

Public Transport in Germany

Organisation and Financing



China Ministry of Transport training programme

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Introduction

A brief introduction of ourselves



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Our company: KCW GmbH

- The leading source of strategic and management advice in the field of public transport of Germany
- Website: <http://www.kcw-online.de/eng>

Agenda

1. Public transport (PT) in Germany
 - Why do we need public transport?
 - Legal framework
 - Statistics and trends
2. Organisation and Institutions
3. Financing of public transport
4. Case studies
5. Questions and discussion

1.1 Why do we need public transport

Transport modes and implications



Movement of people in urban areas is organised efficiently if people are carried in the same vehicle.

1.1 Why do we need public transport

Welcome to Los Angeles ...



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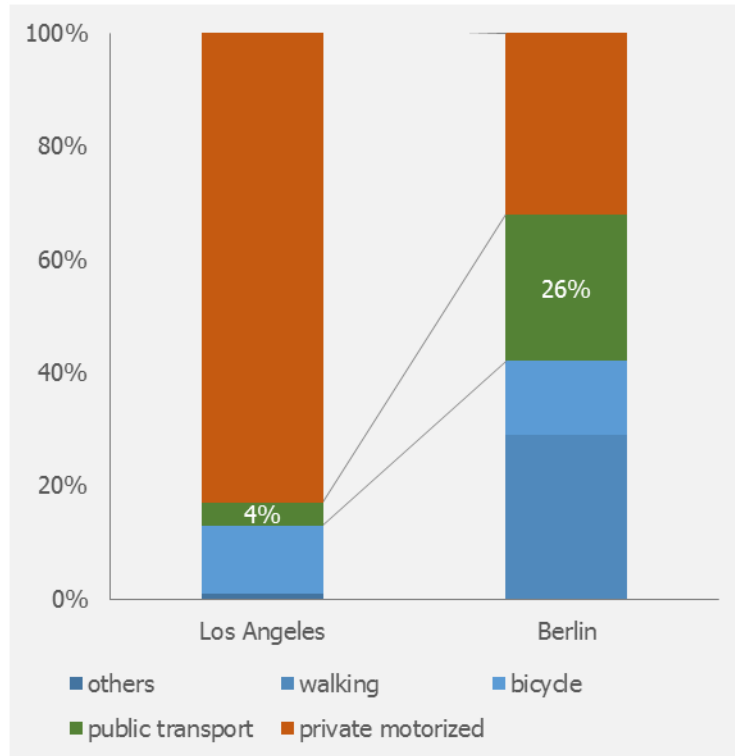
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The Infamous Gdub @flickr
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1.1 Why do we need public transport

Comparison of the modal shares in Los Angeles and Berlin



To a significant extent these figures result from political action and intervention.

Source: http://velo-city2013.com/wp-content/uploads/20130613_gerdaxelahrens.pdf

1.1 Why do we need public transport

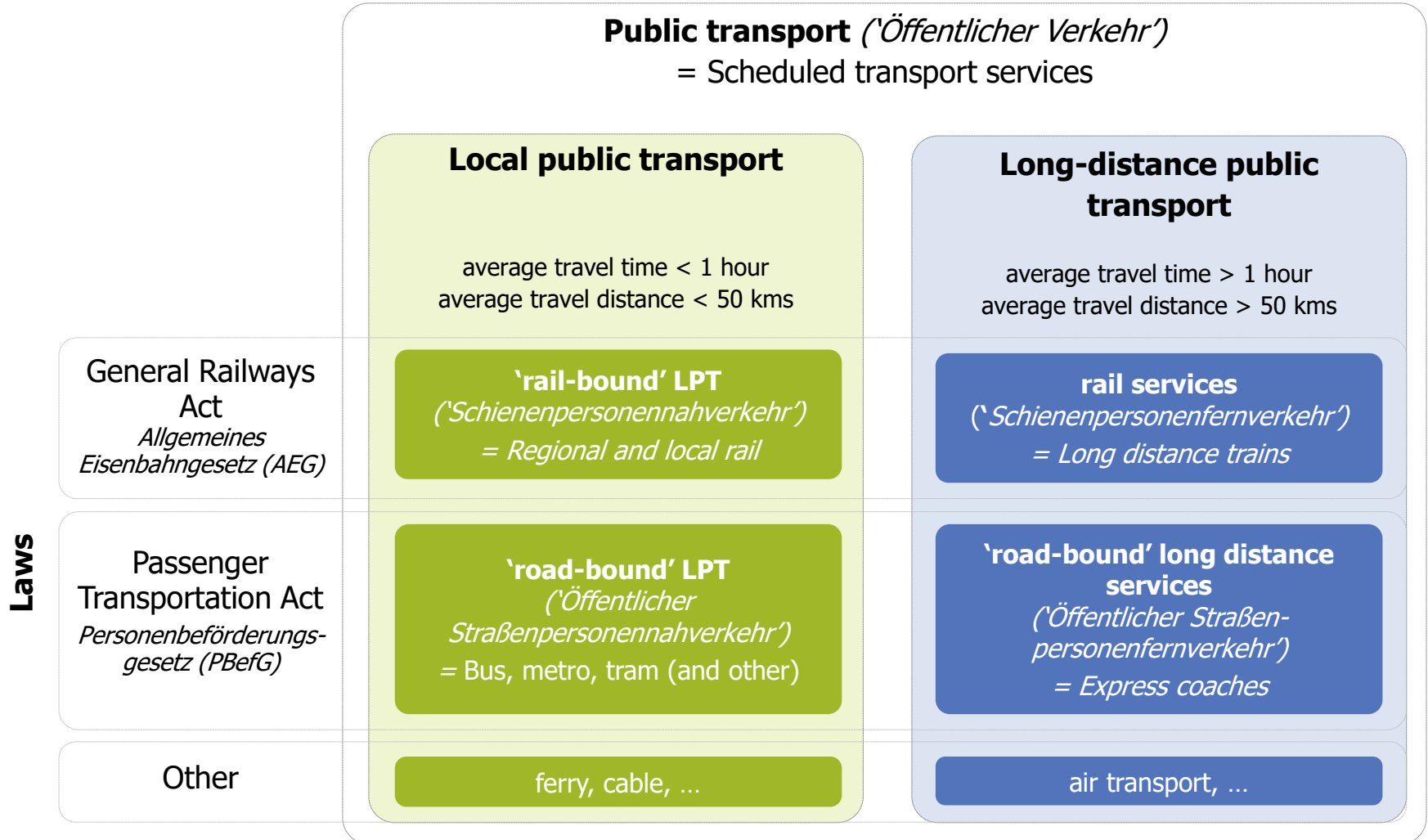
Benefits of Public Transport

PT can contribute to ...

- mobility and economic development
 - social inclusion
 - urban quality of living
 - environmental policies (quality of air, noise reduction, congestion etc.)
- public interest in a well-functioning public transport
- **therefore PT is an issue for politicians and for the general public**

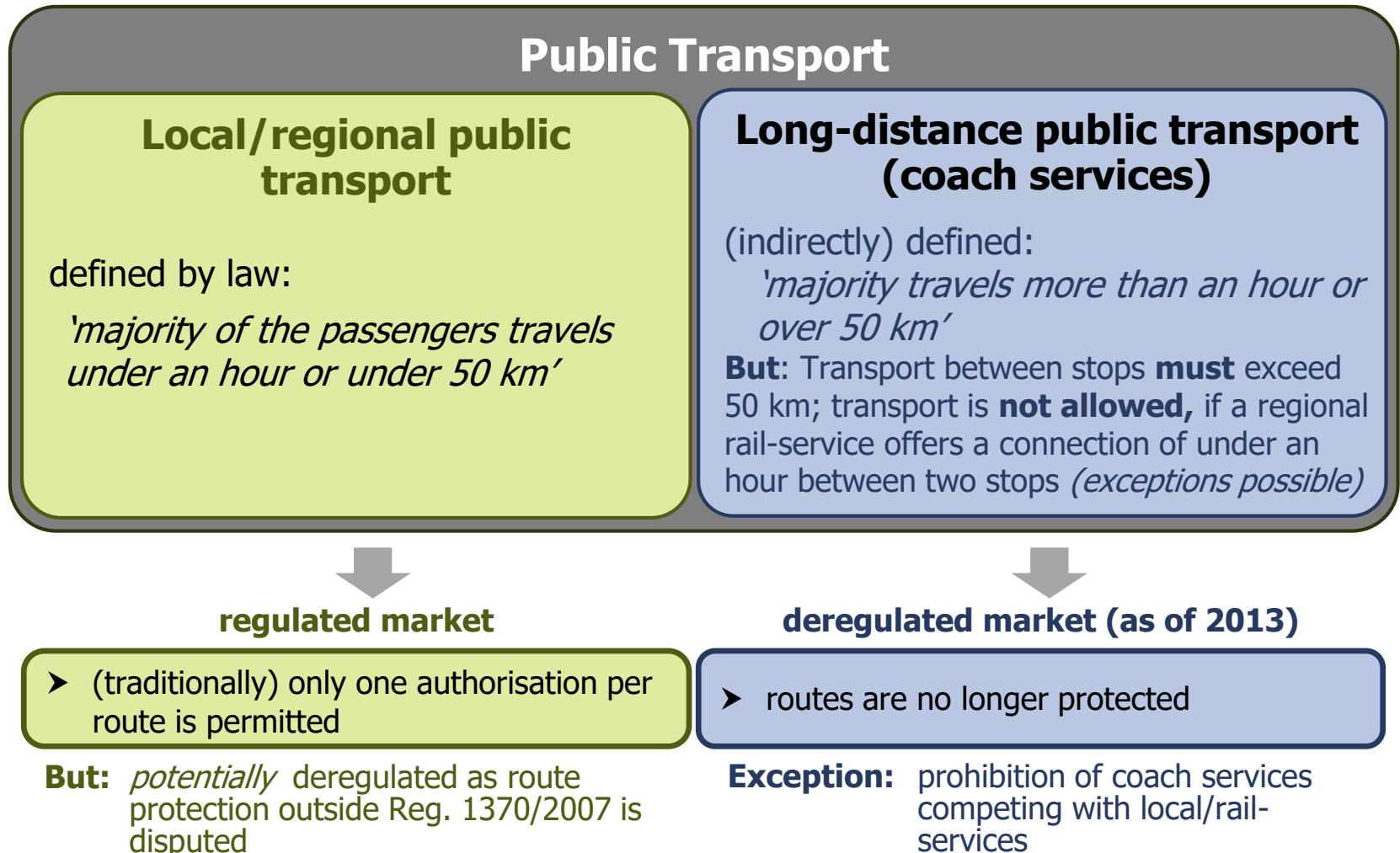
1.2 Public transport in Germany

Legal framework



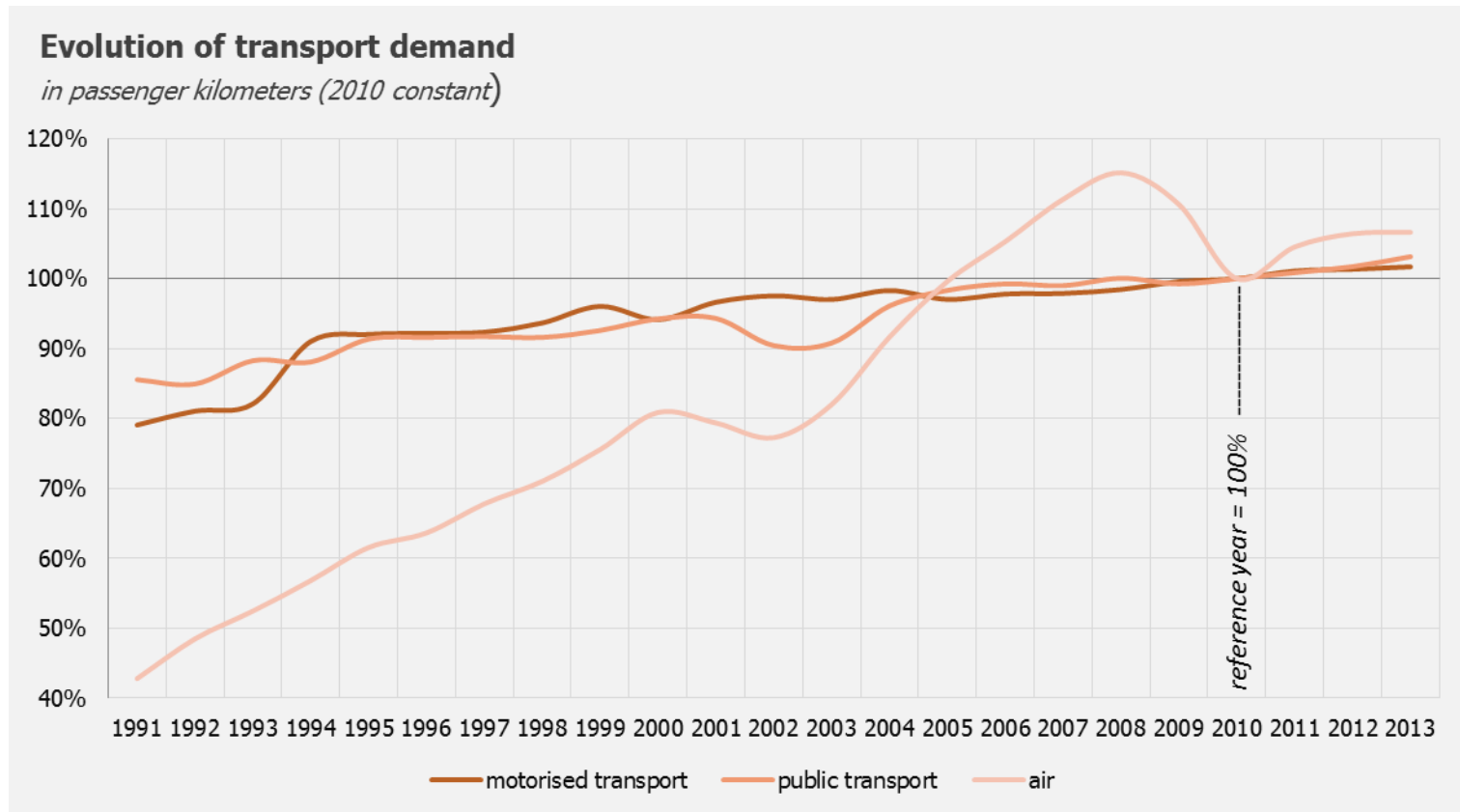
1.2 Definition of public transport in Germany

Regulated local PT – deregulated coach services



1.3 Statistics and Trends

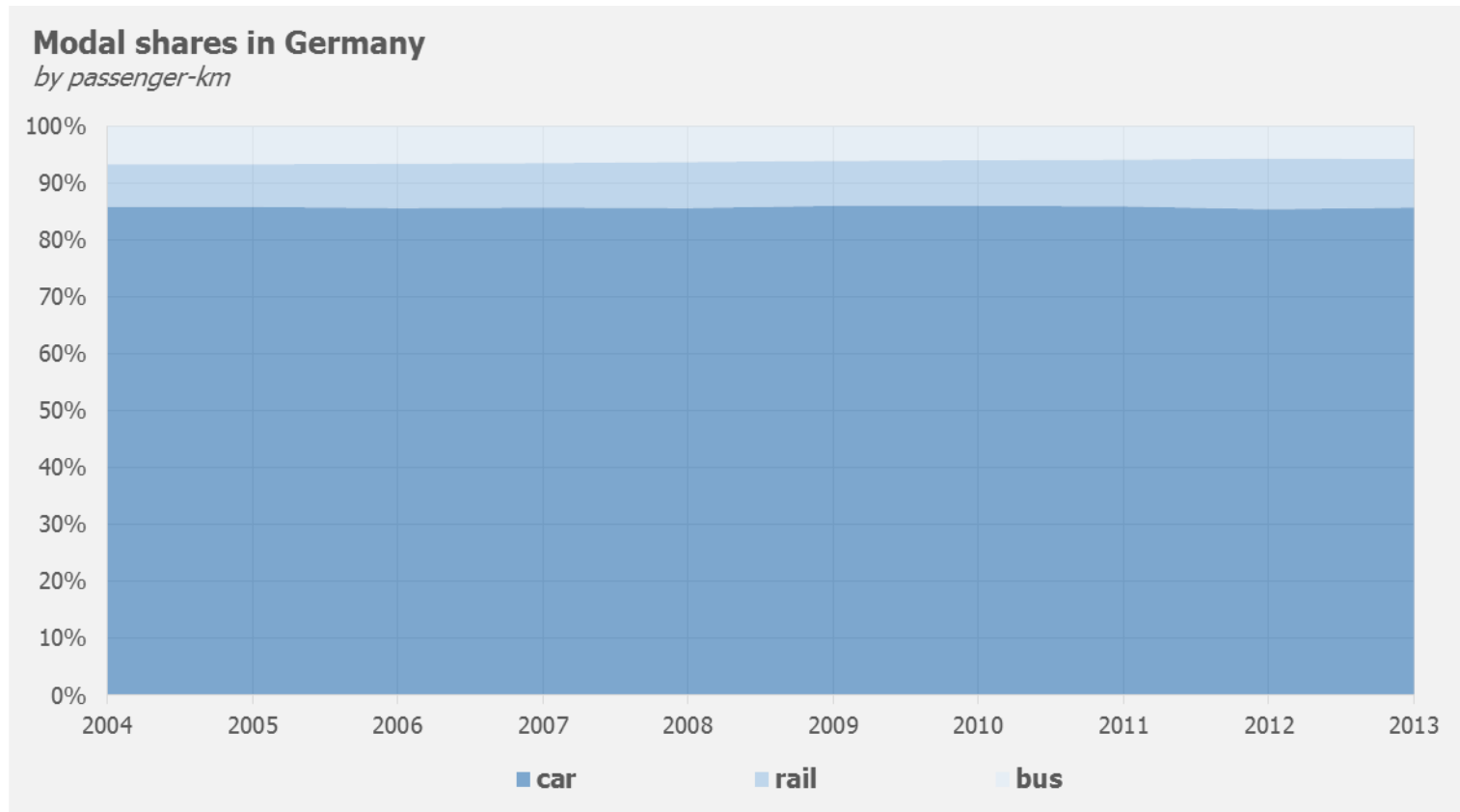
Development of passenger transport



Source: Destatis

1.3 Statistics and Trends

Development of passenger transport



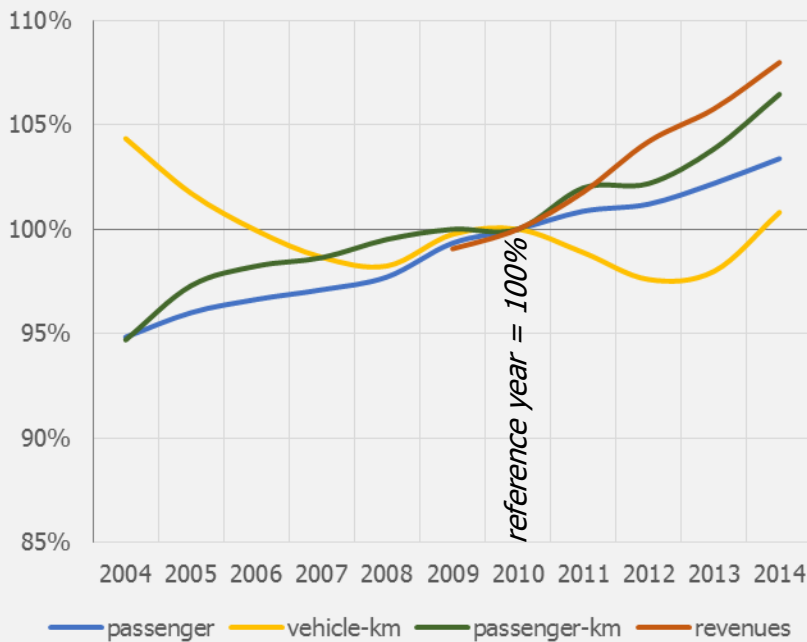
Source: Eurostat

1.3 Statistics and Trends

Development of passenger transport

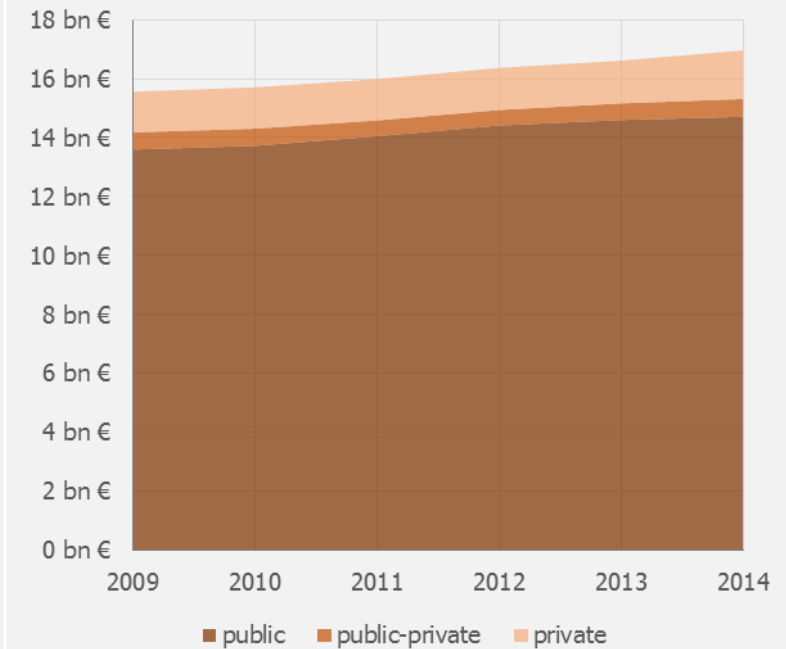
Evolution of supply and demand in Germany

in 2010 constant



Revenues of public transport in Germany

by type of company



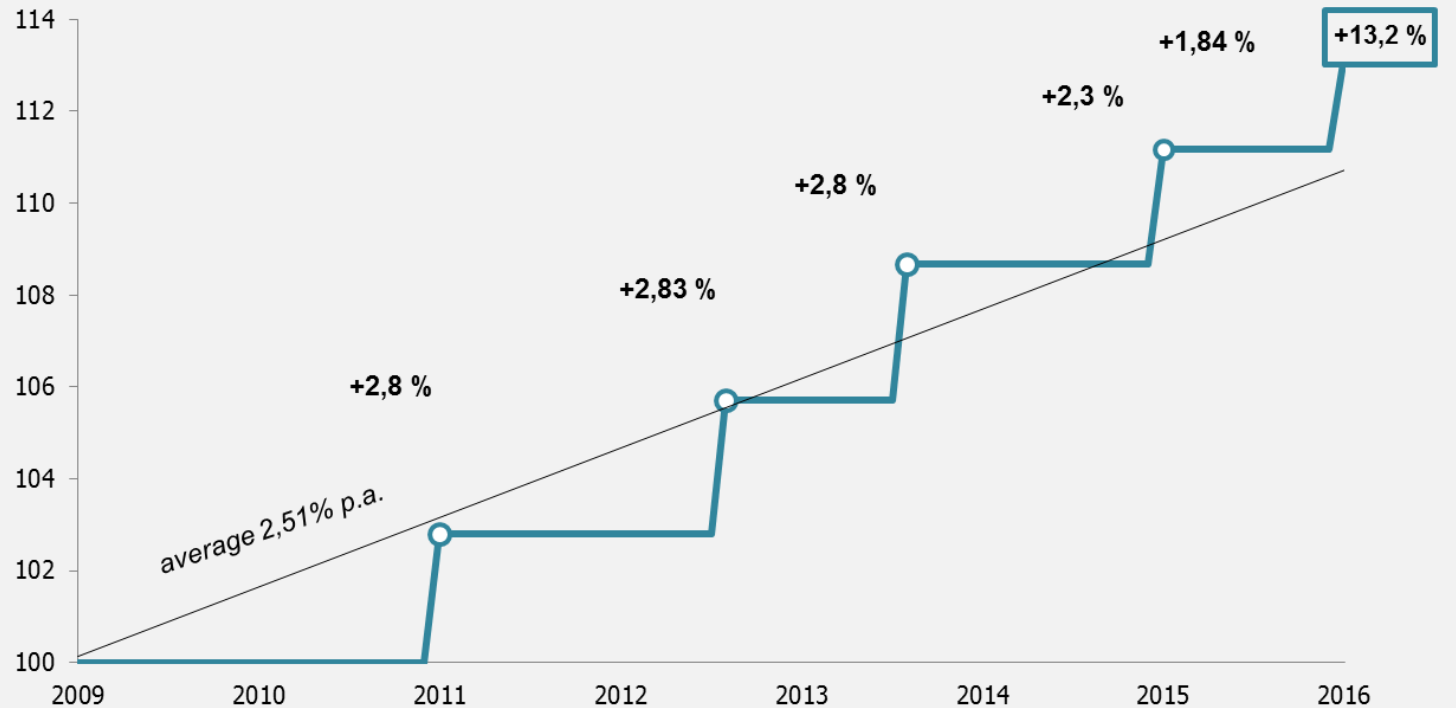
Source: Destatis

1.3 Statistics and Trends

Development of passenger transport

Fare evolution VBB 01/2009 - 01/2016

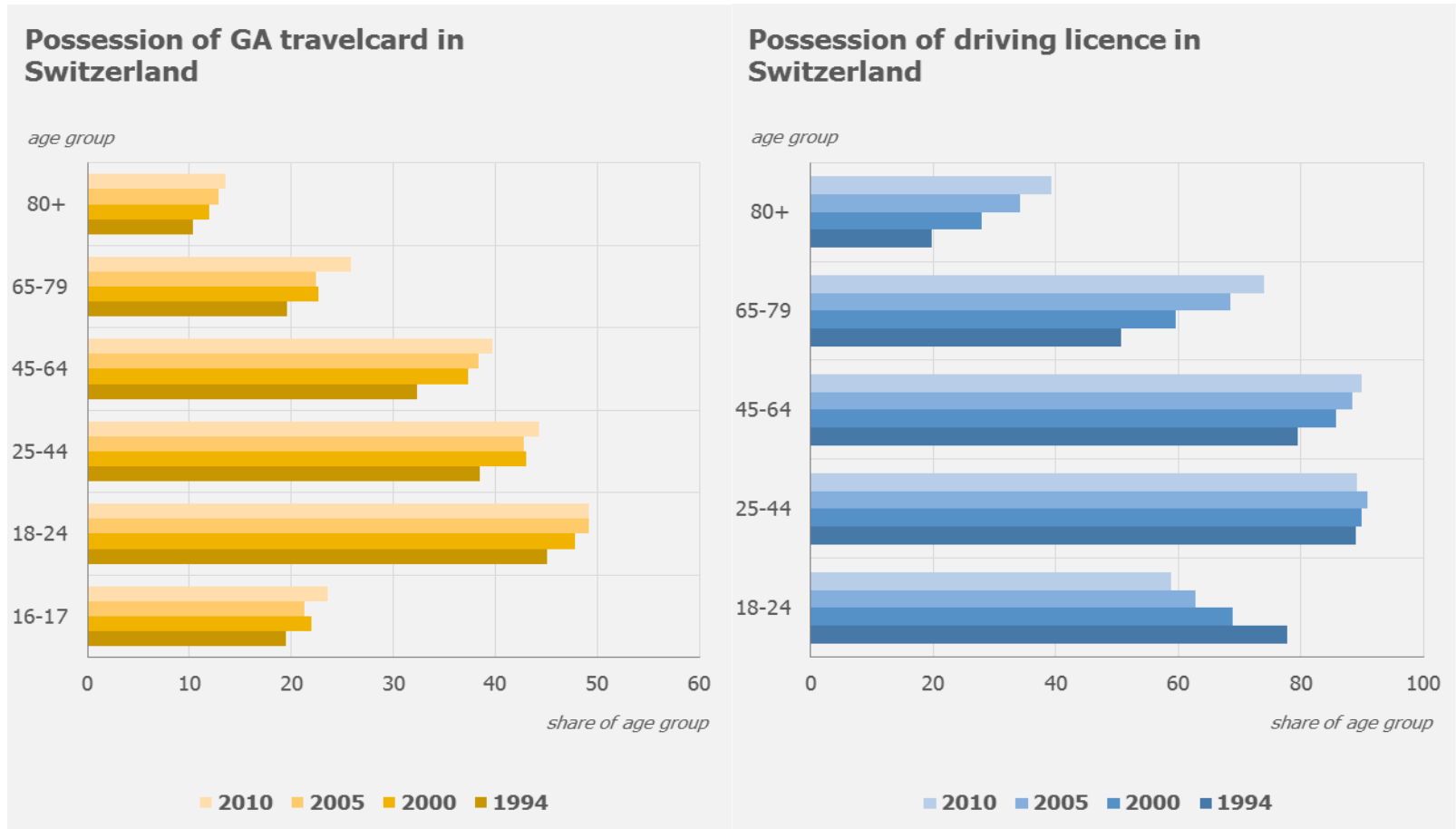
average increase association; 2009 constants



Source: KCW

1.3 Statistics and Trends

Development of passenger transport



www.are.admin.ch/themen/verkehr/00256/00499/index.html?lang=de&download=NHzLpZeg7t,Inp6I0NTU042I2Z6In1acy4Zn4Z2qZpnO2Yuq2Z6gpJCEd4J5fGym162epYbg2c_JjKbNoKSn6A--

1.3 Statistics and Trends

Summary: recent & actual developments

- PT passenger demand continues to grow, in particular in urban areas
- PT passenger-km growth higher than passenger growth → increase of distances travelled
- Consolidation of bus operating companies (2.872 in 2004 to 2.264 in 2014 = minus ~20%)
 - small businesses seem to lack competitiveness
 - average fleet size of bus operators approx. 18 vehicles
- Market share of public enterprises significant: 86% of revenues in PT is derived by public enterprises

1.3 Statistics and Trends

Recent & actual developments

- “New mobility”, flexible use of multimodal mobility offers, e.g.
 - Car sharing, on-demand-services, supported by mobile communication & apps – different in cities and rural areas
 - Reverse trend: declining car ownership and drivers licence possession
 - PTAs and public transport associations discuss and elaborate where and how their involvement has to be aligned
 - Young(er) generation(s) – primarily in urban areas – show a changing behaviour towards transportation:
 - “Use instead of own” (sharing); high level of adaptability (new technologies, in particular IT-related), increased ecological awareness
- Demographic change in rural areas = how can public transport be secured under diminishing demand and funds

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2. Organisation and Institutions
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2. Organisation and Institutions

General facts

Germany

- 82 million inhabitants, 360.000 km² → 229 inhabitants per km²

Federal parliamentary republic – Levels of government

- 16 federal states
 - 403 districts (2009)
 - 301 rural districts
 - 102 urban districts
 - municipalities
- states differ widely in size and population!
- municipalities differ widely in size and population!
- | | |
|---------|-------------------------|
| Hesse: | 21.000 km ² |
| | 6.1 million inhabitants |
| Berlin: | 892 km ² |
| | 3.5 million inhabitants |
- | | |
|------------|-------------------------|
| Frankfurt: | 248 km ² |
| | 0.7 million inhabitants |
| Berlin: | 892 km ² |
| | 3.5 million inhabitants |

Market share of municipality-owned operators

(Source: Federal Statistical Office)

- bus operators: 79 % of all passengers; 69 % of all vehicle-km
- tram operators: 99 % of all passengers; 99 % of all vehicle-km

2. Organisation and Institutions

Federal states as a matter of decentralisation

- Federal states are responsible for financing and organising public transport.
- All states – with exception of the three city states of Bremen, Hamburg and Berlin – delegate responsibility further to urban and rural districts.
- Districts can cooperate or can delegate responsibility to a joint institution.



2. Organisation and Institutions

Historical background

In the past years legislation on PT has changed considerably:

- Since 1996 the 16 states are responsible for management, awarding and financing PT.
- Since then, award and provision of PT are split between the PTAs and the operators.
- A further split between political decisions and management of PT leads to **three distinct levels in the organisation of PT: strategic, tactical and operational.**

The case studies focus on the medium (tactical) level. Approaches to its implementation differ regionally:

- Case study 1: **Berlin - the City as PTA**
- Case study 2: **Frankfurt - PTA-organisation *traffiQ***



2. Organisation and Institutions

Levels involved, key questions and definitions

Policy Level

PTA

Key question: What do we want to achieve?

Management Level

transport assoc.

**Key questions: How are we going to achieve that?
What services do we need?**

Operational Level

Operator

**Key questions: How do we produce the service?
How to manage it?**

Source: based on van de Velde 2001

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Public Transport – Organisation and Financing

2. Organisation and Institutions

Conflicts of interest in regulated public transport systems

Potential and potentially conflicting objectives of ...

... the authority:

- increase patronage
- minimise public subsidies ('financial compensation' for public services)
- create political success (e.g. through low fares, effects on the environment, employment)

... the operator:

- cover costs and maximise profits

... the citizens and customers:

- minimise costs of mobility
- benefit from a suitable public transport service and network

... the staff and the trade unions:

- assure the quality of work conditions, good wages, number of staff; power of unions

... the suppliers and subcontractors of the operators:

- cover costs and maximise profits

2. Organisation and Institutions

Levels of organisation of public transport services

Roles and tasks of authority /operator

Aims for public transport

'Strategic Level'
(long term,
5 years +)

Definition of the general goals:

Transport policy, market share, profitability/public transport budget

General definition of the services:

Area, target groups, products, intermodality

Planning and design

'Tactical Level'
(medium term,
1 to 3 years)

Definition of the detailed service characteristics:

Fares, personnel skills, image & additional services, vehicles, routes, timetable etc.

Operation

'Operational Level'
(short term,
day to day)

sales activities, information to the public, infrastructure management, vehicle rostering, personnel rostering & management, cost controlling etc.

2. Organisation and Institutions

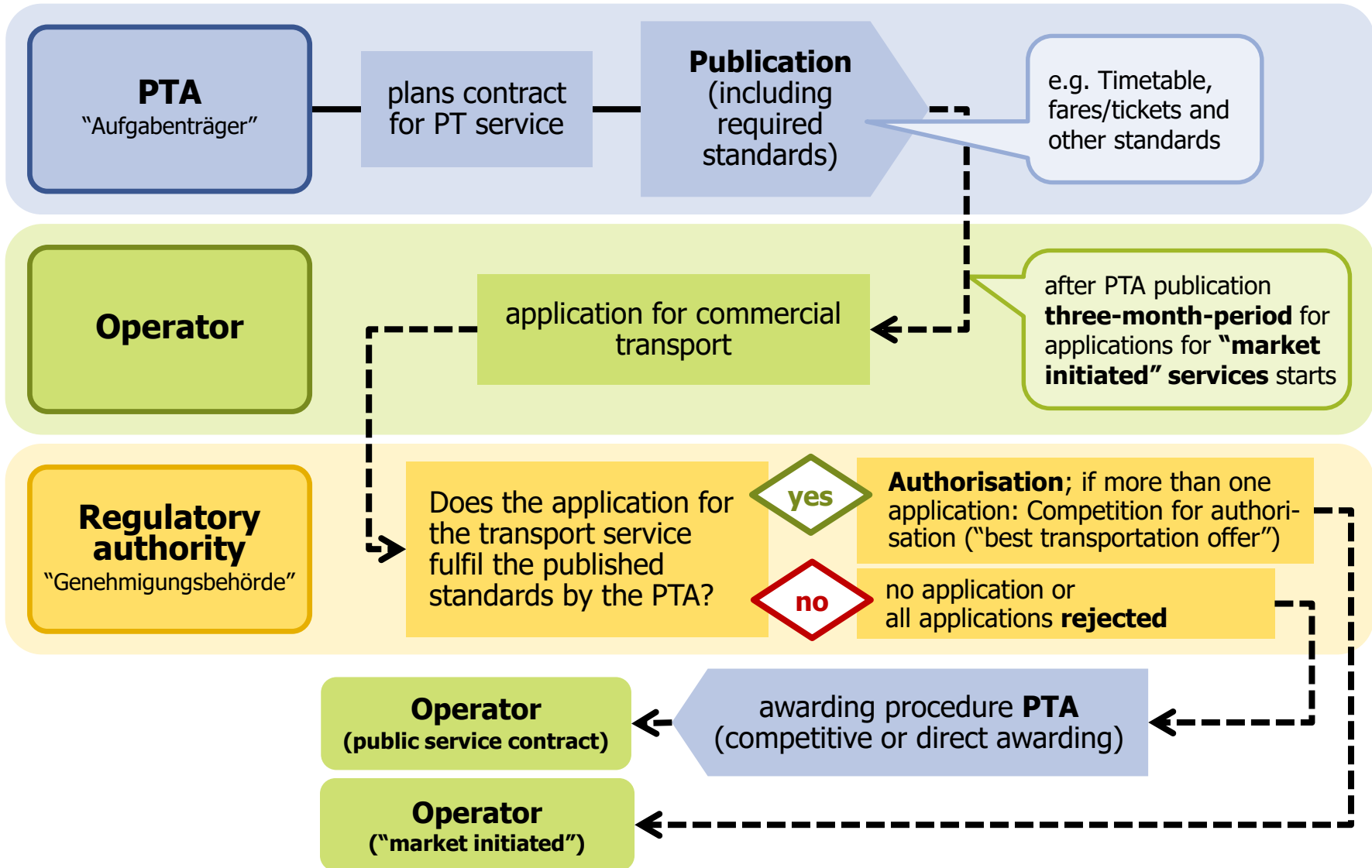
Market organisation today

Authority initiative vs. market initiative

- In general, market entry depends on authorisation and, if subsidies are necessary, on the successful award of a contract.
- **Two different public authorities** are responsible:
 - the **regulatory authority** (“Genehmigungsbehörde”) for authorisation,
 - the **public transport authority** (PTA, “Aufgabenträger”): for awarding respectively contracting.
- The general interaction of these authorities and operators is shown on the next slide.
- The authorisation results in a **de facto-exclusive right**.

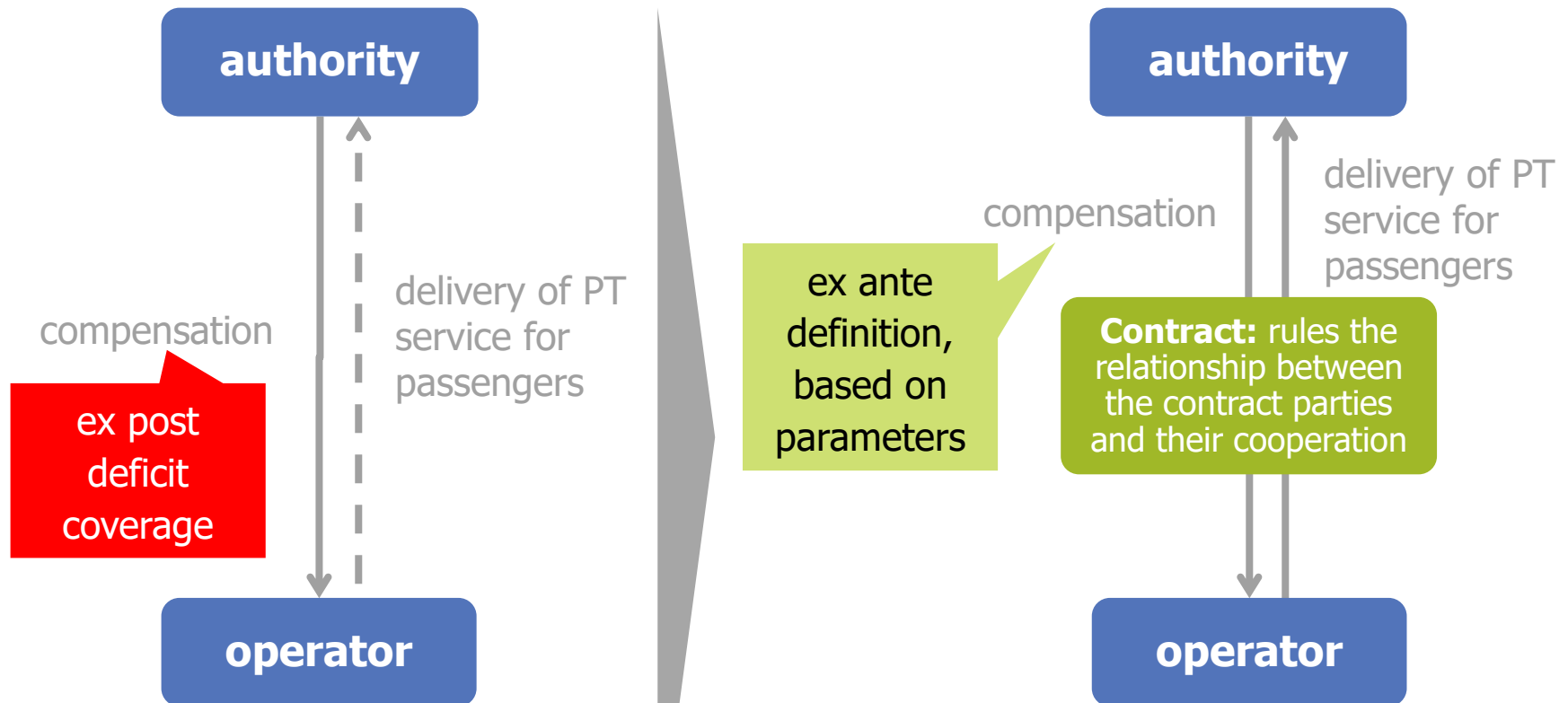
2. Organisation and Institutions

Interaction of authority and operator initiative



2. Organisation and Institutions

Principle *Public Service Contract*

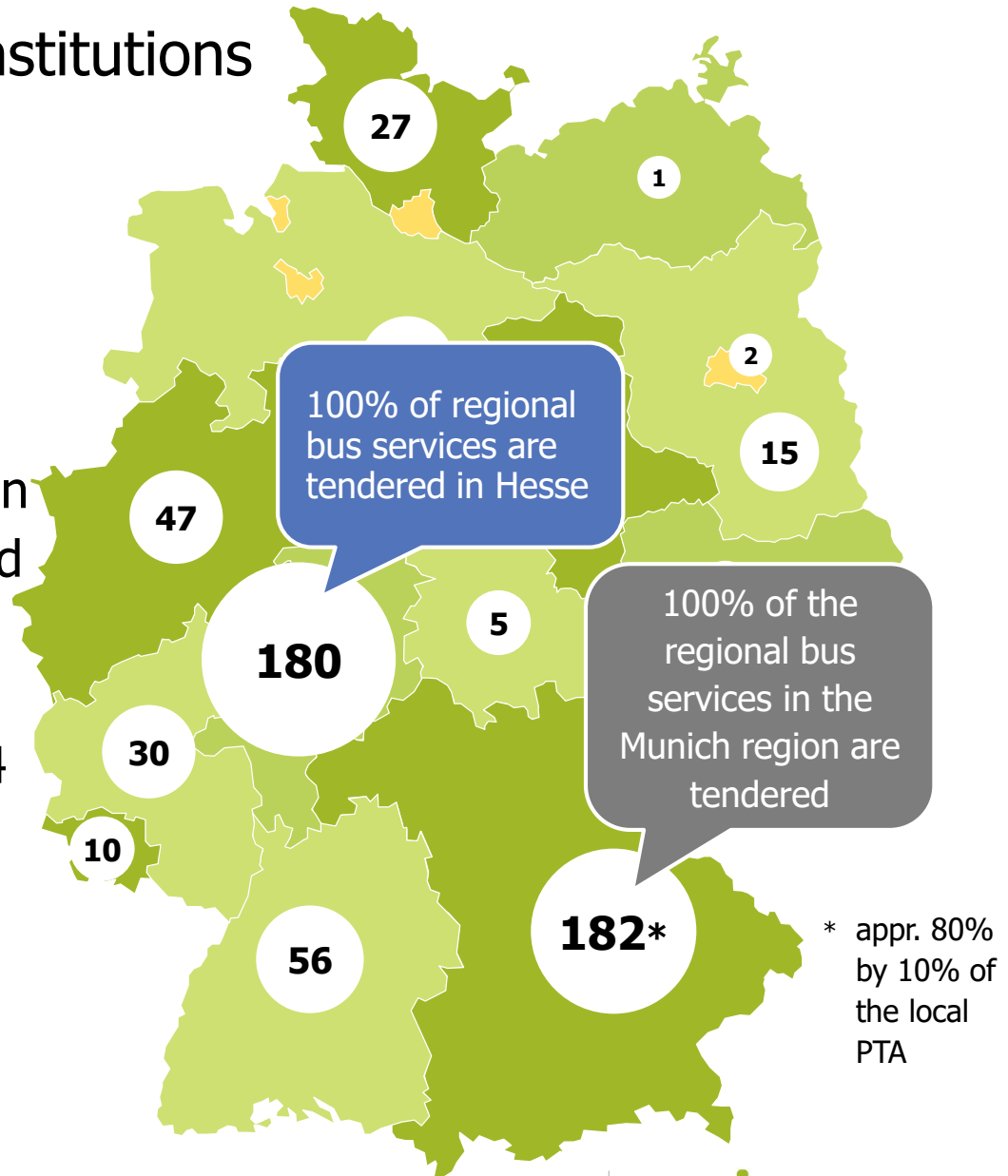


2. Organisation and Institutions

Huge differences between the states

Competitive awarding procedures

- Number and distribution of procedures published in the *Official Journal of the European Union* by 31st December 2014



Source: Own research, KCW GmbH 2015

2. Organisation and Institutions

Lessons learned

- **Establishing transport associations has fostered integration of transport systems**
 - tariff integration: “one-ticket” for one journey with different operators
 - specify generic standards for public transport on regional and even federal state level

- **Contract awarding...**
 - ...paves the way to shape long-term planning perspectives and security for both sides, authorities and operators
 - ...significantly increases service quality
 - ...mitigates investment risks for operators

2. Organisation and Institutions

Lessons learned (2)

- **Contract awarding...**
 - ...increases cost efficiency – prerequisites are intelligent tendering procedures and contracts
 - ...provides a clear framework about remuneration procedures, service levels and adjustments, penalties and quality measures
- Integration creates interfaces and complexity → management skills and lines of communication need to be established
- Definition of PT services, tendering and establishing (technological) standards in an environment of independently acting federal states proves challenging

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3. Financing of public transport

General remarks

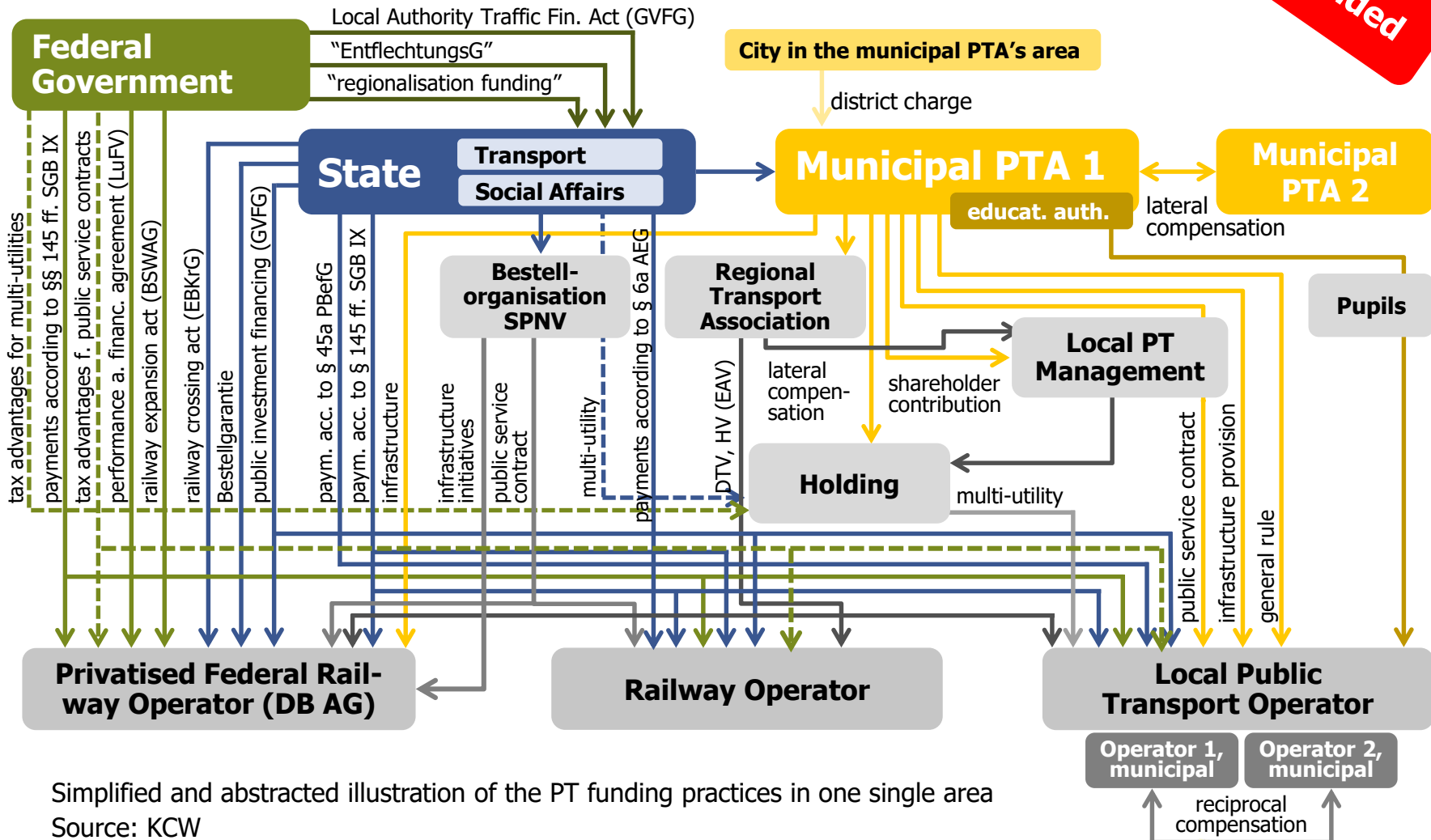
All in all, financing of public transport in Germany is characterized by

- a complex system of different financial sources and instruments, earmarked funds and responsibilities of several stakeholders (see following slides).
- The complexity, lack of transparency and possibilities of inefficiencies and windfall gains are debated and criticized continuously.
- Some federal states implemented finance reforms in the recent past, to rearrange and simplify their financing structures.

3. Financing of public transport

Financing practice in Germany (traditional)

not recommended

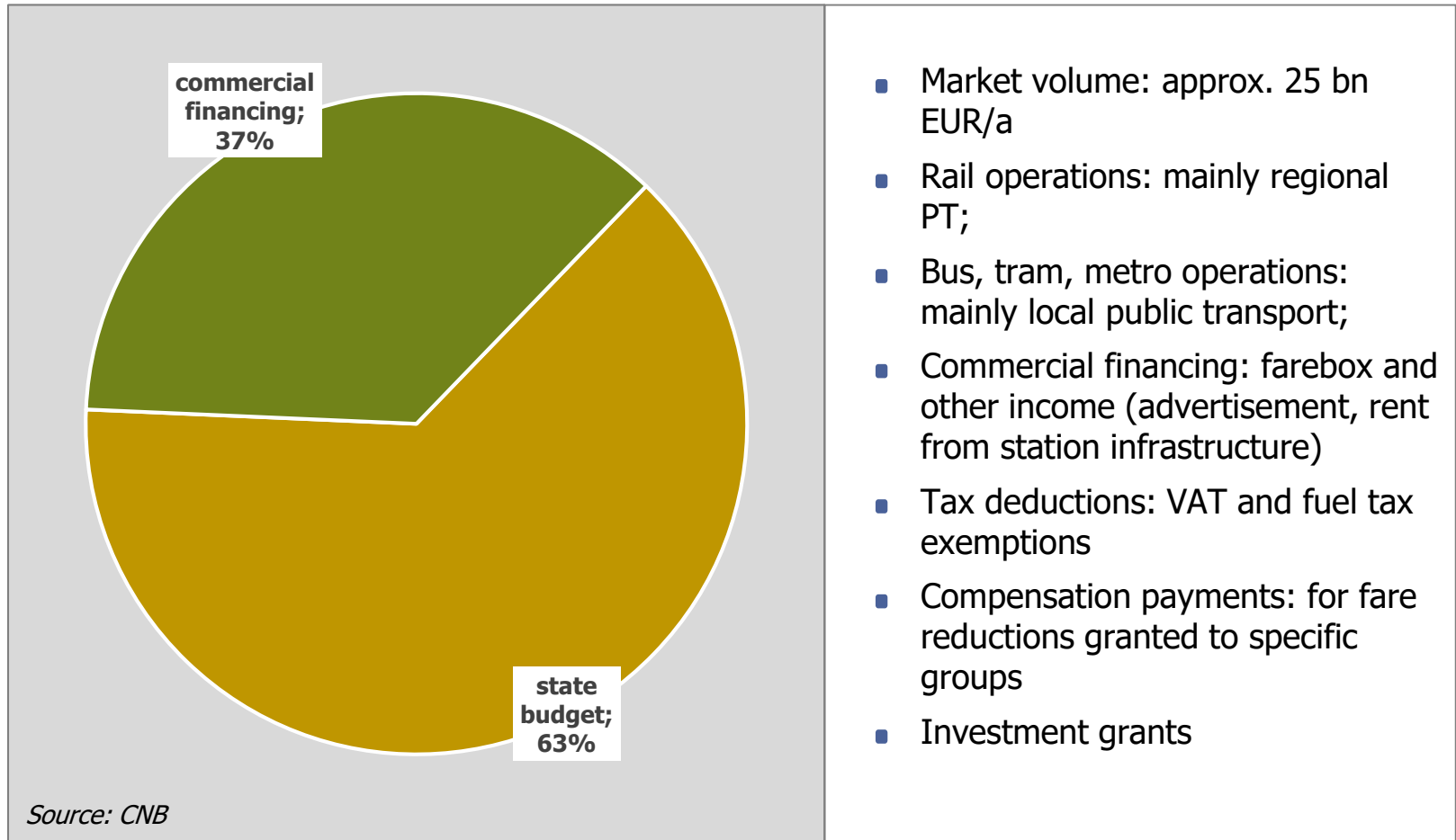


Simplified and abstracted illustration of the PT funding practices in one single area

Source: KCW

3. Financing of public transport

Financing in bn EUR (estimated for 2008)



3. Financing of public transport

Infrastructure investments

Due to a lack of funds, to largely complete PT-networks and to complicated and time-consuming planning processes,

- in larger cities **only targeted investments** are made, e.g. to construct the tracks for the
 - light rail "U 5" in Frankfurt: approved by city council in 2000, ready for use probably in 2020, or for the
 - underground-extension „U 5" in Berlin: agreed upon in the so-called "capital contract" in 1994, ready for use probably in 2019.

Due to infrastructure networks which have been built decades ago,

- in many smaller cities with declining population a **political debate** is going on, whether infrastructure has to be dismantled (in particular regarding tram services in cities with less than 100,000 inhabitants),
- in all cities focus is laid on an **intensified maintenance** of the infrastructure.

3. Financing of public transport

Key criteria in establishing a financing system

- A financing commitment (public funds) of the PTA to a transport association should cover a **long-term perspective** and is appropriately settled in a **service and financing agreement**
- The financing volumes should be **based on relevant criteria** that are sufficiently related to the magnitude of the obligation; if these criteria develop (i.e. population, type and quality of service) the volumes should be adjusted
- Investment aid can be an appropriate measure to **improve bankability** of operators
- Direct funding of infrastructure projects by the state bears the risk to underestimate subsequent maintenance and operating costs of such investments → Private-public partnership models provide adequate transparency on the “true costs” (i.e. BOT); usefulness of PPP models depends primarily on investment needs and risk structure

3. Financing of public transport

PPP examples



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Case studies B and Ffm

Case studies B and Ffm will be inserted here

5. Questions and discussion

Any further questions?



Thank you.



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