



EU's 4th railway package Developments in rail deregulation in the Nordics

March 2, 2016

- I. Introduction to Carnegie Investment Bank**
- II. EU's 4th railway package
- III. The rail sector restructuring in Sweden
- IV. Current developments in Sweden, Norway and Finland
- V. Potential restructuring in Lithuania

Important notice

This presentation is strictly confidential and has been prepared by Carnegie as a material for discussion only. This presentation contains only a preliminary discussion of certain matters and necessitates further investigation. This presentation shall not be made available to any third party without Carnegie's prior written consent. While the information herein is based on publicly available sources, which are believed to be accurate, Carnegie disclaims any and all liability for the contents of, or omissions from, this presentation.

The leading independent Nordic Investment Bank

- Carnegie has a leading position in investment banking, securities broking and private banking services
- Founded in 1803 by David Carnegie and one of the oldest trademarks in the Nordic region
- An independent investment bank with a Nordic focus
 - No. 1 ranked corporate finance adviser in the Nordic region
 - No. 1 ranked in Nordic Equities
 - No. 1 private bank
- Offices in nine countries and approximately 600 employees



International reach with 100% dedication to Nordic equities

Investment Banking

- Leading independent adviser in the Nordic region
- Complete corporate finance product offering



Securities

- Broking and trading of Nordic stocks and bonds
- Award-winning research analysts



Private Banking

- Wealth management services to high net worth individuals in the Nordic region
- Structured financial products tailor-made for individual investors



Examples of rail sector assignments



International rail freight forwarder



ROSCO for regional service EMUs



Former authority for tendering of National passenger rail services



Maintenance of Stockholm subway rolling stock



Train and other ferry operator



Train catering and restaurant services



Train cleaning and shunting services



Intermodal rail services



Rolling stock consulting services



Rail freight operator



Rail freight operator



Freight car lessor



Rolling stock maintenance and repair



Freight car maintenance and repair



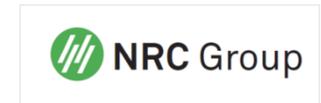
Passenger rail operator



Rail freight operator



Rail and other transportation infrastructure consulting services



Rail infrastructure services

Carnegie has an extensive track record from transactions and advisory work related to the rail sector, including ALL rail sector privatizations in Sweden

- I. Introduction to Carnegie Investment Bank
- II. EU's 4th railway package**
- III. The rail sector restructuring in Sweden
- IV. Current developments in Sweden, Norway and Finland
- V. Potential restructuring in Lithuania

- Concern
 - The modal share of rail has remained modest, despite previous efforts to establish an internal market and to improve rail efficiency
 - Low efficiency and quality of some rail services, mainly the result of low competition, remaining market distortions and suboptimal structures
 - Inability to curb operational inefficiencies caused by a lack of appropriate competitive incentives
 - Necessary to tackle the remaining barriers to a Single European Railway Area
- Target
 - (i) increase rail's capacity, efficiency and attractiveness for customers
 - (ii) encourage modal split from road and air
 - (iii) complete the market openings already in place
- Four key areas:
 - Infrastructure governance
 - Opening of the market for domestic passenger transport services by rail
 - Interoperability and safety
 - The social dimension

A holistic approach to address long and costly procedures, access barriers for new entrants and different market access rules in member states

Infrastructure governance

- Infrastructure managers (IM) to control all functions of the rail network – including investment planning, day-to-day operations, maintenance and timetabling
- IM must have operational and financial independence from any train operator
- European network of IMs to promote cross-border cooperation

Opening of the market for domestic passenger transport services by rail

- Domestic passenger rail services to be opened up to new entrants and services from December 2019
- Open for competition **IN** the market by offering competing commercial services
- Bidding for public service contracts – competition **FOR** the market – to become subject to mandatory tendering
- Regional/local contracting authorities to establish public transport plans
- Non-discriminatory access to integrated ticketing systems
- Non-discriminatory access to suitable rolling stock – obligation to contracting authorities to take the financial risk of the residual value of rolling stock

Interoperability and safety

- Transfer of competencies from member states to the European Railway Agency (ERA) for issuing vehicle authorizations and safety certification for railway undertakings

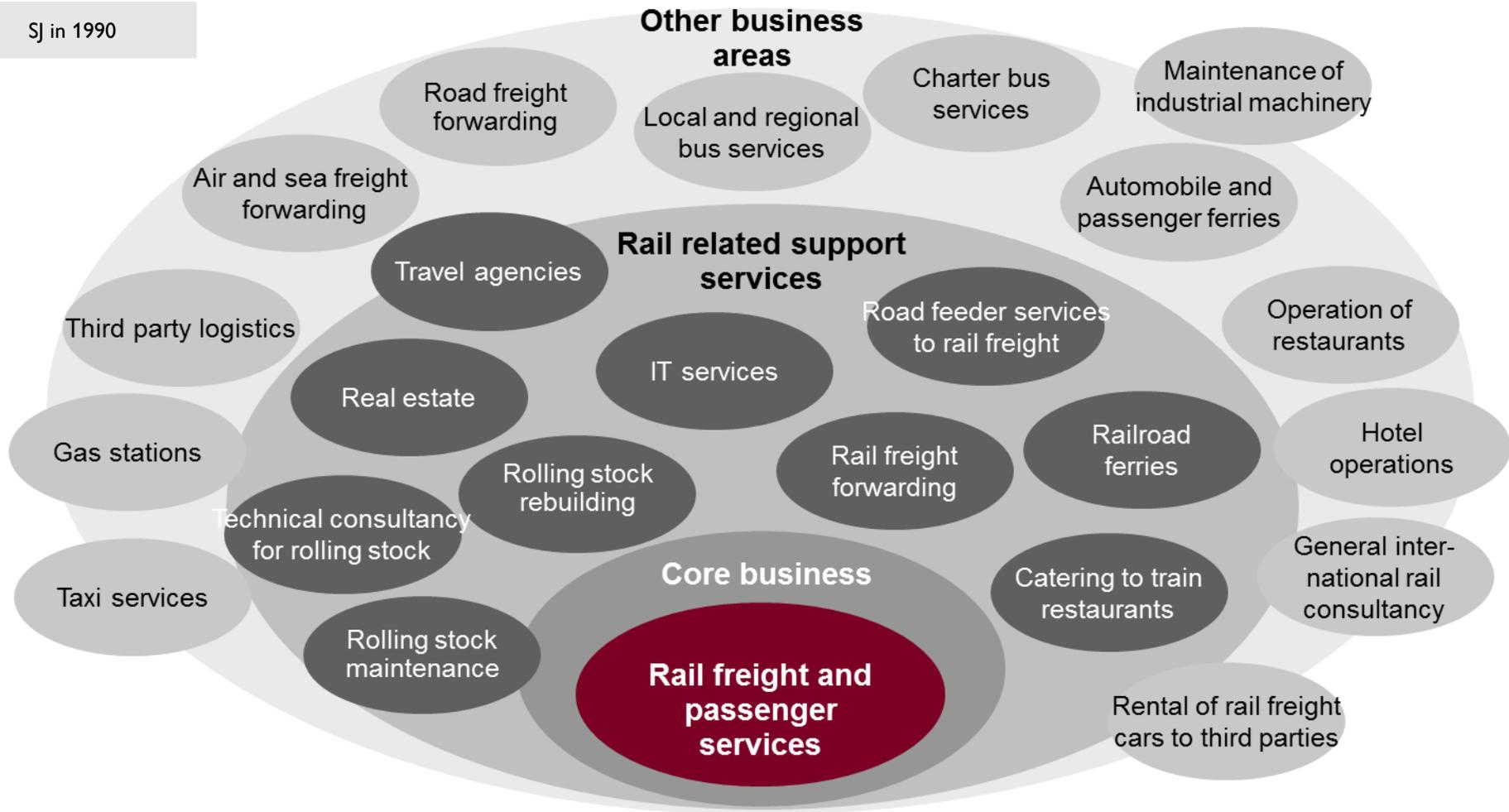
The social dimension

- Requirement that new contractors take over personnel from the outgoing contractor when public service contracts are transferred

Unless competition IN the market is possible, EU's 4th Railway Package requires **mandatory tendering based on non-discriminatory access** to rolling stock and mandatory ticketing systems

- I. Introduction to Carnegie Investment Bank
- II. EU's 4th railway package
- III. The rail sector restructuring in Sweden**
- IV. Current developments in Sweden, Norway and Finland
- V. Potential restructuring in Lithuania

SJ in 1990



... and this was **after** the separation of Banverket (infrastructure) ...

The state owned rail operator – focus on the core business

- The main theme over the past 25 years as regards SJ, the previous part of the Swedish State – has been the definition of **rail operations as the core business**, and departure from the transport conglomerate structure
- Divestments made out of the previous SJ structure:



Freight forwarding / logistics



Bus operations



Train and other ferry operator



Hotel real estate



Train catering and restaurant services



IT services



Train cleaning and shunting services



Intermodal rail services



Rolling stock consulting services



Freight car lessor



Rolling stock maintenance and repair



Freight car maintenance and repair

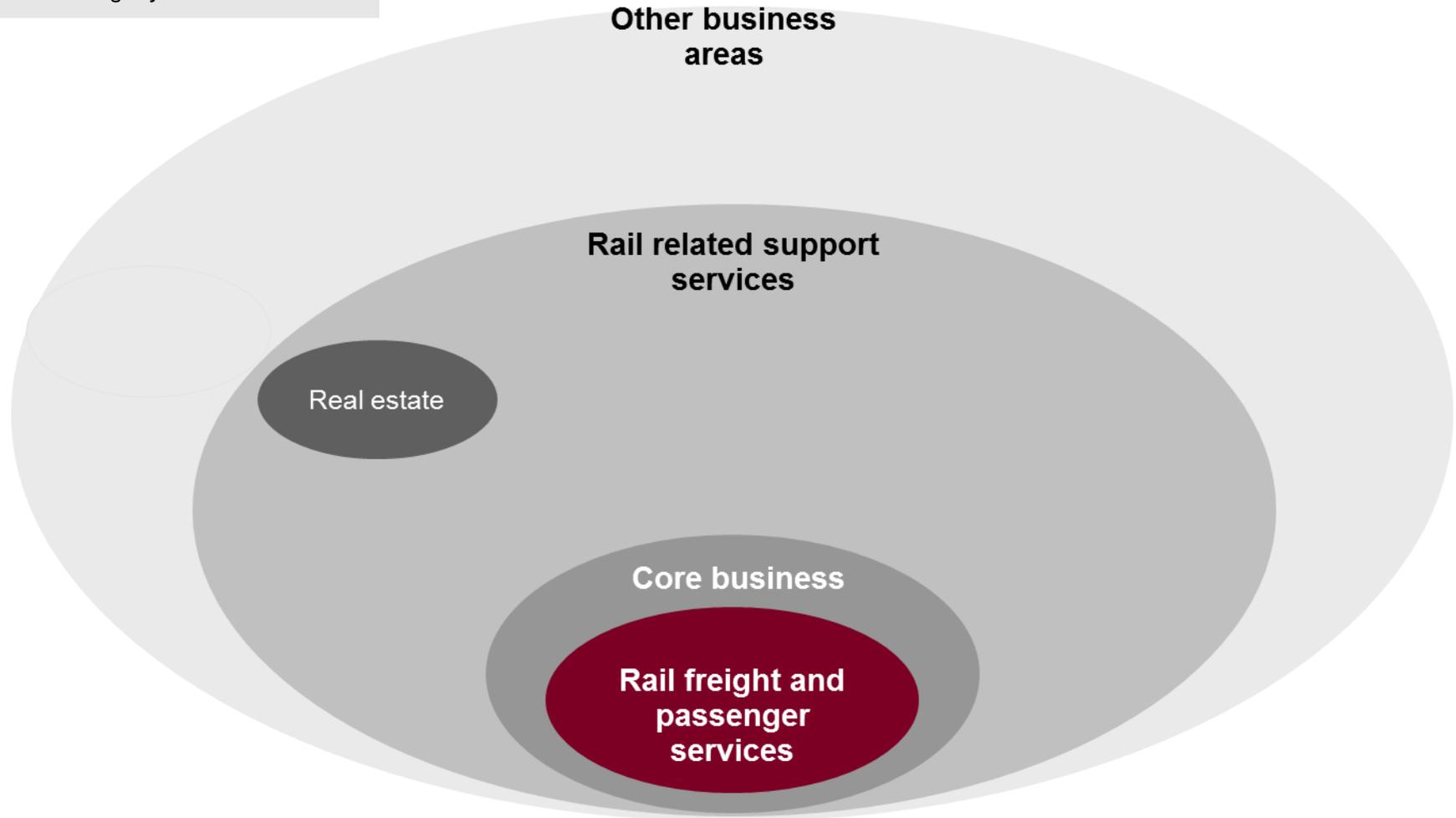


Rail and other transportation infrastructure consulting services

From a transport conglomerate to a full focus on core rail operations

SJ / Green Cargo / Jernhusen in 2013

SJ / Green Cargo / Jernhusen in 2013



Excluding operations related to infrastructure
(separated from operations before 1990)

Measures taken related to deregulation and competition (I/II)

- The first country to implement separation between infrastructure management / regulatory matters and operations
 - Track access charges on a transparent and non-discriminatory basis
 - Track access charges based on short run marginal costs
- Rail infrastructure maintenance contracts are tendered by the IM from a state-owned company (Infranord) or other service providers on commercial terms
- State owned rail traffic incumbents continue operations, but without any type of monopolistic protection
 - Incorporation (as opposed to being part of the state)
- Introducing competition in all types of rail operations
 - Rail passenger traffic without state or regional subsidies – competition IN the market
 - Rail passenger traffic with state or regional subsidies – competition FOR the market
 - Tendering for all public service contracts, both local, regional and certain long-distance services
 - Rail freight traffic – competition IN the market
- Jernhusen, the state owned real estate company, has a responsibility for securing non-discriminatory access to stations, major intermodal and freight terminals and rolling stock maintenance workshops

Measures taken related to deregulation and competition (II/II)

- Non-discriminatory access to rolling stock for public service contracts secured in several ways:
 - For long distance services through the IM (Trafikverket)
 - For commuter or regional services through a company (Transitio AB) owned by all regional contracting authorities
 - In certain cases by individual regional contracting authorities
- With the introduction of new operators – other than the state-owned incumbents – in the rail market, a privatization of relevant support services to operations became a commercial necessity
 - Competitors to state owned incumbent operators would not want to be dependent on the services of a state owned service provider – such party would be seen as an affiliate of the main competitor
 - Diversity among operators should be mirrored by diversity among service providers
 - In-house capabilities can be used in addition to third party suppliers

Sweden already complies with the requirements in EU's 4th Railway Package as regards the opening of the market for domestic passenger transport services by rail

The Swedish rail sector – the current diversity picture (I/IV)

Passenger services on a commercial basis (IN the market) – timeline

- 1999 Arlanda Express established under private sector ownership
- 2006 Deregulation regarding night train services
- 2009 Deregulation regarding weekend train services
- 2010 SJ's monopoly status terminated

Passenger services on a commercial basis – active players



ArlandaExpress



SJ (state owned) still dominates this segment, but MTR is a serious challenger on the busiest route (Stockholm – Göteborg)

The Swedish rail sector – the current diversity picture (II/IV)

Passenger services based on public service contracts (PSC) – timeline

- 1968 First tendering process for the Stockholm county commuter train system
- 1980's Tendering process for regional trains also in southern Sweden; rapid increase in such processes thereafter
- 2000 First net contract for long distance night train PSC traffic

Passenger services based on PSC – active players



All public service contracts subject to competitive tendering

Additional large players are actively competing for public service contracts

The Swedish rail sector – the current diversity picture (III/IV)

Rail freight services – timeline

- 1990's Deregulation commences
- 1996 The single largest block train product, the iron ore transport to Narvik and Luleå, is transferred to a LKAB subsidiary
- 2000's Strong growth of privately owned block train operators

Rail freight services – main active players



Despite certain turbulence among the challengers to state owned Green Cargo, such challengers are gaining market shares at the expense of Green Cargo

The Swedish rail sector – the current diversity picture (IV/IV)

Market diversity – infrastructure maintenance

INFRANORD

stg / SCANDINAVIAN TRACK GROUP

 **NRC Group**

Infratek

VR TRACK

ELTEL

 **Strukton Rail**

vossloh
understanding mobility

Market diversity – rolling stock maintenance


EuroMaint

SweMaint
MAINTAINING YOUR RAILWAY LOGISTICS

ALSTOM

BOMBARDIER

Mantena

 **KNORR-BREMSE**

MIDWAGON
SOLUTIONS FOR OPTIMAL WAGON STATUS

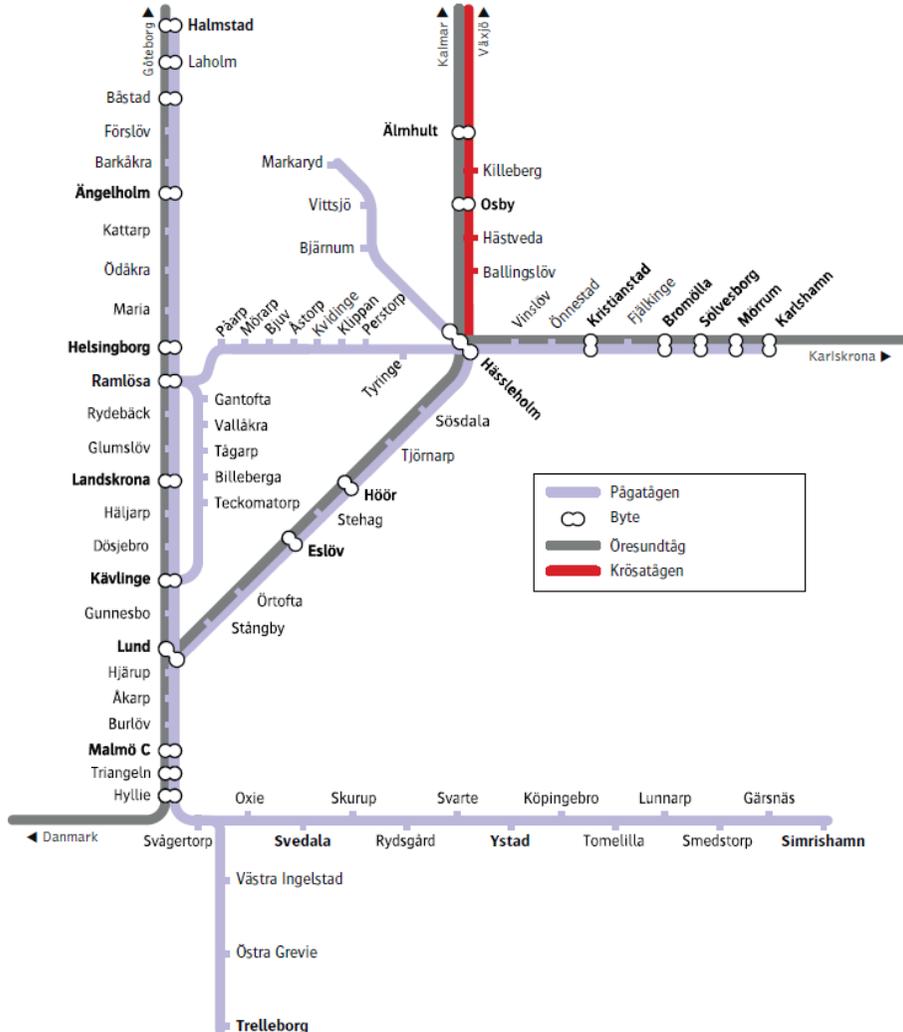
MGN SERVICE
Instandhaltung von Schienenfahrzeugen



Deregulation and introduction of competition have created a diverse market landscape also for support services to the rail operators

Regional passenger rail systems based on PSC – some examples

The Malmö – Lund – Helsingborg area – service providers Arriva (“Pågatågen”) and Transdev (“Öresundståg”)



Examples of train supply

- Malmö (pop. 270') – Lund (pop. 83') – 16 km; 198 trains*
- Malmö – Trelleborg (pop. 28') – 42 km; 37 trains*
- Malmö – Helsingborg (pop 97') – 69 km; 82 trains*
- Malmö – Ystad (pop. 18') – 70 km; 39 trains*

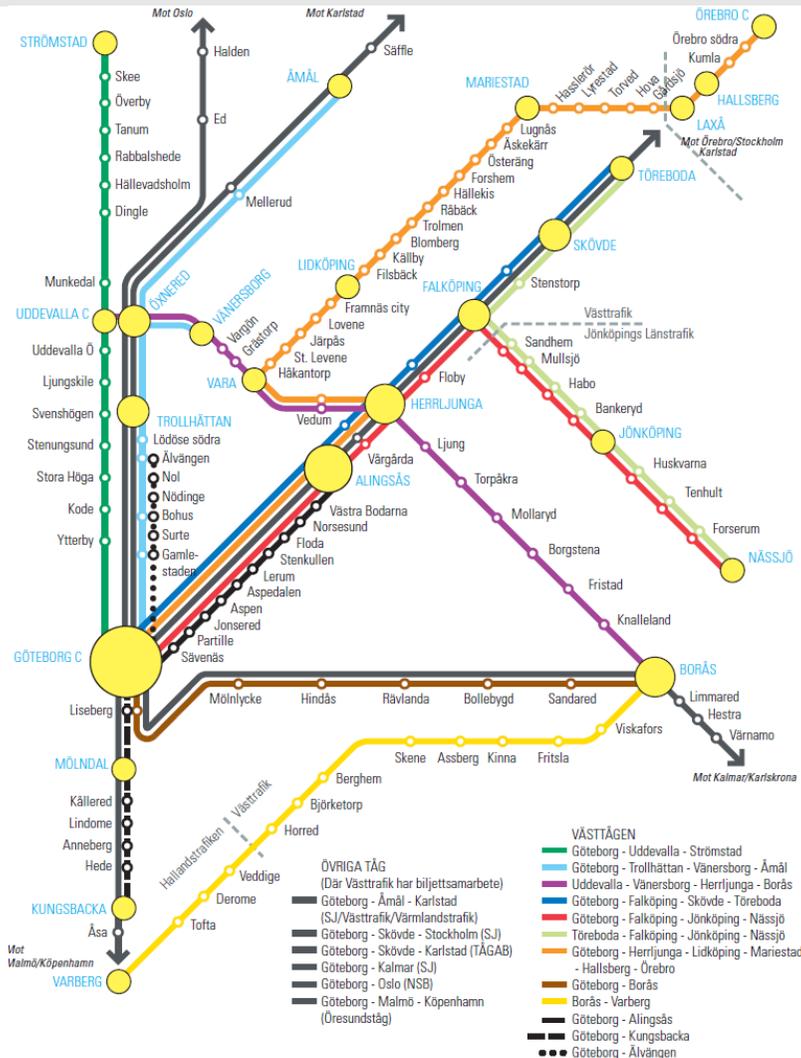
* One way, Monday - Friday

EMU used by “Pågatågen”



Regional passenger rail systems based on PSC – some examples

The Göteborg area – service providers SJ (most services) and Arriva (the orange line in the adjacent map)



Examples of train supply

- Göteborg (pop. 481') – Alingsås (pop. 24') – 45 km; 54 trains*
- Göteborg – Kungsbacka (pop. 19') – 28 km; 54 trains*
- Göteborg – Uddevalla (pop 31') – 88 km; 21 trains*
- Göteborg – Borås (pop. 66') – 72 km; 14 trains*

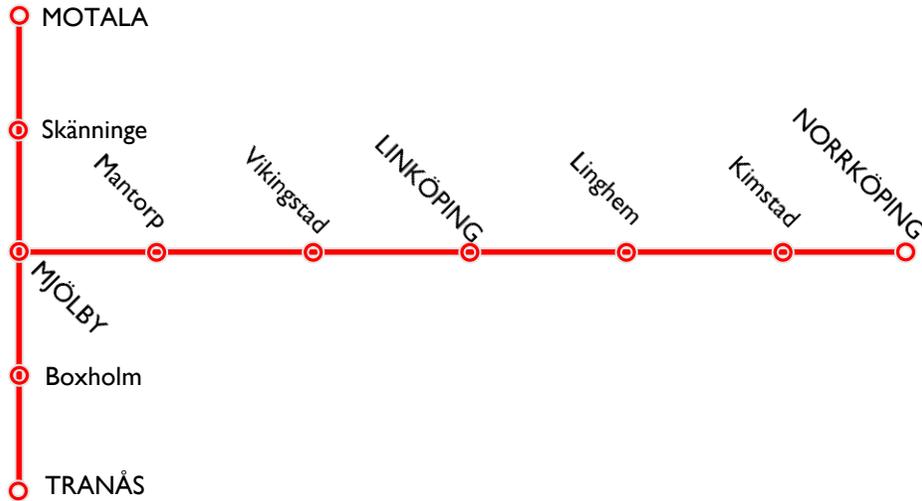
* One way, Monday - Friday

EMU used by “Västtågen”



Regional passenger rail systems based on PSC – some examples

The Norrköping – Linköping area – service provider Arriva



Examples of train supply

- Norrköping (pop. 87') – Linköping (pop. 104') – Mjölby (pop. 12' – Motala (pop. 30') – 106 km; 38 trains*
- Motala – Tranås (pop. 14') – 36 km; 18 trains*

* One way, Monday - Friday

EMU used by “Östgötapendeln”



- I. Introduction to Carnegie Investment Bank
- II. EU's 4th railway package
- III. The rail sector restructuring in Sweden
- IV. Current developments in Sweden, Norway and Finland**
- V. Potential restructuring in Lithuania

Sweden – further measures to increase competition proposed



- Further reform measures proposed on a state report (SOU 2015:110)
 - Further competitive tendering processes also on interregional passenger services, including traffic rights on the planned future high speed railroads
 - Strengthening commercial passenger rail operations by way of creating transparent transport supply plans for PSC traffic
 - Increased state responsibility for the location of assets which are necessary for the conduct of rail operations
 - Tasks within Jernhusen AB which are of a nature of tasks associated with a state authority should be performed by a state authority, so that such services are provided on a neutral basis to operators
 - Consider further privatization, in part as a result of the above principle, of state owned operating companies – SJ AB (passenger traffic), Green Cargo AB (rail freight traffic), Jernhusen AB (real estate related to the rail sector) and Infranord AB (construction and maintenance of rail infrastructure)

Reform based on even more comprehensive separation between regulatory/traffic management and actual operations, introduction of competition throughout the system, and full privatization of operators



- The Government of Norway plans a major restructuring of the rail sector, as described in Meld. St. 27 (2014-2015). The main themes are:
 - Full separation between regulatory and operating entities
 - Departing from a structure with one state owned passenger rail provider providing services on a concession basis to a structure where passenger rail is based on competitive tendering
 - No preferred status of any state owned operators in terms of legacy rights or access to strategic production factors
 - Market economy principles to be applied as regards management and coordination
 - Alignment with the national transport plan
- Proposed concrete restructuring measures include:
 - All infrastructure operations and maintenance tasks should be based on competitive tendering processes, rather than being performed to a substantial by the infrastructure owner, Jernbaneverket
 - Ownership of assets which are necessary for the conduct of rail operations should be owned by the infrastructure owner, not by the incumbent NSB, and should be made available to operators on a neutral basis
 - Passenger rail operations to be based on competitive tendering – competition **FOR** the market being the envisaged principle – two large packages have recently been announced for tendering
 - Strive to create competition between several providers of maintenance services for rolling stock
 - Workshop facilities to be owned by a state entity, so that such facilities can be made available to operators on a neutral basis
 - NSB's rolling stock to be transferred to a state owned rolling stock company, and subsequently be made available to winners of competitive tendering processes

Reform based on full separation between regulatory/traffic management and actual operations, and introduction of competition throughout the system

Finland – comprehensive restructuring being discussed

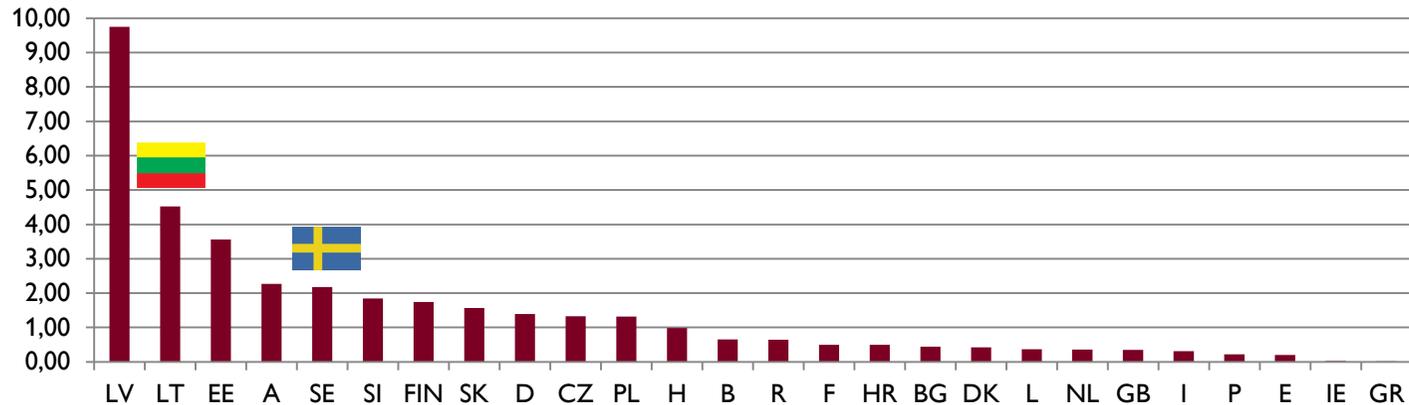


- Discussions about a new structure in progress
- A new set of rules may be in place in 2016
- VR's (the state owner operator) may lose its exclusivity effective 2018
- Privatization is not part of current discussions

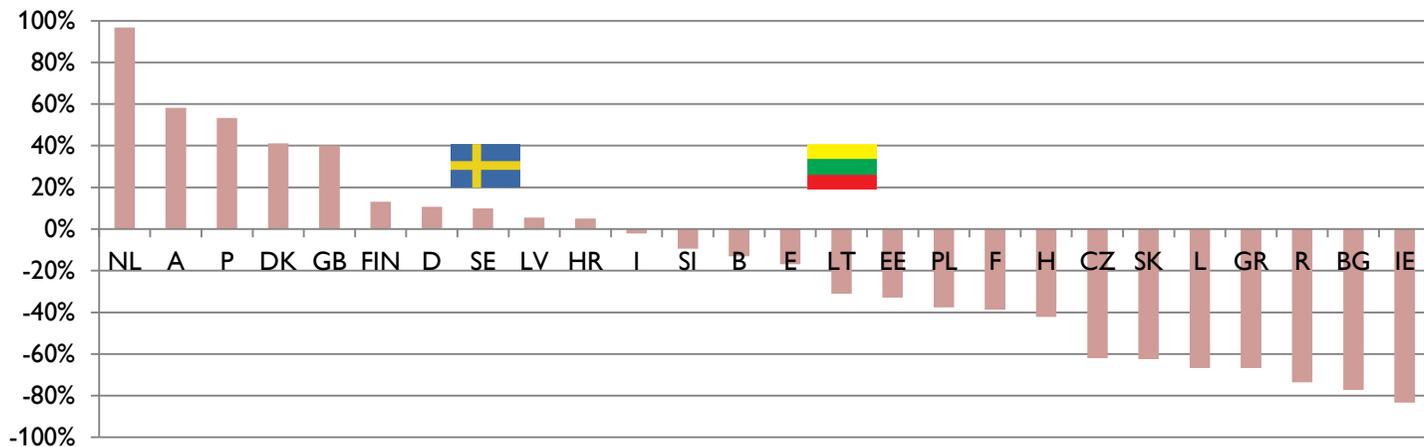
Reforms related to the opening of the market for domestic passenger transport services by rail, as required in EU's 4th Railway Package may be implemented

- I. Introduction to Carnegie Investment Bank
- II. EU's 4th railway package
- III. The rail sector restructuring in Sweden
- IV. Current developments in Sweden, Norway and Finland
- V. Potential restructuring in Lithuania**

Comparison between EU countries as regards billion ton km related to population (million)...



...and total growth/contraction in ton km 1990 - 2013

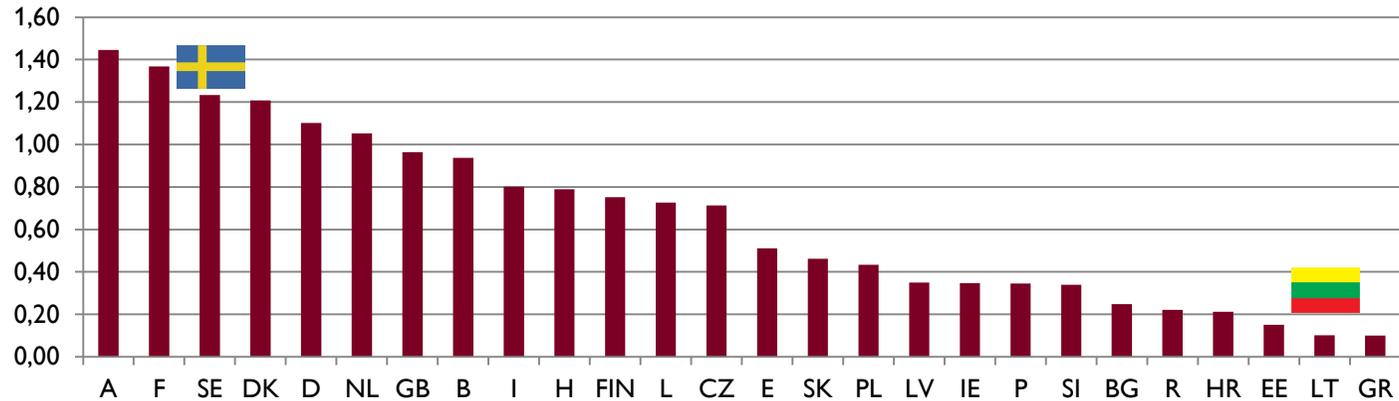


Source: European Commission

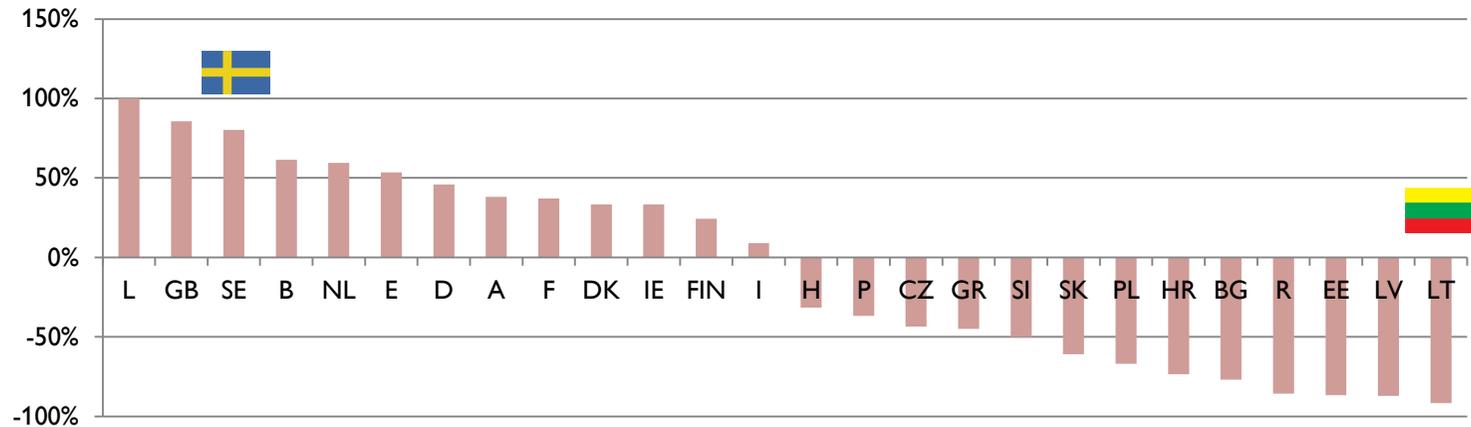
Note: For CZ and SK in 1990 – Source data refer to Czechoslovakia; assumption that the distribution between CZ and SK was the same as in 1995.
For Croatia, the total growth is between 1995 and 2013

...but weak position in passenger rail

Comparison between EU countries as regards billion passenger km related to population (million)...



...and total growth/contraction in passenger km 1990 - 2013



Source: European Commission

Potential action points



Current position

- Rail freight doing fine – very highly ranked in terms of volume (ton-km) in relation to its population
- Passenger traffic a tiny trickle only – in absolute numbers, smaller than Luxembourg
- Rail freight and passenger rail have quite dissimilar characteristics

Potential action points – state control

- Continued state control of the key assets - ownership of infrastructure, management of infrastructure – but not necessarily carrying out the actual work, which would be better carried out by contractors acting on a competitive basis – and control of track access charges, allocation of train paths and monitoring of the utilization of train paths
- Full separation between rail infrastructure and rail operations

Potential action points – passenger rail

- Separation between rail freight and passenger rail
- Securing non-discriminatory access to rolling stock – implying the need to create a state-owned rolling stock company – and other assets necessary for operations
- Introduction of a comprehensive system for public service contracts
- Tendering for all public service contracts

Potential action points



Potential action points – rail freight

- LG is in essence a rail freight operator, with transit traffic to/from the port of Klaipėda being the most important traffic
- LG thus faces serious competition from rail freight services into competing ports for such traffic, including Liepāja, Ventspils and Tallinn/Muuga
- LG thus needs to be as efficient as ever possible in order to defend its traffic
- The port of Klaipėda needs efficient rail services (not necessarily from LG only) to support its current gains in volume and earnings
- The efficiency requirement calls for a spin-off of all passenger rail assets and operations out of LG
- Such spin-off would increase the earnings in LG by elimination of the loss from passenger services, and also increase the value of LG by a multiple of such earnings increase
- The same argument calls for a divestment of all non-rail freight assets
- Granting market access to challengers would not call for a privatization of LG
- Desirable to make LG an efficient rail freight operators also on a market with competing rail freight providers

Several extensive restructuring processes may be coming up, partly as required in EU's proposed 4th Railway Package, but ultimately for the benefit of passengers and rail freight customers

Sweden, having gone through extensive restructuring of the sector, is highly likely to be a source of inspiration