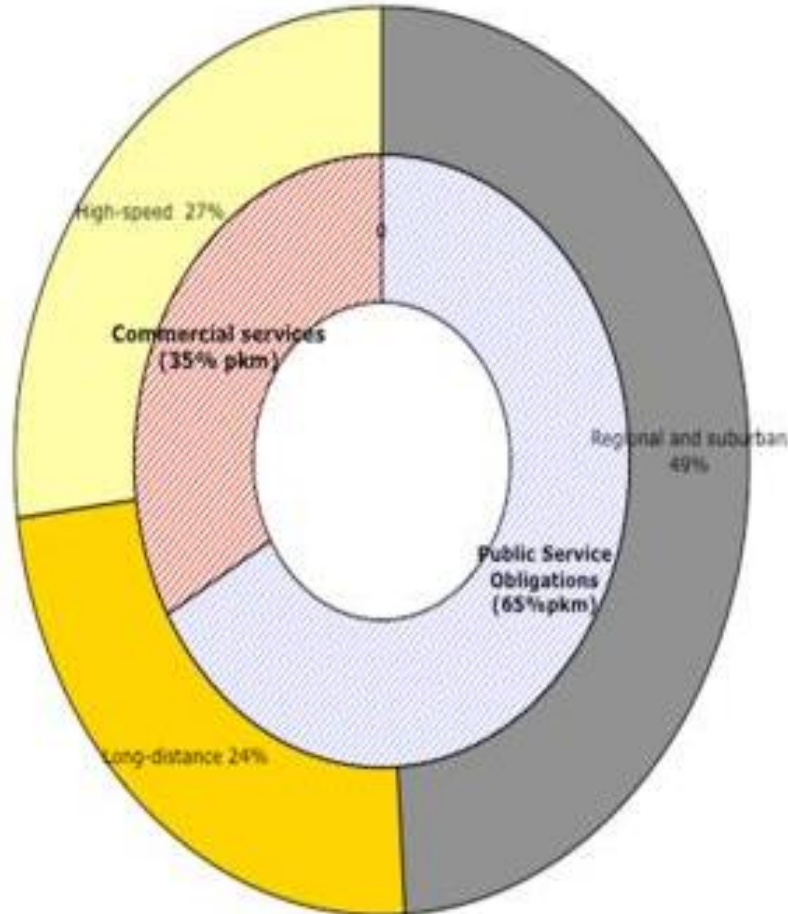
PSO and commercial services in 2012 (% pkm)



*EU average:
62-65%*

All local and regional traffic and 2/3 of long-distance traffic are based on public service obligations

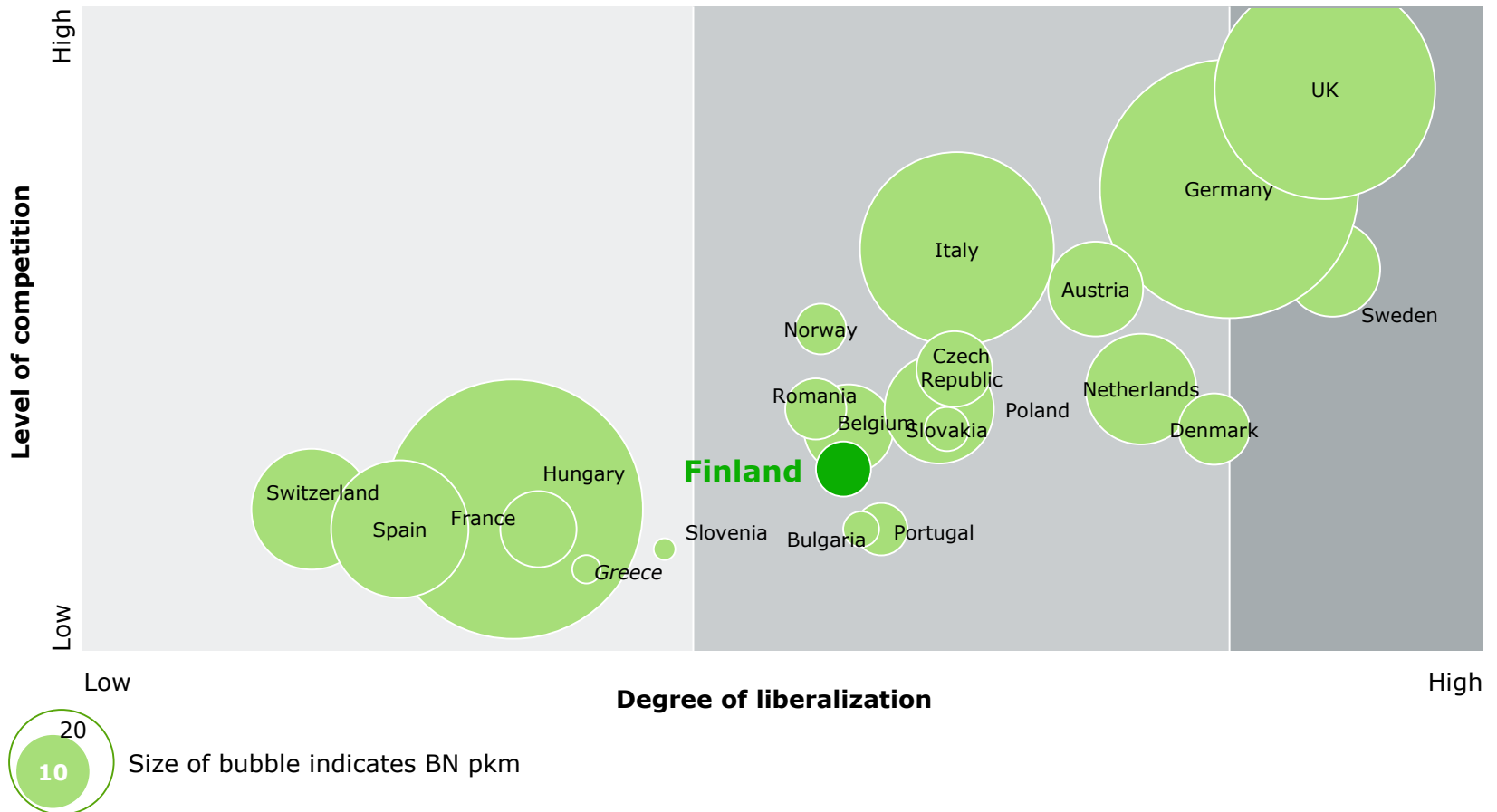
Rail segments and market structure in 2012 (% pkm)



LESSONS LEARNED FROM LIBERALIZATION IN EUROPE

European passenger rail is at different levels of liberalization and competition today

Level of competition and degree of liberalization



While liberalization is taking place at various speeds, three main models have been adopted

1 Disruptive model

- **Fast** implementation (~2–5 years)
- **Tendering** or **open access policy** for the majority of the network
- **Horizontal separation** of value chain
- **Vertical separation** (freight, passenger and infrastructure)
- **Significant build up** of **regulatory, coordination** and **control body**



Split-up of **incumbent**

Examples



UK SW

2 Evolution model

- **Stepwise implementation** (~5–15 years)
- **Tendering** of an increasing share of the network/**open access policy** for long distance
- Some **vertical** and **horizontal separation**, integrated railway holding
- Build up of **regulatory, coordination** and **control body**



Remaining **strong incumbent**

Examples



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3 Strong governance control

- No **liberalization**
- **One** incumbent (and small public owned local operators)
- Fully **integrated value chain** and **horizontal integration**
- Strong **governmental control** with lean regulatory body and **regulation based on performance agreements**



Integrated incumbent and system coordinator with tight governmental **performance control**

Examples



CH Lux

Each model reflects a different level of impact on the vertical and horizontal separation, as well as on the organization of competition

Model criteria



Level of vertical integration

- Usually clear split between **infrastructure**, **passenger** and **freight**
- Often further **separation** within passenger into **long distance** (high speed and/or conventional) and **regional/suburban**
- **Partially** existence of **integrated railway** holding



Value Chain integration

- Value chain typically **divided** into **operations**, **rolling stock procurement/financing**, **maintenance**, **sales** (incl. separate ticket distribution)
- **Incumbents** often cover **full** value chain, however **new entrants** for **parts** of value-chain
- Partially **explicitly rolling** stock provision only by **third parties**



Organization of competition

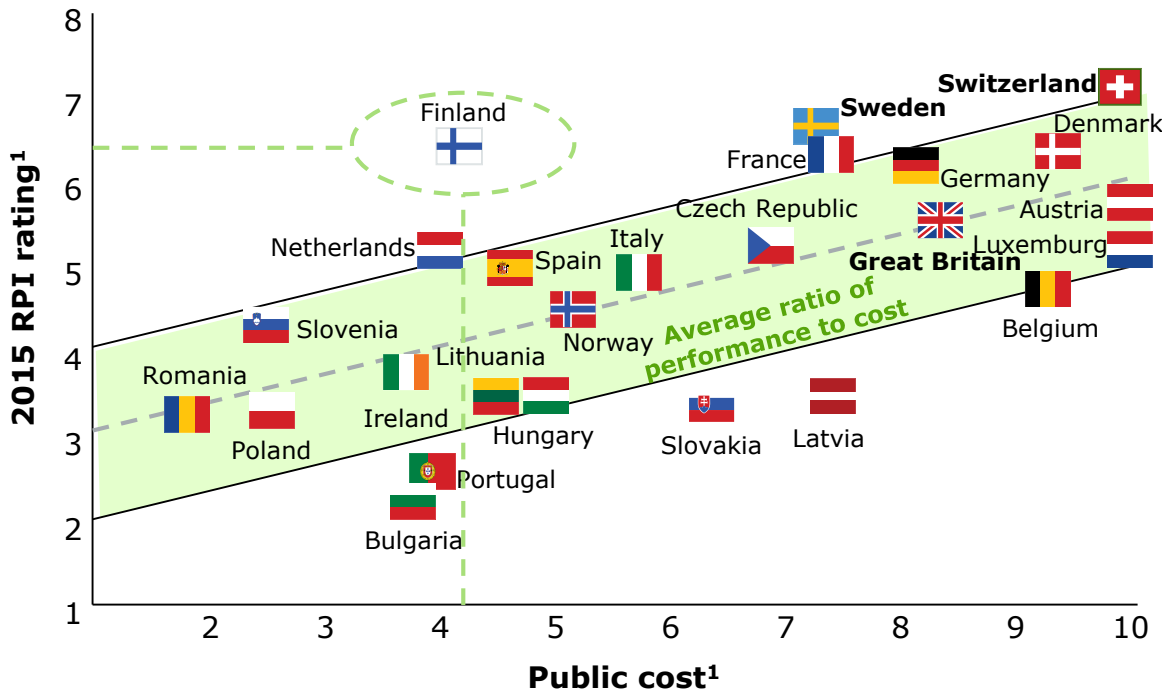
- Typically either **open access** (competition on same routes at same time) and/or **tendering** (competition for exclusive franchise for a route or network)
- **Transport contracts vary** in many points (duration, revenue sharing, vehicles specifications, guarantees by authorities, service level agreements, penalties etc.)

Implementation process

- Each country has chosen a **different approach** as well as a **different timeline** concerning the liberalization process (~2 to 20 years)
- Most countries are not **fully liberalized** yet, UK, Sweden and Germany most advanced (long distance and regional transport liberalized)
- Relevant EU legislation (4th railway package) is **delayed**, especially respective **obligations for tenders**

Nevertheless, experience has shown that railway performance depends mainly on the level of public spending

EU passenger rail subsidy – RPI ratings with public cost, but some countries get more value for their money



Comment

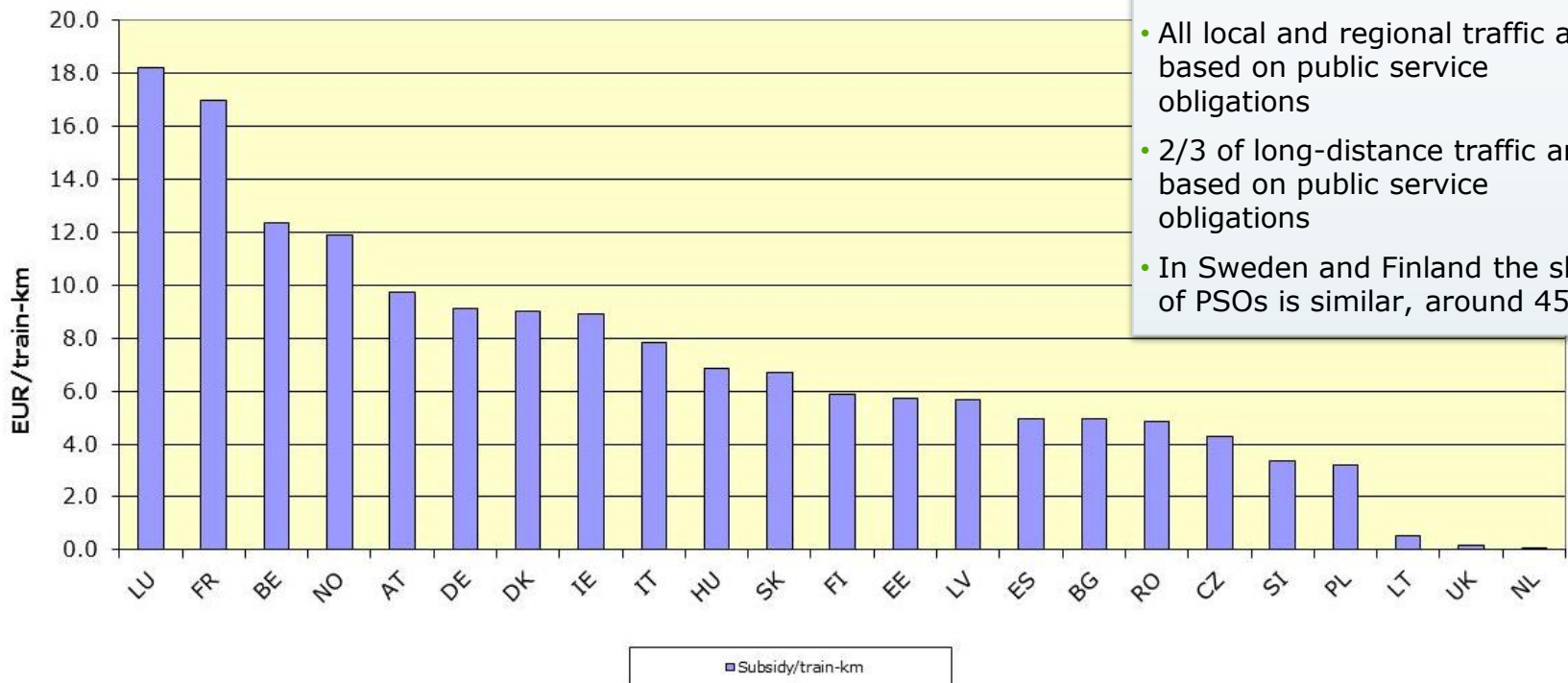
- Countries with high degrees of liberalization, e.g. GB, do not necessarily have the best performing railway systems
- At the same time they also often rank amongst the highest in terms of public cost allocation
- While non-liberalized countries with a high public spending, e.g. Switzerland have a very good performance
- Finland has already low public spending and a high performance in comparison

Source: BCG analysis

1. RPI = Railway Performance Index; Performance is measured based on intensity of use, quality of service and safety; public cost is the sum of public subsidies and investments, and it includes cost of debt and expected future investments;
2. Public cost is expressed as thousands of euros per inhabitant, normalized on a scale of 0 to 10; Not adjusted to purchasing power.

In Europe public service transport still has a dominant position in rail

**Subsidy / train km in 2012
(EUR/train km)**



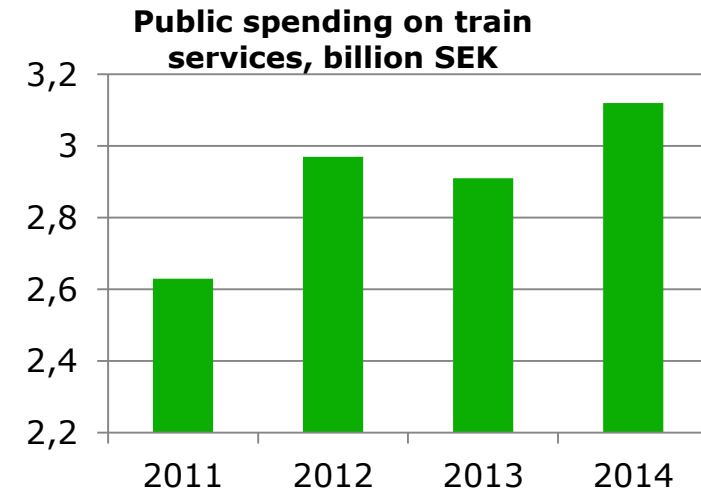
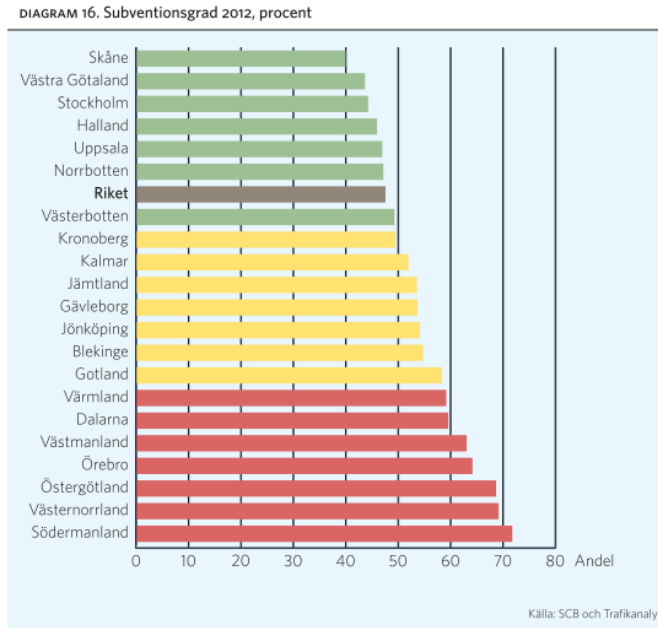
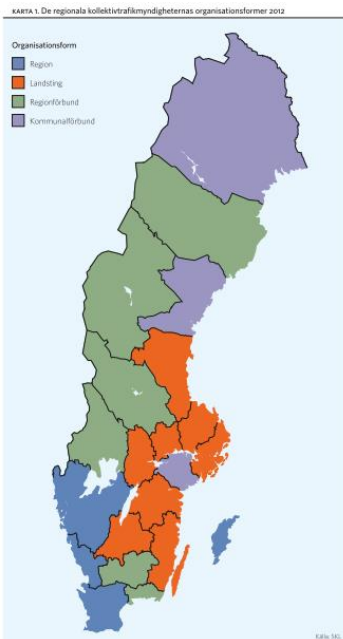
- Public service contracts comprise 62-65% of all passenger km in the EU (statistics from 2011-2012)
- All local and regional traffic are based on public service obligations
- 2/3 of long-distance traffic are based on public service obligations
- In Sweden and Finland the share of PSOs is similar, around 45 %

→ In total 18 billion EUR of public subsidies in the EU to finance public service obligations



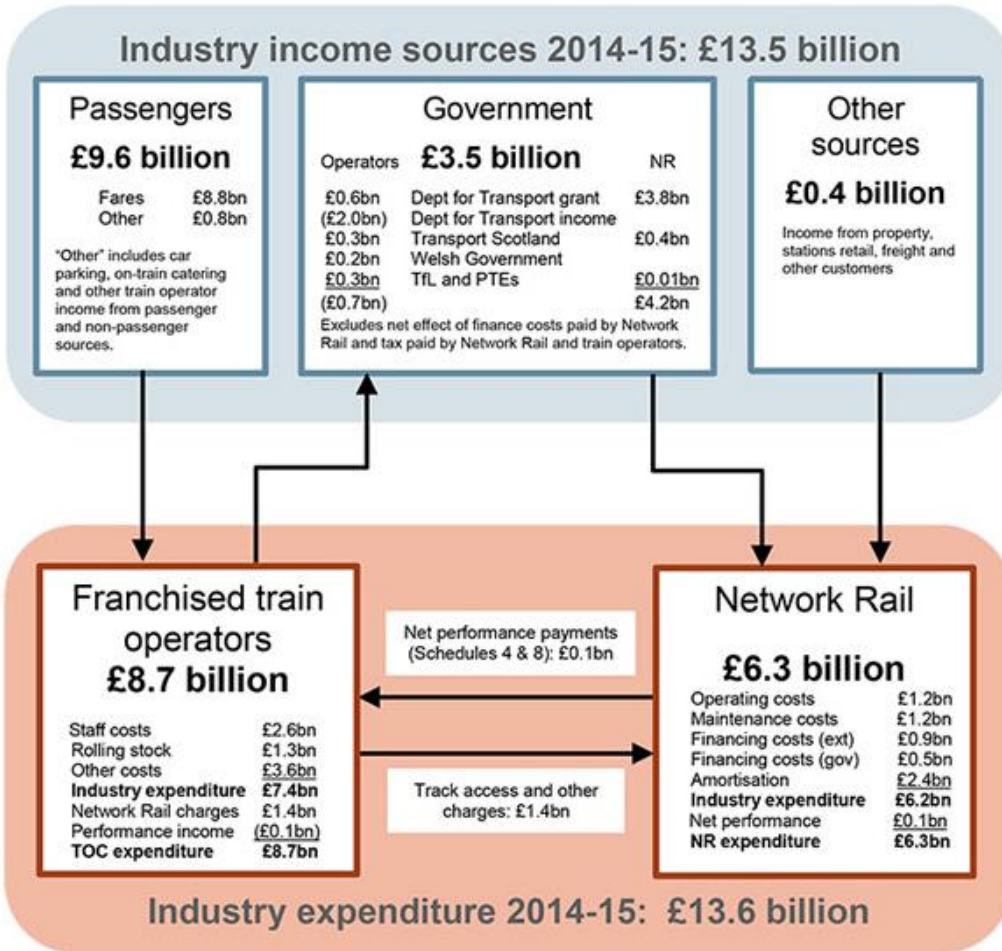
In Sweden all regional passenger traffic consists of liberalized but tendered public service obligations

- Regional authorities are responsible for ordering and tendering of passenger traffic services
- Share of public subsidies varies between 40-70 %
- Use of public financing has grown after opening of the market in 2010
- In 2014 the public spending on train services consisted of 3.1 billion SEK (over 300 million EUR)





The UK rail market is also liberalized but with much smaller government funding



- Rail industry income was £13.5 billion
 - 71 % from passengers
 - 26 % from governments
 - Overall cost of running railways was £13.5 billion
 - 54 % train operations
 - 46 % rail infrastructure
 - Franchised train operators contributed more to governments than in previous years
 - In 2013-14 net they received net support of £0.1 billion
 - In 2014-15 they made net payments of £0.7 billion
 - Total governments' funding per passenger journey
 - England £1.66
 - Scotland £6.70
 - Wales £9.14
- due to the very different average passenger densities per train

Lessons learned from the different models and countries



1 Disruptive model

Disruption led to an increase in competition in the UK

- **High increase** in number of passengers (starting from a very low level)
- Development of **competition** is strongly dependent on **attractive passenger flows** (e.g. regional franchises 12 BN pax km p.a.)
- High **complexity** due to **fragmentation**
- High **degree of coordination** required, causing high **administration costs**
- **High cost** of infrastructure

Build up of competition in Sweden has been slow due to unattractive passenger flows

- **Inability to attract international players** due to **unattractive traffic patterns** – only for attractive lines (e.g. Stockholm – Göteborg (MTR Express))
- Only **little value creation** on entrepreneurial level, value chain fragmented and not attractive for large investors
- **Continuous increase** in overall public contribution



2 Evolution model

- Several benefits of the evolution model have been realized in Germany and Austria, but the competitive situation remains unsustainable



3 Governance model

- Attractive rail systems exist in Switzerland and Luxembourg, but only due to high public spending and strong governmental control



SPECIFICS OF THE FINNISH RAILWAY MARKET

The base for liberalization has already been established



Separation between **infrastructure** and **operations** as well as of **passenger** and **freight** has already taken place



Freight market has been **opened** for **competition** in **2007** and the **tendered Helsinki area commuter services** will start in **2021**



The long-distance **bus/coach** market is **liberalized**



High **degree** of **cost transparency** concerning infrastructure charges, subsidies and VR's operational cost

Key characteristics of the Finnish passenger railway market

Single track infrastructure

- High risk of capacity bottlenecks
- Low operational flexibility

Specific gauge

- Limited reutilization possibilities of European rolling stock
- High degree of rolling stock specification and high procurement cost

Low density population

- Nationwide only low traffic volume, which can be bundled in order to increase load factor
- Major traffic volume only present in Southern parts of Finland (Helsinki region), no other large cities

Good positioning of intermodal competitors

- Many airports
- No road congestion

Карта Финляндии

Расстояния

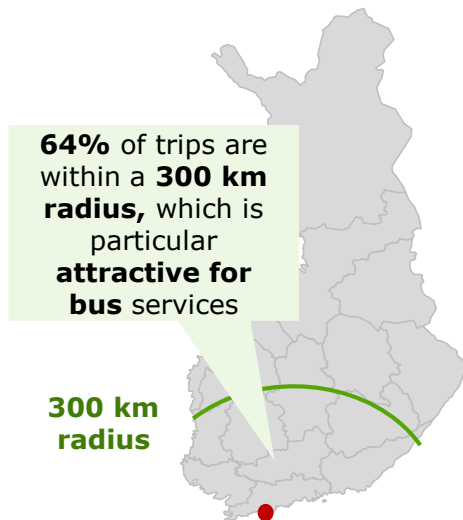
Helsinki - Hanko	128 km
Helsinki - Espoo	18 km
Helsinki - Hyvinkää	56 km
Helsinki - Hämeenlinna	101 km
Helsinki - Imatra	256 km
Helsinki - Joensuu	437 km
Helsinki - Jyväskylä	270 km
Helsinki - Kotka	133 km
Helsinki - Kouvolaa	134 km
Helsinki - Kuopio	382 km
Helsinki - Lahti	104 km
Helsinki - Lappeenranta	221 km
Helsinki - Oulu	607 km
Helsinki - Pori	237 km
Helsinki - Porvoo	50 km
Helsinki - Rovaniemi	815 km
Helsinki - Savonlinna	334 km
Helsinki - Tampere	176 km
Helsinki - Turku	165 km
Helsinki - Vaasa	419 km
Helsinki - Vantaa	16 km
Joensuu - Kajaani	230 km
Lahti - Mikkeli	126 km
Oulu - Kuusamo	215 km
Rovaniemi - Ivalo	288 km
Turku - Rauma	94 km
Turku - Seinäjoki	295 km
Turku - Tampere	157 km
Vaasa - Kokkola	121 km



Intermodal competition from low-cost buses has already led to price reductions as well as schedule and operating cost optimization

Intermodal (low-cost bus) competitive intensity

- **Deregulation** of the **bus/coach market** has brought significant intermodal **competition** to rail from 2014 onwards
- 64% of the travelling is within **300 km radius** of Helsinki
 - **14%** from Helsinki to other parts is **beyond 300 km**
 - **22%** of the traffic is **outside of the 300 km** radius of Helsinki
- **Traffic within the 300 km is particular attractive for bus services**



Preliminary conclusion:
Additional rail competition will not bring significant additional impact nor increase the overall volume of travellers

Liberalization of the rail market - four key conclusions

- 1** The liberalization model needs to be **tailored** to the **countries traffic** structure and **liberalization objectives** as well as at the appropriate **implementation speed**

- 2** **Tendered networks/baskets** need to be **attractive** for operators

- 3** **Appropriate coordinating** and **regulatory structures** be build up is required but the **degree of complexity** needs to be in balance with the benefits

- 4** Liberalization does not mean that **public financing** can be avoided

Thank you for your attention!