



Branschföreningen
Tågoperatörerna
ASTOC

Brussels, March 28th, 2017

Björn Westerberg

Agenda

- Background
 - ASTOC
 - Rail traffic in Sweden
 - Liberalization
- What are the main opportunities and challenges?
 - Infrastructure
 - EU-Regulation
 - Digitalization
- Boosting the rail mode competitiveness



43 members of which 10 are associate members

Quality - Capacity – Competitiveness

Associate members



Nordiska Tåg AB



Ansaldo STS Sweden AB



BotniaTåg AB



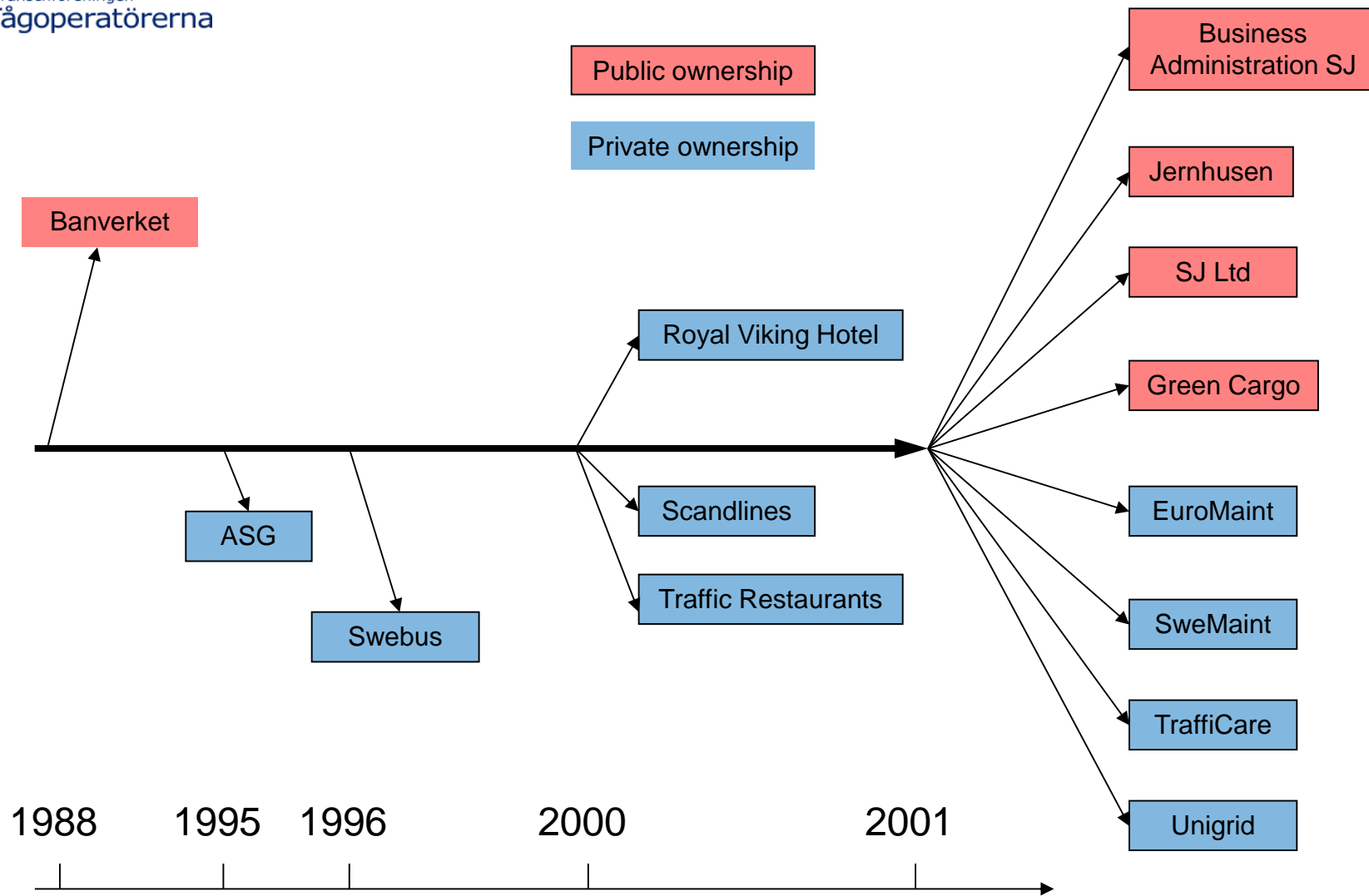
TMRail AB



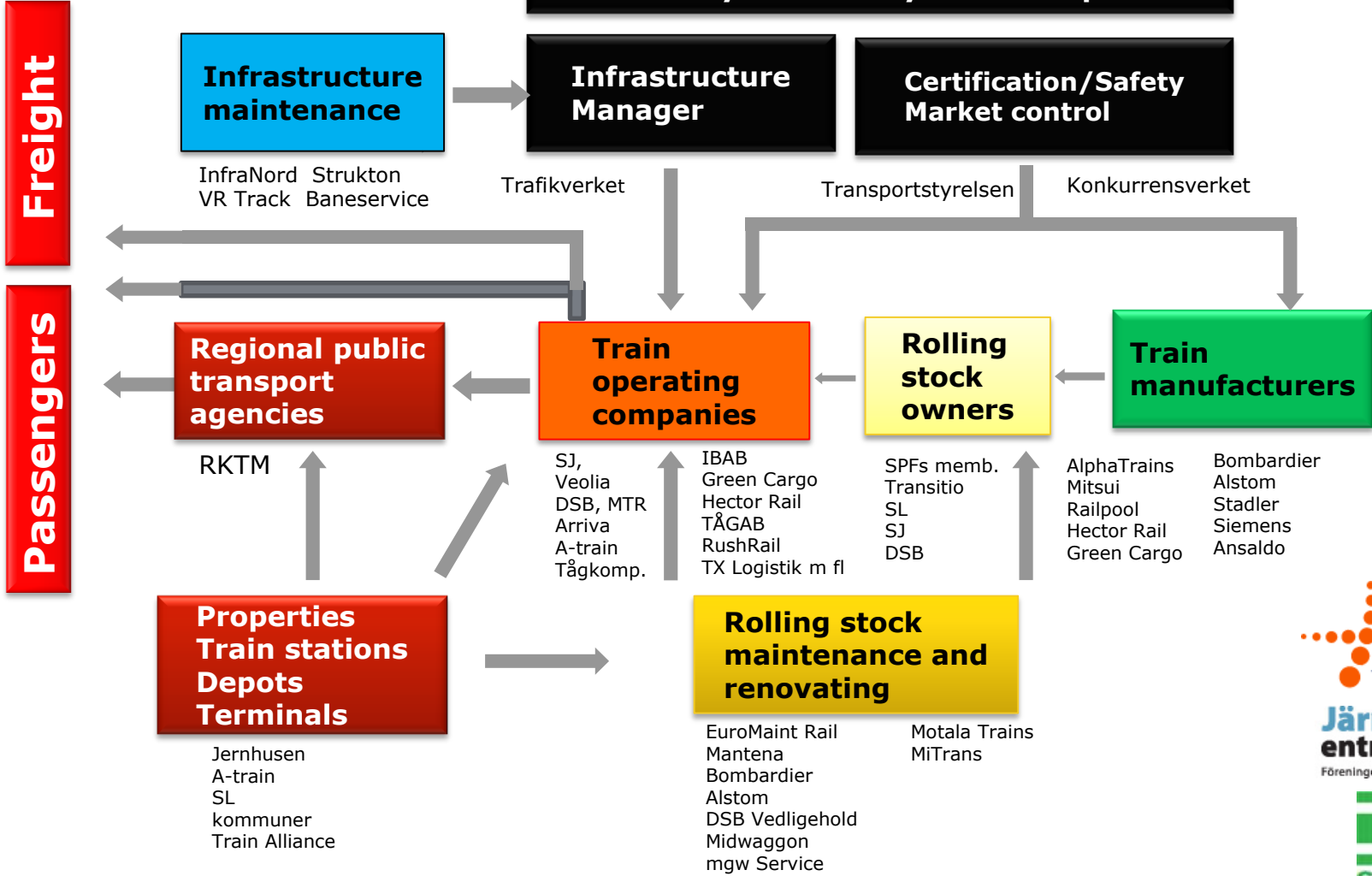
Tågkeriet i Bergslagen AB



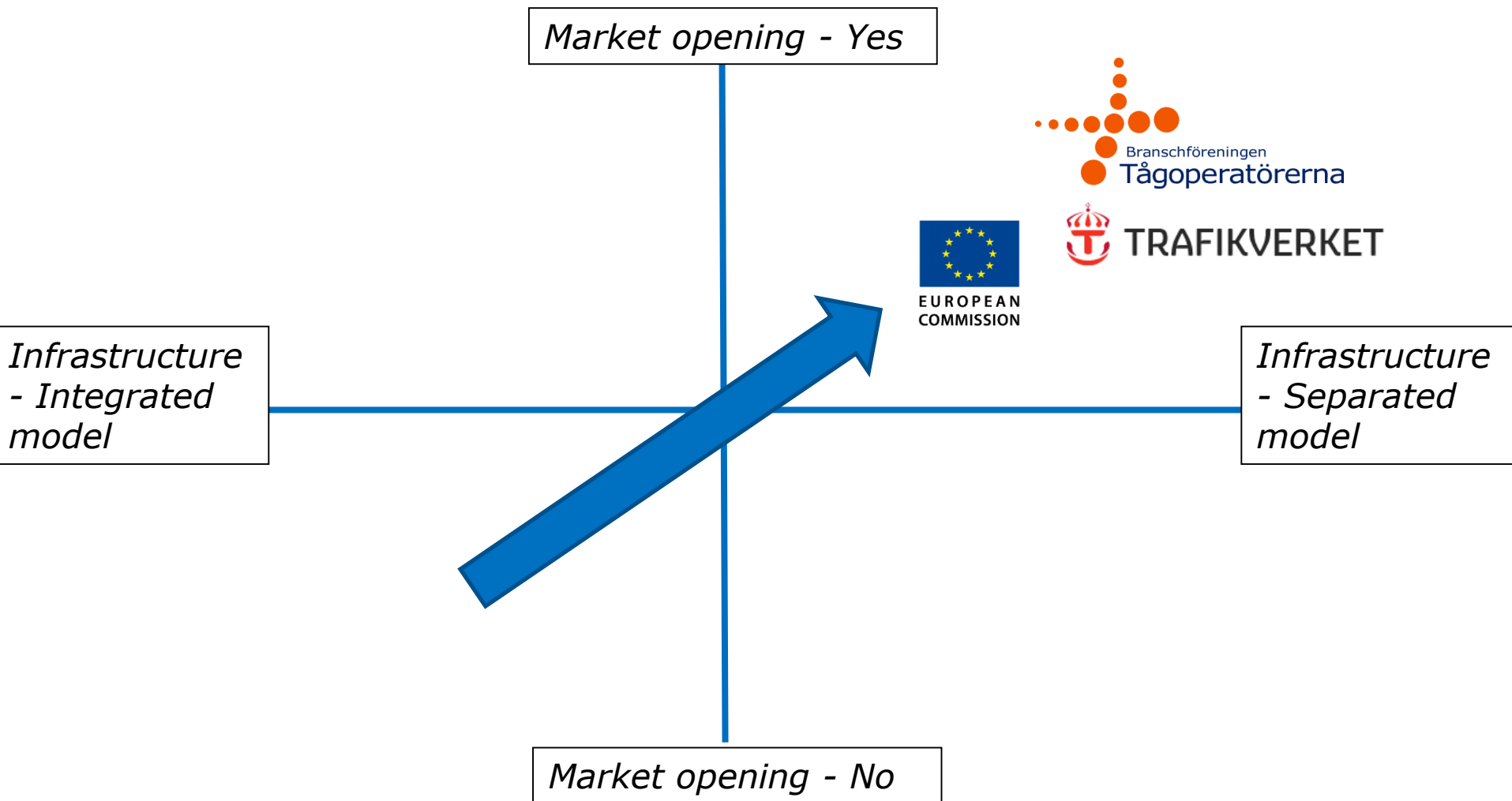
The liberalised railway



Swedish railway 2017



4RP Political Pillar: Market opening and Governance



Current organisation of the Swedish railway sector – some characteristics (1)

- Institutional vertical separation between infrastructure and train operations
- National multi-modal authority Trafikverket (Swedish Transport Administration) is the main (80%) infrastructure manager, with strong focus on procurement from external contractors
- Train operating companies (or other organisers of train services) apply for access to the track infrastructure and pay charges
- Horizontal separation between passenger and freight operations

Current organisation of the Swedish railway sector – some characteristics (2)

- Decentralised responsibility for regional passenger services to 21 county public transport agencies (controlled by municipalities and counties with their own taxation power)
- Most regional passenger services (and some long-distance) depend on subsidies and are procured by means of competitive tendering (resulting in contracts between public transport agencies and train operating companies)
- For tendered services, the procuring authority typically provides the rolling stock to the train operating company
- Freight services and commercial passenger services are subject to open access competition. For these services, train operating companies have their own rolling stock
- The role of the public sector is still very strong (state controlling the main IM and RUs, county public transport agencies procuring train services)

Experience and effects

- Increased investments in rail infrastructure
- Strong local and regional commitment to develop passenger services
- Strong growth in demand
- Improvements in (for example) productivity and safety
- Innovations, new pricing models
- In recent years, decrease in average speed of trains (mainly due to capacity constraints)
- Punctuality problems a recurrent issue of concern
- Appearance of several new entrants, reducing the market share of the incumbents
- Tendering leading to reduced need for operating subsidies but also cases of strategic bidding

Strong growth of railway services

- Since the early 2000's both passenger and freight services have experienced a strong growth
- Important factors behind the development:
 - Structural reforms and market opening
 - Infrastructure investments (early years)
 - Low infrastructure charges (level playing field?)
 - Regional traffic development (passenger PSO's)
 - Competition (freight)
 - (Relatively) steady framework conditions

Governance and cooperation



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Freight

Passengers

Ministry of Industry and Transport

Infrastructure maintenance

InfraNord Strukton
VR Track Baneservice

Infrastructure Manager

Trafikverket

Certification/Safety Market control

Transportstyrelsen

Konkurrensverket

**Järnvägs
entreprenörerna**
Föreningen Sveriges Järnvägsentreprenörer



Regional public transport agencies

RKTM

Train operating companies

SJ, Veolia, DSB, MTR, Arriva, A-train, Tågkomp.
IBAB, Green Cargo, Hector Rail, TÅGAB, RushRail, TX Logistik m fl

Rolling stock owners

SPFs memb. Transio, SL, SJ, DSB

Train manufacturers

AlphaTrains, Mitsui, Railpool, Hector Rail, Green Cargo, Bombardier, Alstom, Stadler, Siemens, Ansaldo

Properties Train stations Depots Terminals

Jernhusen, A-train, SL, kommuner, Train Alliance

Rolling stock maintenance and renovating

EuroMaint Rail, Mantena, Bombardier, Alstom, DSB Vedligehold, Midwaggon, mgw Service, Motale Trains, Mitrans



Future railsweden

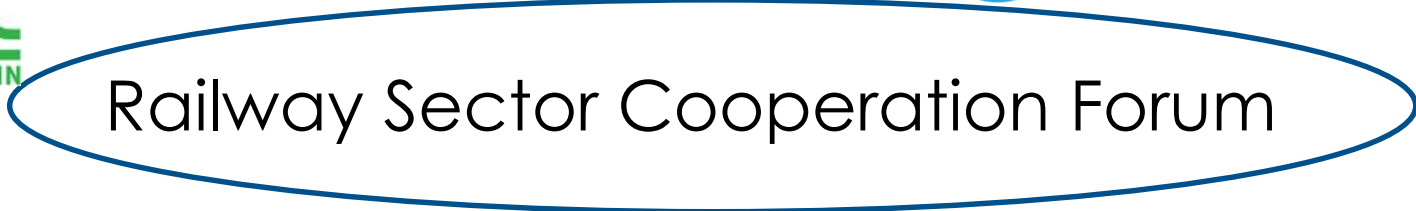




Railway Sector Cooperation Forum (JBS)



Skånetrafiken



Punctuality
12 WS

Maintenance
4 WS

Capacity

Recruiting &
branding

Culture

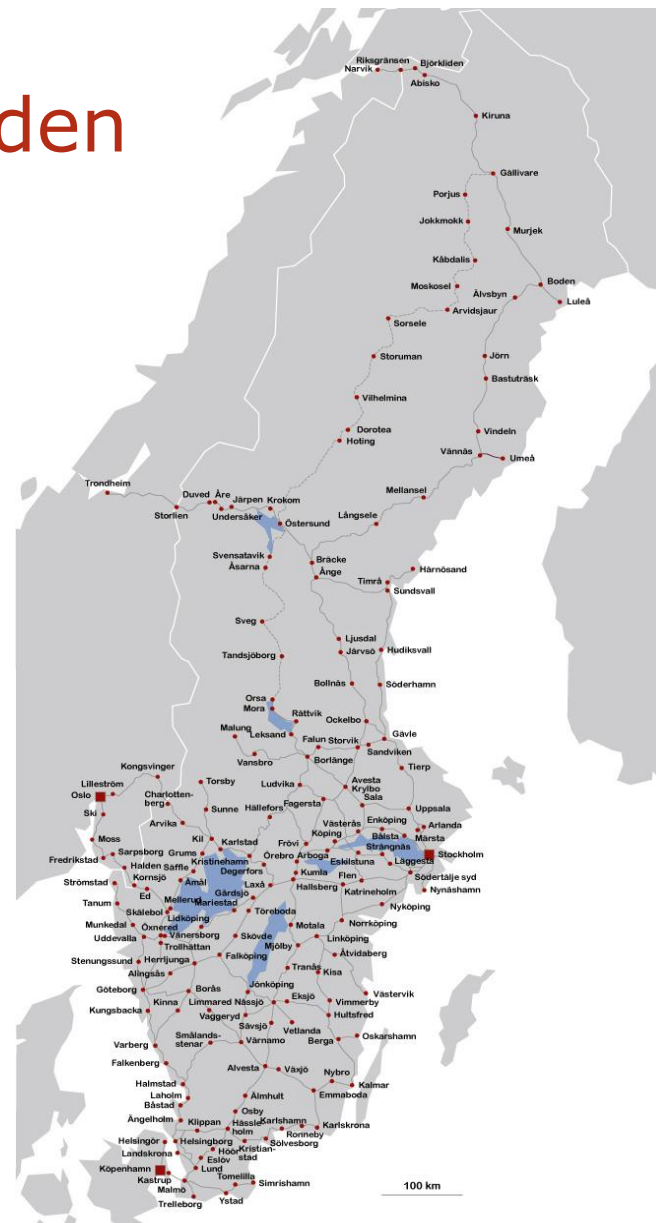
Innovation

Agenda

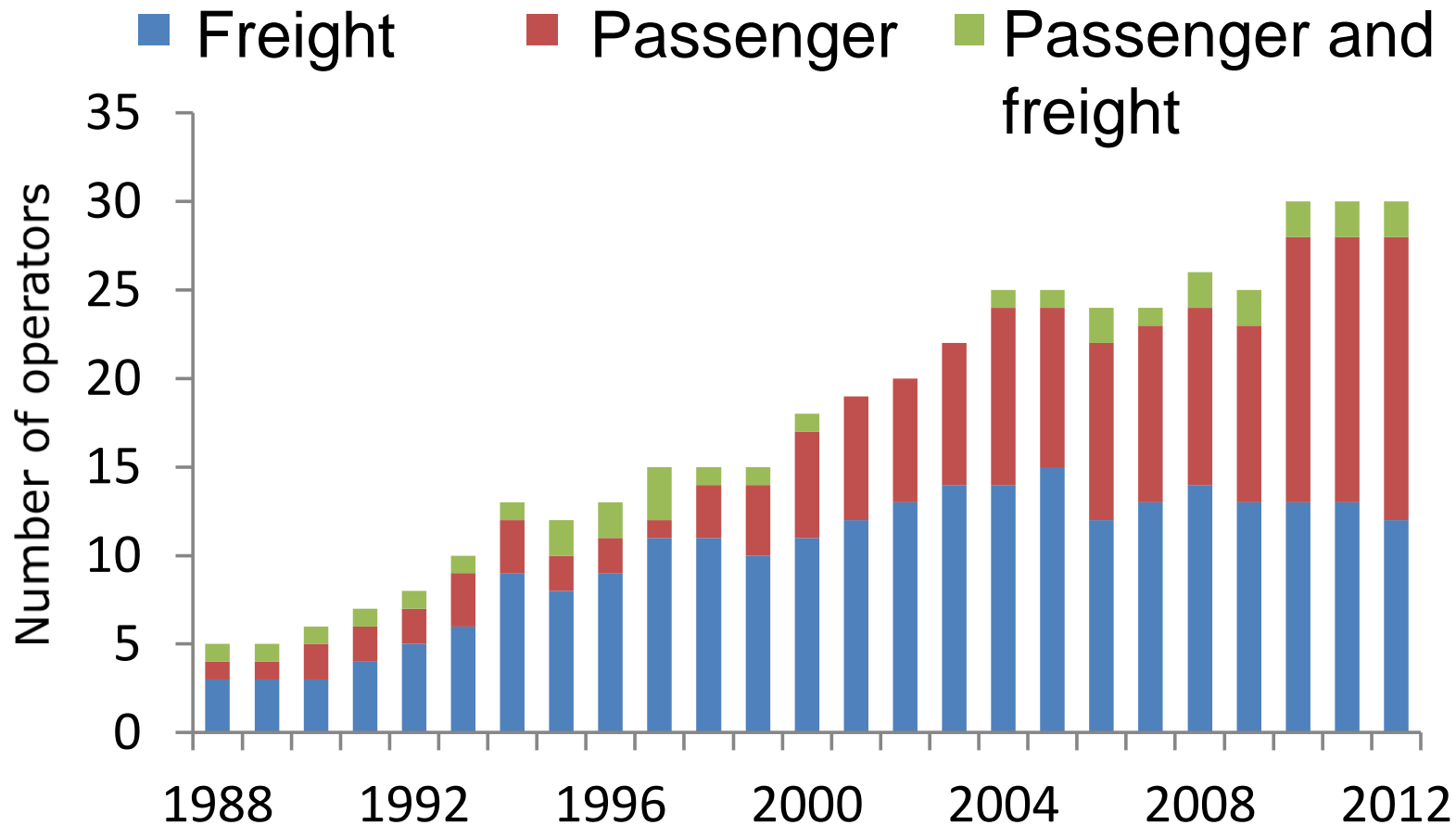
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 - Deregulation
 - Governance
- What are the main opportunities and challenges?
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 - Digitalization
- Boosting the rail mode competitiveness

Rail traffic in Sweden

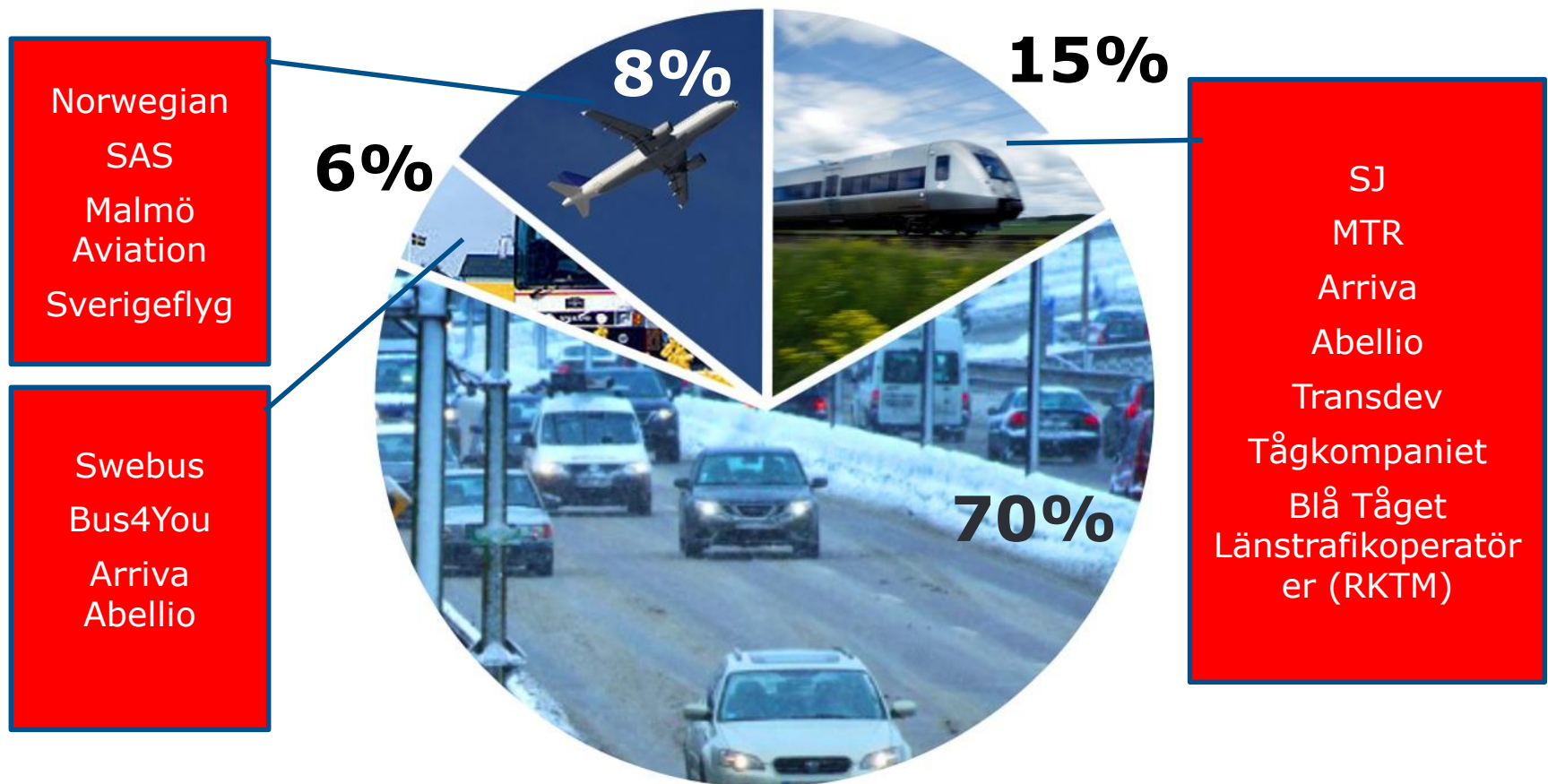
- Sweden has more than 12,000 km of railway track
 - 2,000 km double tracks
 - 10,000 km single tracks



Train operating companies

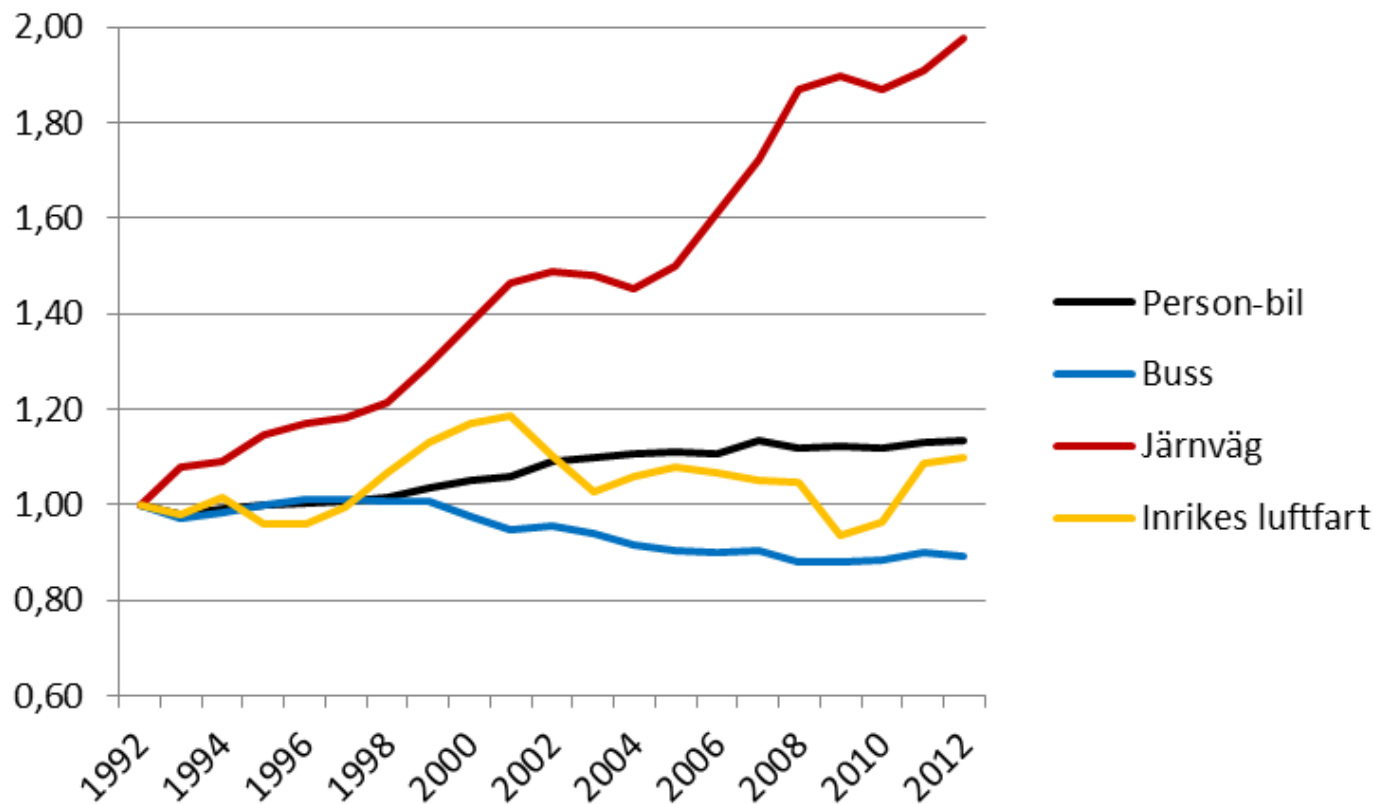


The car is the train's major competitor, when it comes to traveling further than 10 miles



Advantage Passenger Rail

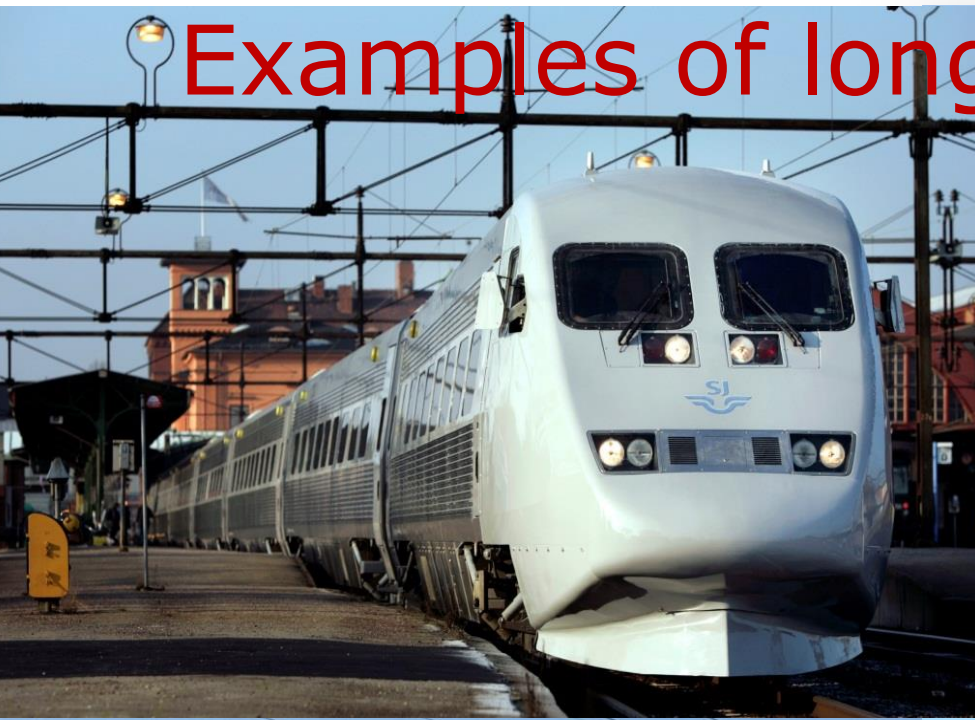
Index 1992



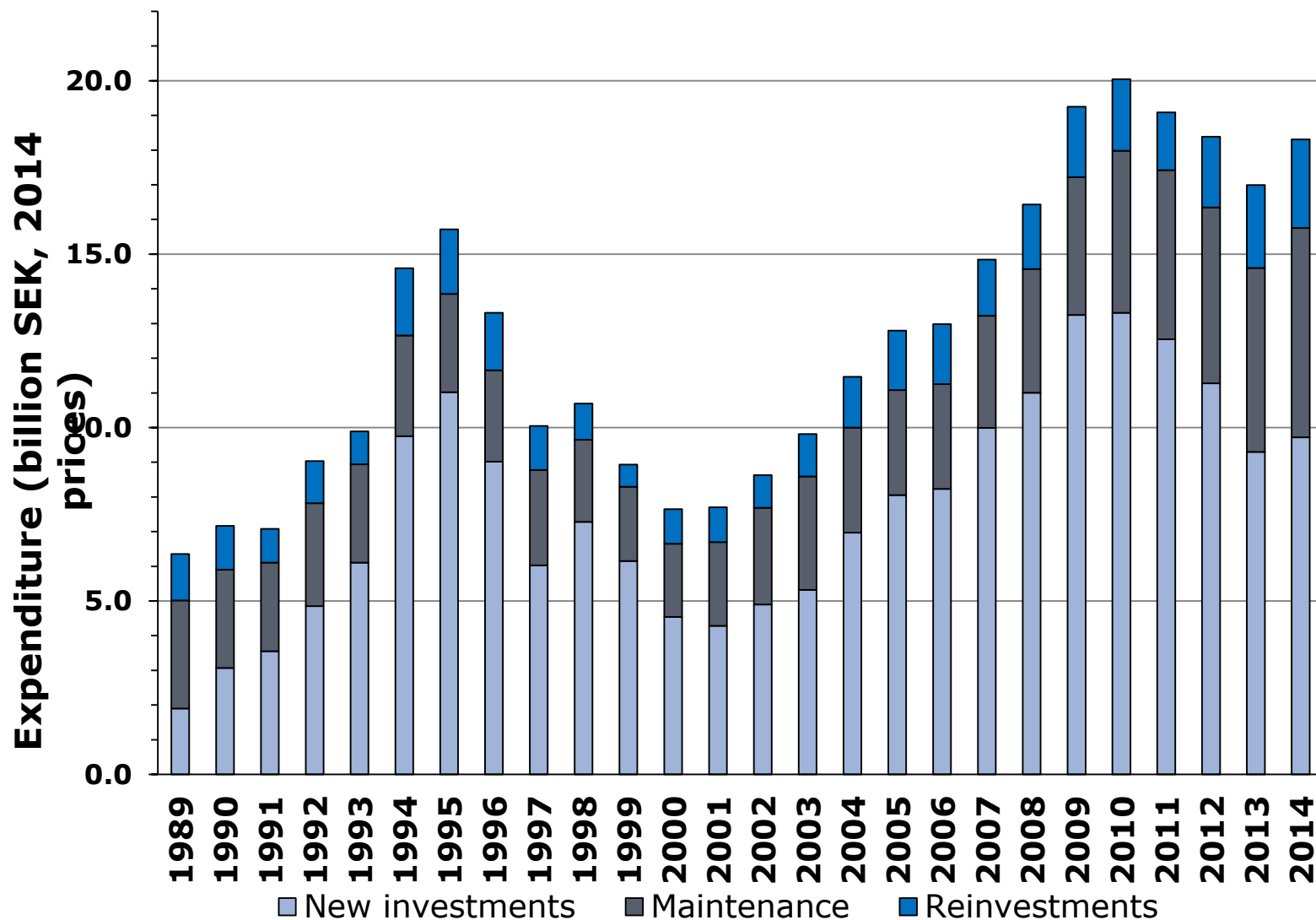
Källa: Trafikanalys



Examples of long distance trains

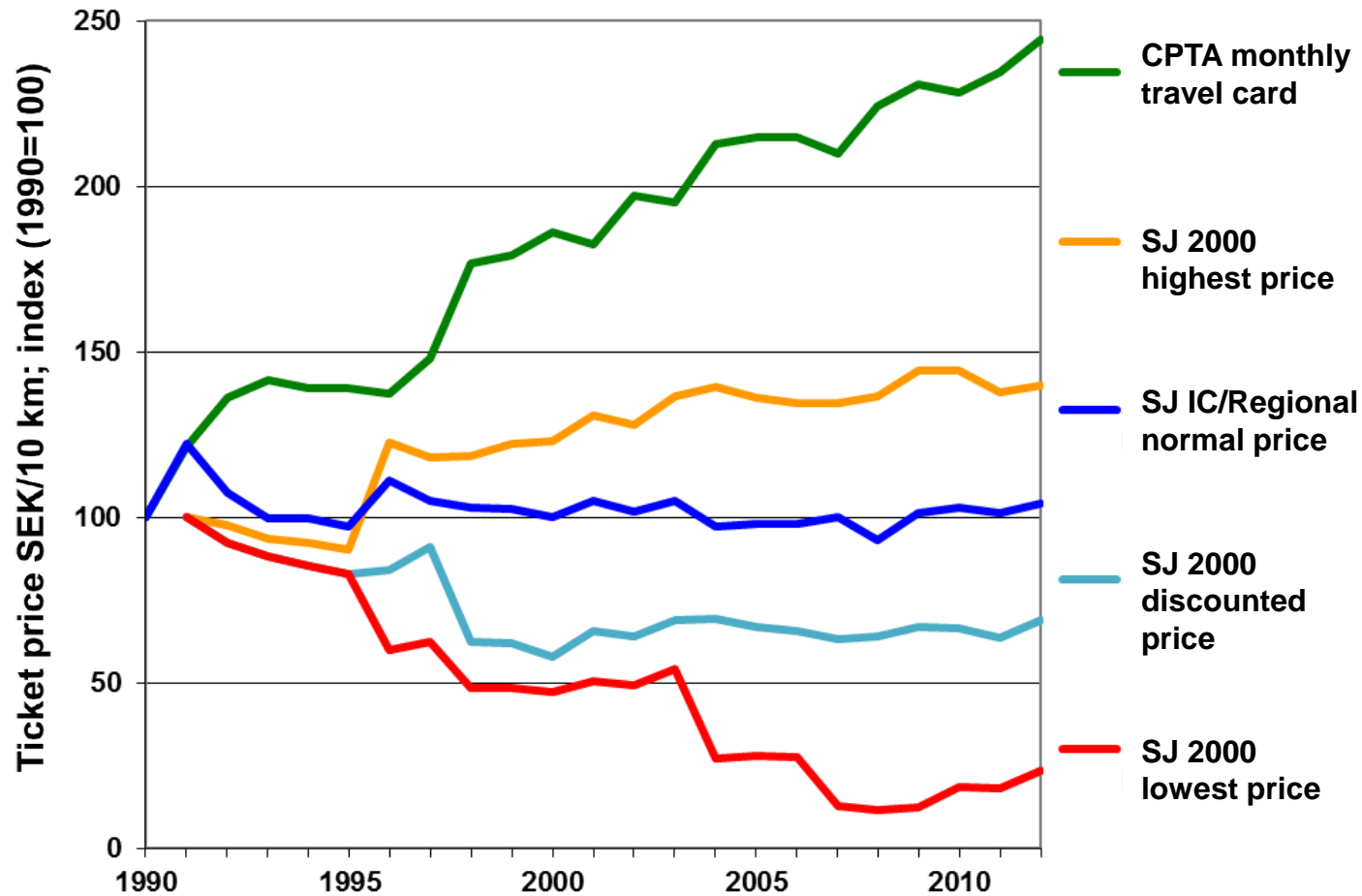


Rail infrastructure investments and maintenance





Ticket price development



Source: Nelldal et al (2012)

Market share

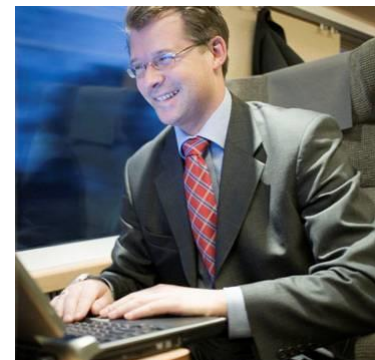
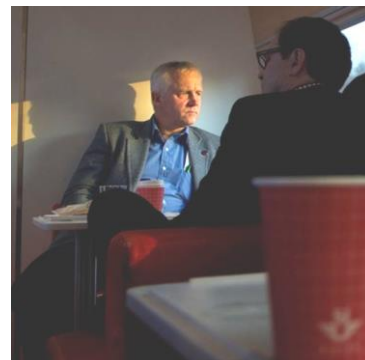
- Air and train travel -

| Gtb-Sto | Train | Air |
|---------|-------|-----|
| 2001 | 49% | 51% |
| 2011 | 69% | 31% |

| Karlstad-Sto | Train | Air |
|--------------|-------|-----|
| 2001 | 66% | 34% |
| 2011 | 90% | 10% |

| Sundsvall-Sto | Train | Flyg |
|---------------|-------|------|
| 2001 | 30% | 70% |
| 2011 | 66% | 34% |

| Malmö-Sto | Train | Air |
|-----------|-------|-----|
| 2001 | 23% | 77% |
| 2011 | 30% | 70% |



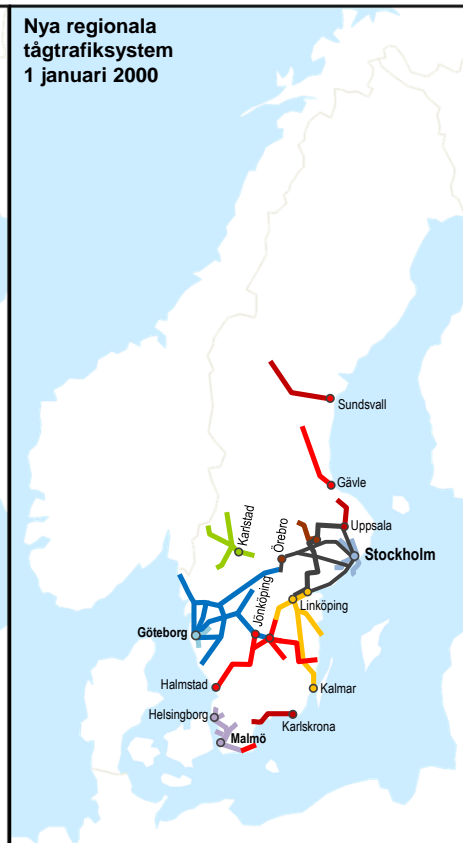


Regional traffic system 1990-2016

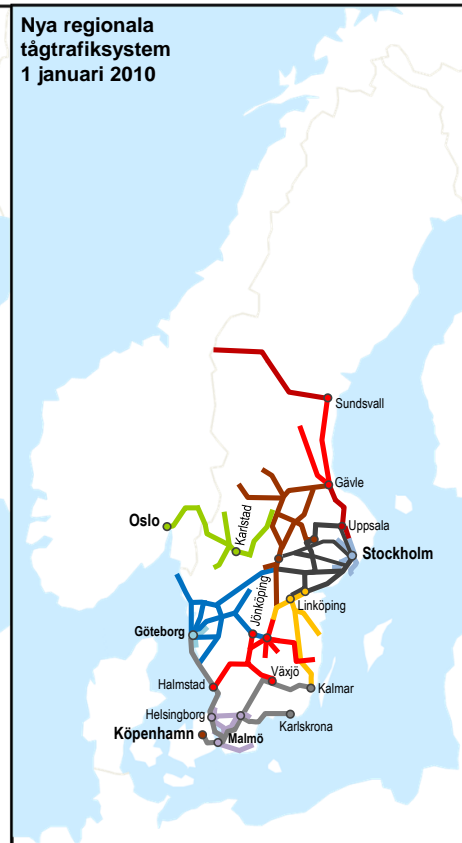
Nya regionala
tågtrafiksystem
1 januari 1990



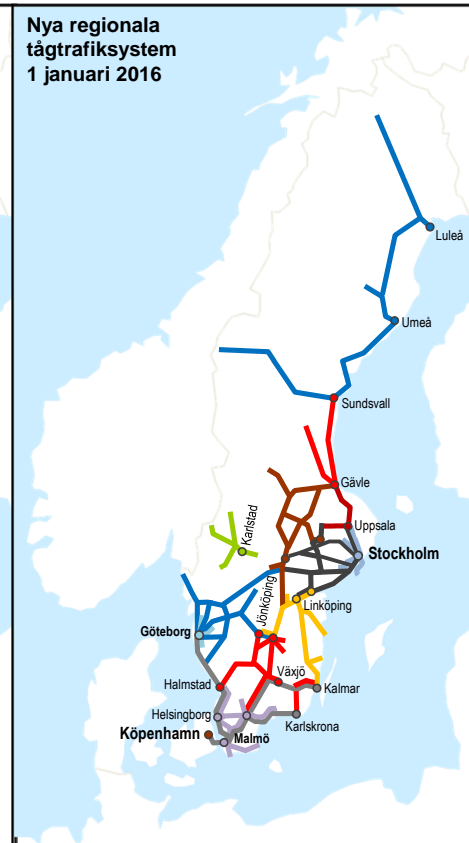
Nya regionala
tågtrafiksystem
1 januari 2000



Nya regionala
tågtrafiksystem
1 januari 2010



Nya regionala
tågtrafiksystem
1 januari 2016

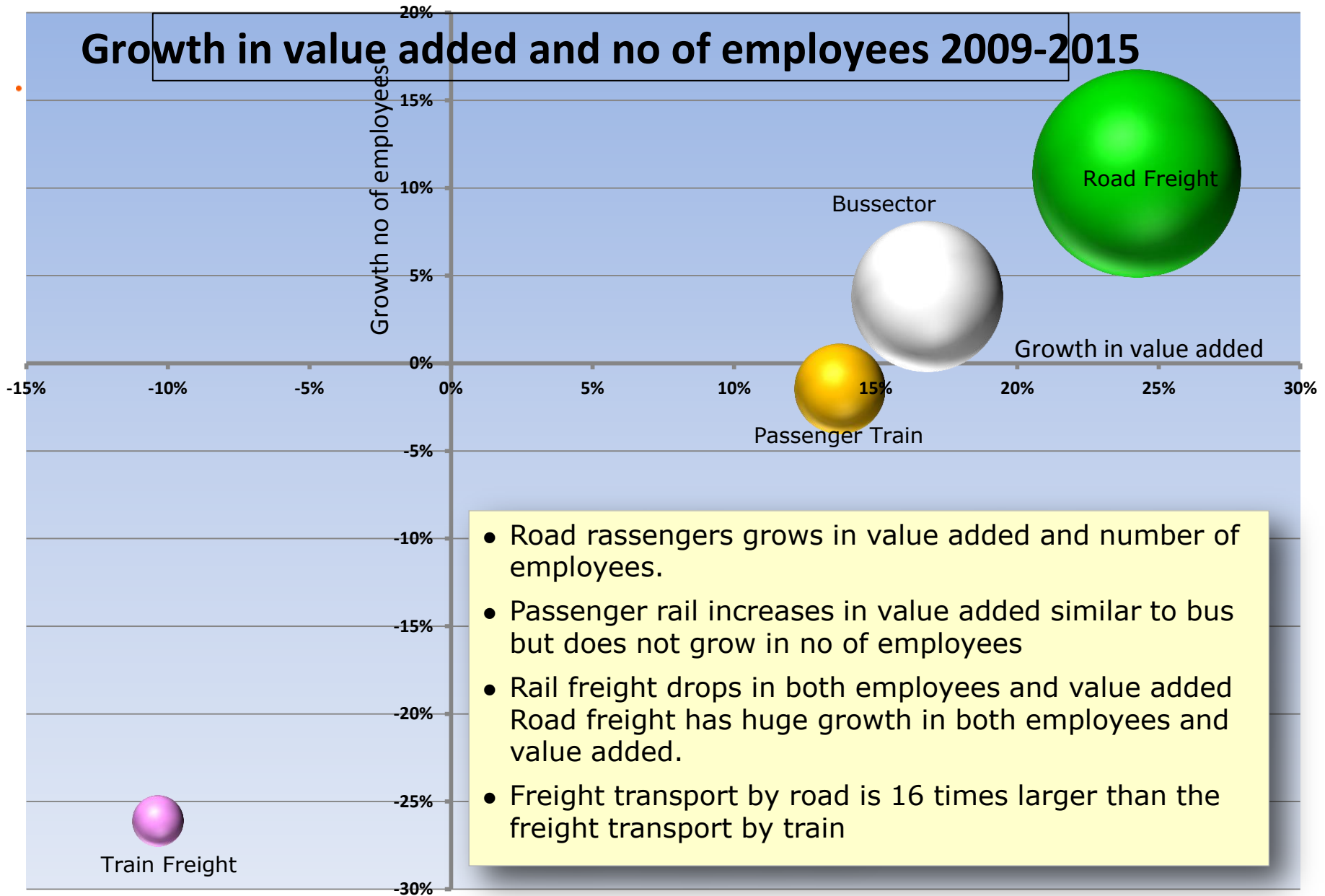


Källa: Oskar Fröidh, KTH

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Growth in value added and no of employees 2009-2015



- Road rassengers grows in value added and number of employees.
- Passenger rail increases in value added similar to bus but does not grow in no of employees
- Rail freight drops in both employees and value added Road freight has huge growth in both employees and value added.
- Freight transport by road is 16 times larger than the freight transport by train



The impact of EU for the Swedish railway

- Sweden is in the frontline of liberalization as well as market opening in Europe, closely followed by the UK. New EU regulations for the railway sector highly affects the Swedish railway, which is different from the European railways.
- The increasing level of regulation, especially on the technical side, might imply **increasing costs and non-optimized solutions**. Sweden has an important role and needs to push towards a market and customer focused development of regulations based on **functional criterias** instead of technical criterias.
- A key to success is to secure that EU regulations are customized to an **open market**. The open market encourages innovation and digitalization
- The majority of the CER members are represented by state owned companies making the role of ASTOC complex.

Key issues for the European railway from Swedish operators perspective

- *Rail is key* to reach the objectives of the White Paper and the reduction of CO2 emissions in EU and Sweden.
- *Accessibility and availability*, drives the need of standards (ERA), simplified administration, investments in bottlenecks
- *Functional specifications and less regulation*
- *ERTMS*, verification and funding
- *Corridors* in Europe, TEN-T, need of a management committee with the right resources
- *Funding* opportunities of TEN-T
- *Taxation*, harmonizing the different modes of transportation, climate taxation and VAT
- Implementation of the *4th Railway Package*
- *Fair competition* from trucks
- The increased need for European infrastructure investments (rolling stock, maintenance etc.) requires *external funding*

Facing full-fledged deregulation

- Customer satisfaction
 - Employee contribution
 - Sustained profitability
 - Expansion
- Improved quality of service
 - Increased participation
 - Improved productivity
 - New markets



Incumbent's journey of change

From TRAIN generics ...

... to SJ specifics

From TRAIN is good for...

... to SJ is good for

From TRAIN & sustainability

... to SJ & sustainability

From operating TRAINs

... to serving people

From information

... to dialogue

Digitalization is underway; maturity varies by industry, but most potential is yet untapped

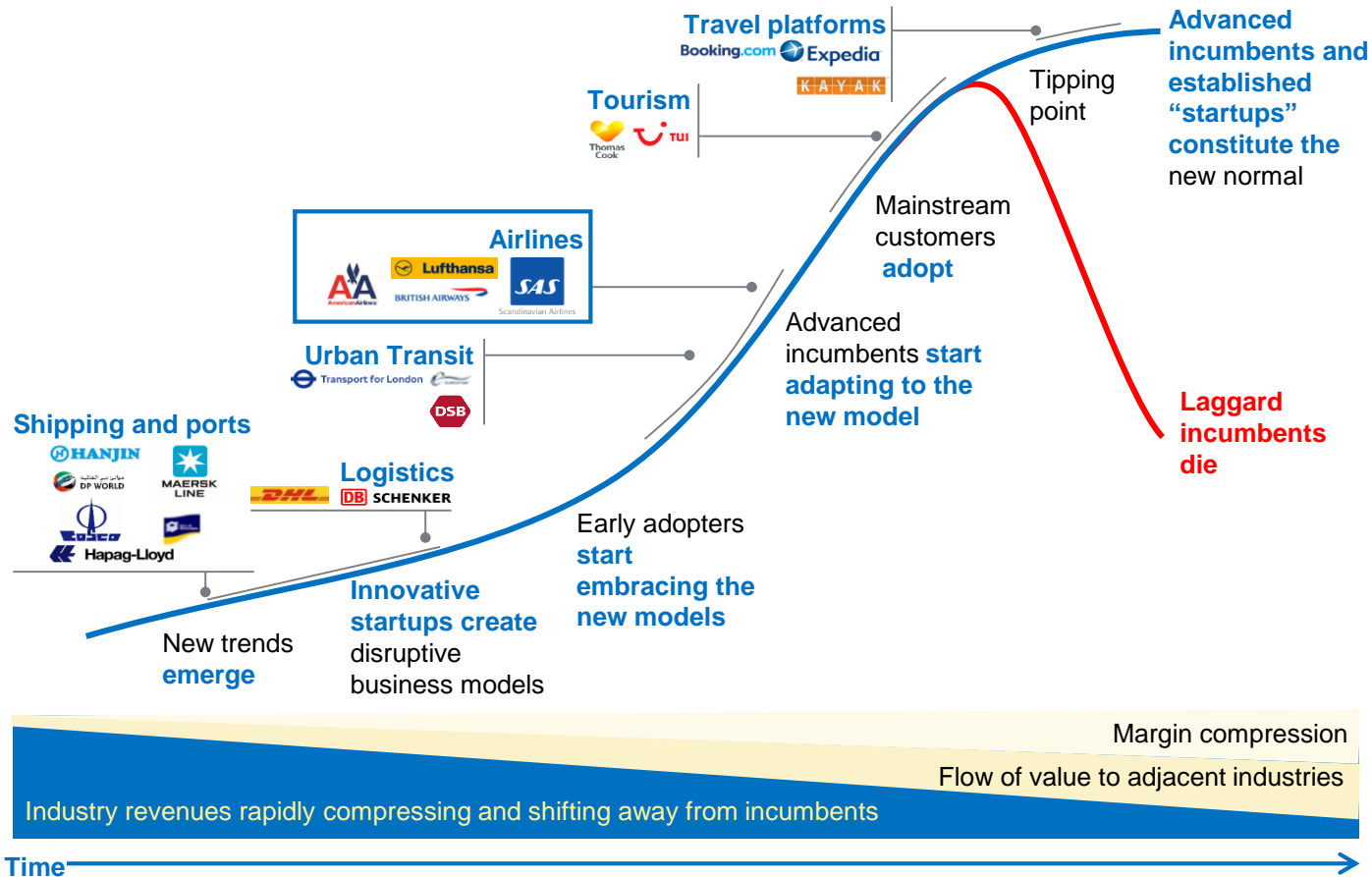


- Efforts to date have mostly digitized the business “as-is”
- Organizations either haven’t recognized the real digitalization opportunities yet, or aren’t capable of implementing them



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Tågoperatörerna

The rail industry may soon face the tipping point of the digital lifecycle



SOURCE: McKinsey & Company

Digitalisation

Examples from Passenger operator

Migration from manual to digital channels

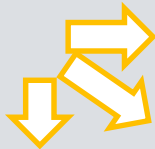
Strategy

- Meet new customer habits
- More efficient sales & service



Goal

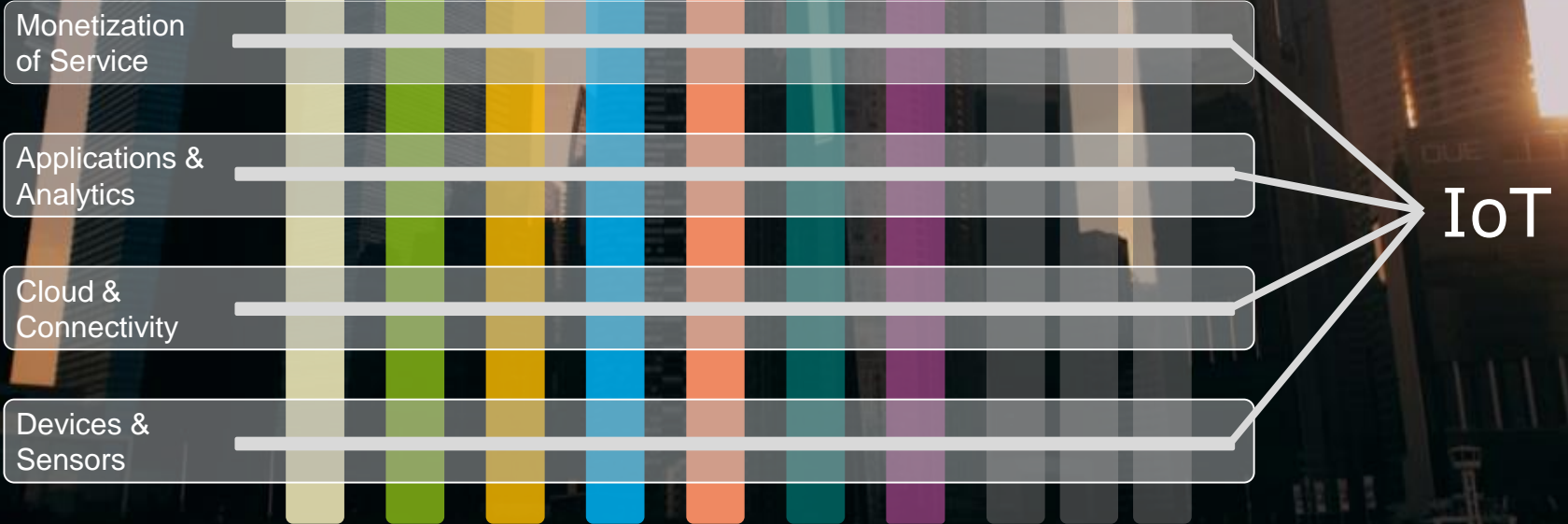
94% sales via own digital channels

| Active shift for digitalisation | | |
|--|---|---|
| | Offline/FullService | Online/SelfService |
| Direct/Own | Travel shop Contact Center  | SJ.se, Mobil.sj.se Mobile app Vending machines 94 % |
| Indirect/Agent | Travel agency Resellers | Micro sites / widgets Partners / affiliates |

Internet of Things Enabling technologies



Manu-
facturing Energy Transport Public Safety Health-
care Media Telecom
Operators Other
industries.....



IoT



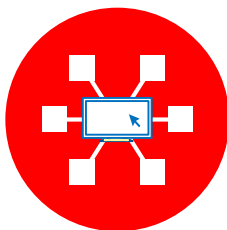
6 disruptions could fundamentally change the travel and transportation industry



Current
disruptions



Upcoming
disruptions



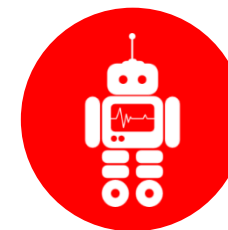
Online platforms

"Traditional TTL companies as capacity providers only?"



Expansion of large technology companies

"Fear of the hungry tech giants?"



Advanced robotics

"Fundamental changes to cost structures?"



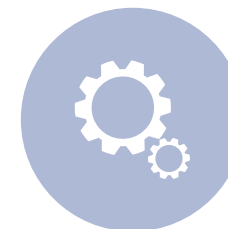
Asset sharing

"The door opener for innovative startups in the industry?"



Autonomous vehicles

"Cost structures, opportunities, competitors – will everything change?"



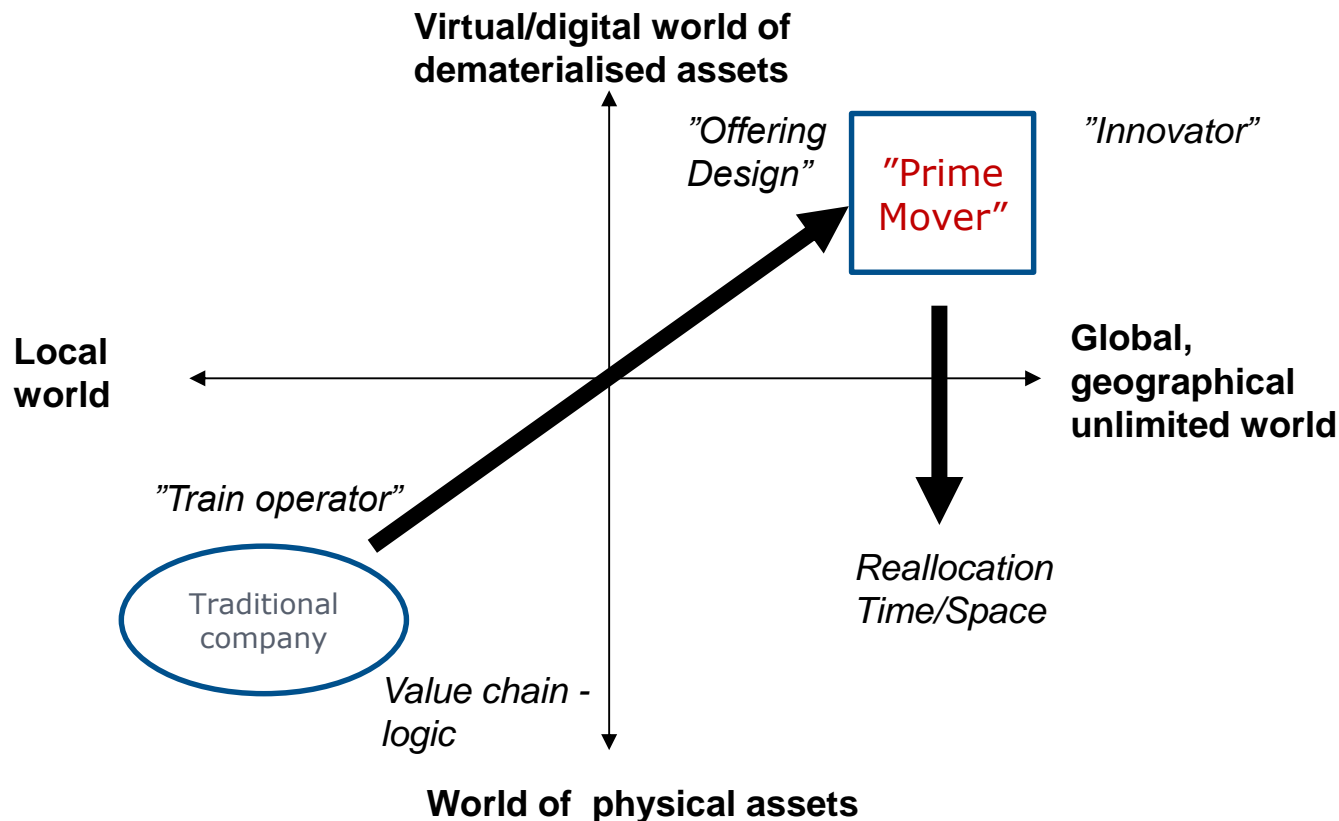
Additive manufacturing

"The 'big hit' to the logistics industry?"

Organizing digital mobility

Reconfigure or be reconfigured

- Rail as prime mover..?

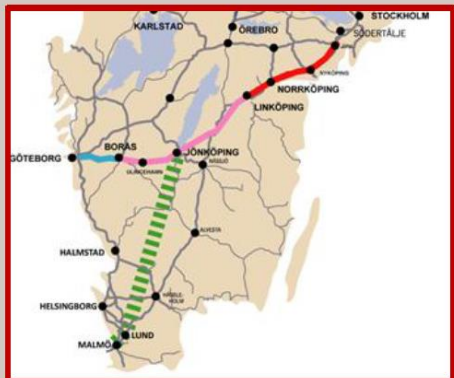


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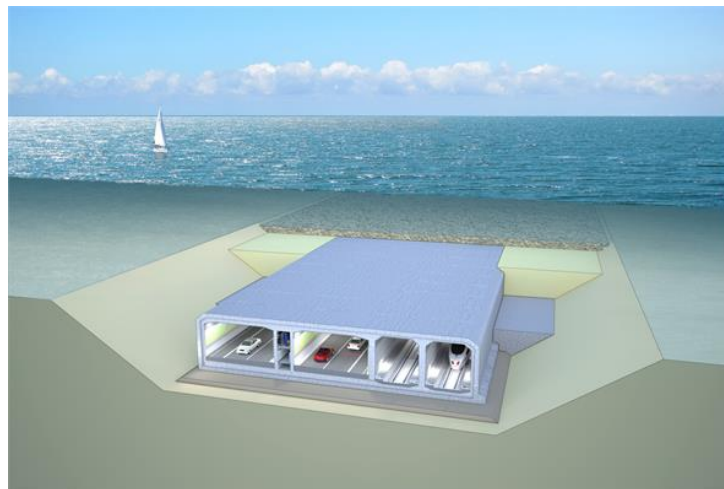
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New business opportunities created by new capacity

RAPPORT
Nya stambanor mellan Stockholm-Göteborg/Malmö
 Fördjupat underlag
 Beställning från Näringsdepartementet, Transportenheten
 2014-02-28



New High Speed tracks 2035

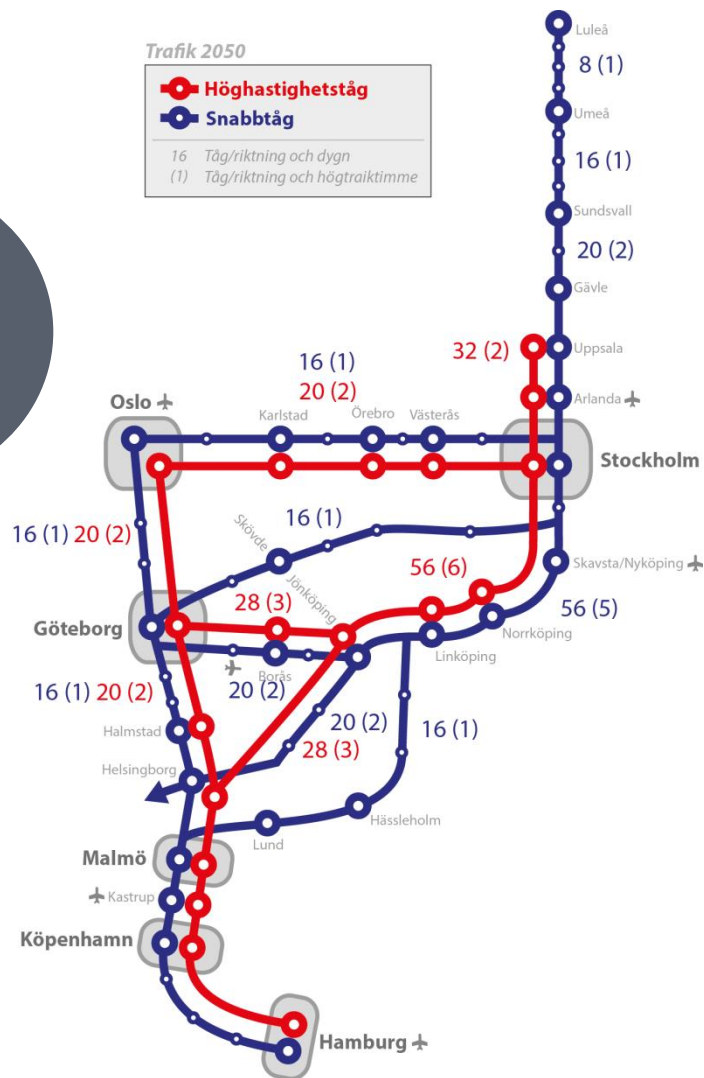


Fehmarn Bält 2024



Ostlänken 2028

Vision Railway 2050!



Summary

- Intentions behind the 4th RP
 - Separation and market opening – it works!
- Balanced track access charges
- Be careful regarding severe consequences of detailed regulation

Thank you!

Quality - Capacity – Competitiveness

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