Public Private Partnerships (PPPs) in Germany

- Principles of PPP/PFI in Germany -

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- Providing, Organisation and Financing of the Transport Infrastructure in Germany
- Organisation of HGV-toll
- Challenges for Transport Infrastructure
- The Role of PPP in German Transport Policy
PPP - Our understanding

- PPP/PFI has emerged as an alternative procurement strategy for various sectors of public services
- PPP allows to procure public services more quickly and in an efficient way
- There should be no bias towards either the traditional or the PPP option
  - Experience in the UK:
    (only) 20% of public projects fit into the PPP/PFI scheme
- PPP is not a way to
  - “build without money“
  - “invest without money”
  - “save money without spending money“
**PPP - Our understanding**

### Elements of a PPP

- **Project**
- **Competition**
- **Payment mechanism**
- **Risk allocation**
- **Output specification**
- **Life cycle approach**

### Characteristics of a PPP

- A private partner finances a project and achieves a remuneration to refinance his investments, operating costs and in addition an adequate return on capital.
- The partnership is fixed in a long-term contract.
- The risks are allocated from the partner who is able to manage it.
- The life cycle approach integrates all phases of a project like build, operate and maintain.
- The services are defined in an output specification.
- The payment mechanism is chosen according to the services and sharer risks.
## Public Services as potential "PPP markets"

### State level
- **Federal republic**

### Several Public Services
- **Legislative Level / Framework**
  - Federal trunk roads and highways, Federal railways
  - International airports (partly)

### States / Federal Laender
- **16 States (13 territorial states and 3 city states)**

### Executive Level and States Tasks
- Education
- Country roads, Seaports (partly)
- Buildings of states administration

### Municipalities
- **Cities**
- **Counties**

### Municipal Service Level
- Sports fields and public pools
- City halls, hospitals, schools and prisons
- Community supplies like energy networks
### Sectors and “Products” for PPP

<table>
<thead>
<tr>
<th>Transport</th>
<th>Supply/Disposal</th>
<th>Public Real Estates</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Air / Airports</strong>&lt;br&gt;Transport and other systems</td>
<td><strong>Energy / Power, Gas</strong>&lt;br&gt;Generation, Transmission</td>
<td><strong>City halls</strong>&lt;br&gt;Ministry buildings&lt;br&gt;Other public buildings</td>
<td><strong>Kindergartens</strong>&lt;br&gt;Schools&lt;br&gt;Universities</td>
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<td><strong>Roads / Roads (net)</strong>&lt;br&gt;Bridges, Tunnels&lt;br&gt;Transport and other systems</td>
<td><strong>Water / Drinking water, Wastement Treatment</strong>&lt;br&gt;Generation, Treatment, Transmission, Sewers</td>
<td><strong>Hospitals</strong>&lt;br&gt;Old peoples homes</td>
<td><strong>Police buildings</strong>&lt;br&gt;Prisons</td>
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<tr>
<td><strong>Railway / Stations, Railway (net)</strong>&lt;br&gt;Transport and other systems</td>
<td><strong>Waste</strong>&lt;br&gt;Removal, Disposal, Treatment</td>
<td><strong>Museums</strong>&lt;br&gt;Theatres</td>
<td><strong>Barracks</strong>&lt;br&gt;Educational centres&lt;br&gt;Administrations</td>
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<tr>
<td><strong>Water / Harbours, Waterway (net)</strong>&lt;br&gt;Transport and other systems</td>
<td><strong>Telecommunication</strong>&lt;br&gt;Fixed nets, Mobile nets</td>
<td><strong>Sports arenas</strong>&lt;br&gt;Public pools</td>
<td><strong>Faire areas</strong></td>
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**Contractual and Institutional Partnership**

**Contractual PPP**
- Public Partner
- PPP contract
- Special Purpose Company (SPC)
- Purchase of services
- “Vertical Partnership”
- PPP-Project contract e.g. as service contract
- Functional Privatisation
- without or only with temporal transfer of ownership

**Institutional PPP**
- Public Partner
- PPP contract
- SPC (Joint Venture)
- Shareholder Agreement
- Purchase of services
- like Contractual PPP
- but in addition
  - “Horizontal Partnership” at a second level

**Partial Privatisation**
- Public Partner I
- Transferring shares
- SPC (Joint Venture)
- Shareholder Agreement
- Purchase of services
- “Horizontal Partnership”
- Shareholder Agreement
- Partial Material Privatisation
- Permanent Transfer of Ownership
- Transferring shares of a public company to a private partner
100 PPP-Projects closed

Accumulated investment volume and number of projects per year
- Accumulated investment volume
- Accumulated number of projects

Investment volume civil engineering: 2.956 m €, 99 projects
Investment volume road construction: approx. 1.321 m €, 8 projects

*as of 12.09.2008
Projects with signed contracts (as of 16.09.2008):

- 99 civil engineering projects and 8 road construction projects
- Investment volume approx. 3 bn € in civil engineering
- And more than 1,3 bn € in road construction
- Average efficiency gain 16,0 %, individual gain between 5 and 28%
- Estimated savings approx. 680 m €
- Strong increase in 2007
- In 2008 so far approx. 1.300 m € investment volume
- Average duration from tendering to contract 12 months

Announced and planned projects

- More than 140 projects in preparation/announced/in bidding process
Projects with signed contracts
Breakdown according to building category

*as of 12.09.2008

Leisure, cultural, sport, events: 8
Justice buildings: 4
Road construction: 5
Schools, daycare centers, education: 19
Admin. buildings: 3
Health Sector: 28
Other: 3

n = 107
Projects with signed contracts
Breakdown according to investment class

- up to 10 m €: 20 projects
- > 10 to 25 m €: 13 projects
- > 25 to 50 m €: 39 projects
- > 50 m €: 32 projects

Total: 107 projects
n = 104

*as of 12.09.2008
Goals of Federal Government with PPP/PFI

- Efficiency
  - Procurement of public services with an optimal ratio of funding and achieved benefits
- Bring forward prior projects
  - Realisation of huge and important projects earlier than the available funds in the annual budget allow
- Modernisation
  - PPPs setting Benchmarks for conventional procurement
  - Optimisation of administration structures
- Innovation
  - Innovative solutions are expected from procurement by the private partner
Evolution of PPP in Germany

**Sector**
- PPP in Buildings: since 2003
- PPP in Roads: since 1994

**Motivation**
- Efficiency
- Transparency
- Compare variants of procurement
- Value for Money Assessment

- Additional funds
- Road Pricing / User Financing

**Strategy**
- Hochbaugutachten
- Pilot Projects

- FStrPrivFinG / F-Model
- A-Model

**Realisation**
- Schools
- Hospitals
- Other social infrastructure

- 2 F-Model Projects
- 4 A-Model Pilot Projects
Providing the Transport Infrastructure in Germany

- The network of transport infrastructures is provided by 3 separate levels of federal authorities
  - The federal government represented by the ministry of transport, building, urban affairs and housing (BMVBS)
    - Responsibility for the national transport infrastructure network on federal level and general tasks of transport
    - The BVWP is the plan for the national transport infrastructure network on federal level; it includes roads, railways and inland waterways as different means of transport; the extension and operation of airports mainly belongs to local responsibility but is also considered in BVWP
  - Federal Laender and local authorities are organised differently
    - E.g. tasks of transport partly related to Ministries of Economy
    - Equivalent plans to the BVWP exist for the subordinated network for each level
Federal Transport Infrastructure Network in Germany

State level

- Federal republic
  - Ministry of Transport (MoT)

- States / Federal Laender
  - 16 States (13 territorial states and 3 city states)

- Municipalities
  - Cities
  - Counties

Federal transport infrastructure network (2007)

- Germany's inter-urban road network has a length of more than 231,000 kilometres
- Federal road network
  - highways (Bundesautobahnen): 12,550 km
    Traffic volume: average of 50,000 vehicles per day
    (up to 150,000 on some sections)
  - trunk roads (Bundesstraßen): 40,700 km
    Traffic volume: around 10,000 vehicles per day
- Federal railway network
  - Lines (with 1 or more tracks): 34,128 km
  - High speed lines (v > 160 km/h): 3,224 km
- Federal national waterway network
  - Canals, Rivers and Maritime Lanes (2005): 7,354 km
Organisation of the Transport Infrastructure in Germany

MoT → VIFG

- Financial management of revenues of the HGV-toll

Federal Roads
- Administrations of federal states
- BAG agency for heavy goods traffic
- BASF institute for technical analysis in roads

Federal Railways
- DB AG
- EBA supervising agency

Federal Waterways
- Wasser- und Schiffsfahrtsverwaltung (WSV)
- BAW agency for hydraulic engineering
- BfG institute for hydrography
The VIFG was founded in 2003 following the recommendations of the “Pällmann-Kommission” and is based on the VIFG act.

Government objectives:
- Point out the connection between charging the users and using the charges
- Finance programs for different transportation infrastructures (road, rail, waterway)
- Relief the public sector of certain tasks

ABMG § 11 (toll revenues):
- The toll revenues belong to the federal government. Costs for operation and control of the toll system as well as the administration costs for the VIFG are paid from toll revenues. The remaining toll revenues completely fixed for objects in the traffic budget aiming to achieve the improvement of the transportation infrastructure, mainly for the trunk roads. The revenues and the costs are balanced different in budget.
**Functions and Tasks of the VIFG**

**Financing Function**
- Provision of investment capital
- Financial management
- Adjustments between different transport infrastructures
- ...  
- Financial compensation for federal states in case of the road tax refunds

**PPP Competence Centre for Transport**
- Provision of support to the project executing organisation
- F- and A-Model projects
- Development of new private operator programs
- ...
Supporting the project executing organisations that are realising PPP projects in transportation sector, particularly in F-Model and A-Model projects.

- In addition the VIFG is supporting two chosen municipal projects since 2007

- Bundling of existing investigations of PPP for the transport sector

- Evaluation of international experiences and analysis of the transferability to German cases

- Analysis of efficiency and feasibility of existing and new developed PPP-models for PPP-measures in transport sector

- Concentration and interpretation of past ideas of different models plus pointing out appropriate models for future developments in BOT

- Support the modernisation of administration with experiences from PPP
Financing the Transport Infrastructure in Germany

- **Federal Roads**
  - Federal budget
  - Revenues from HGV-toll

- **Federal Railways**
  - Federal budget
  - Capital Resources from DB AG

- **Federal Waterways**
  - Federal budget
  - User fees for waterways
- Investments in federal roads without a appreciable boost in spite of enhancement of HGV-toll

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</thead>
<tbody>
<tr>
<td>Federal Budget</td>
<td>€ 261,6 bn</td>
<td>€ 283,2 bn</td>
<td>€ 288,4 bn</td>
<td>€ 292,4 bn</td>
<td>€ 295,2 bn</td>
<td>€ 300,6 bn</td>
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<tr>
<td>Transport</td>
<td>€ 20,3 bn</td>
<td>€ 20,7 bn</td>
<td>€ 22,3 bn</td>
<td>€ 22,0 bn</td>
<td>€ 21,9 bn</td>
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<tr>
<td>Investments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roads</td>
<td>€ 4,93 bn</td>
<td>€ 4,93 bn</td>
<td>€ 5,23 bn</td>
<td>€ 5,04 bn</td>
<td>€ 4,89 bn</td>
<td>€ 4,85 bn</td>
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<tr>
<td>Railways</td>
<td>€ 3,40 bn</td>
<td>€ 3,70 bn</td>
<td>€ 3,92 bn</td>
<td>€ 3,92 bn</td>
<td>€ 3,92 bn</td>
<td>€ 3,92 bn</td>
</tr>
<tr>
<td>Waterways</td>
<td>€ 0,59 bn</td>
<td>€ 0,80 bn</td>
<td>€ 0,90 bn</td>
<td>€ 0,89 bn</td>
<td>€ 0,88 bn</td>
<td>€ 0,87 bn</td>
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<tr>
<td>Investments total</td>
<td>€ 8,92 bn</td>
<td>€ 8,43 bn</td>
<td>€ 10,05 bn</td>
<td>€ 9,85 bn</td>
<td>€ 9,69 bn</td>
<td>€ 9,64 bn</td>
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Revenues from HGV-toll do not enhance investments in transport infrastructure; investments from federal budget decreasing simultaneously.
Legal Framework of HGV-Toll

- HGVs with a maximum permissible weight of at least 12 t on federal highways
- Started on 1st of January 2005
- Average toll rate:
  - 12.4 cent/km when started
  - 13.5 cent/km now
  - between 16.3 - 18 cent/km expected in 2009
- Differentiation according to axles and emission classes
- Charging based on the exact number of kilometres driven
- Toll revenues aroused from € 3 bn (2005) up to € 5 bn (2012)
- Earmarking of revenue
Organisation of the HGV-toll

Federal / State Government  \(\rightarrow\)  VIFG  
\[\text{Financial management of revenues of the HGV-toll}\]

BAG  \(\rightarrow\)  Toll Collect  
\[\text{Service contract}\]

Toll Collect  \(\rightarrow\)  Users  
\[\text{User financing based on ABMG}\]

Legend:
- \(\rightarrow\)  Toll payments / forwarding
- \(\leftarrow\)  Contractual relation
- \(-\)  Implementation of federal tasks
- BAG  \(\rightarrow\)  Controlling Entity for Toll Collect

Heavy Goods Vehicle “HGV”-Toll (highways)
Collection of HGV-Toll
Collection of HGV-Toll

- Charges established by virtual collection points
Challenges for Transport Infrastructure

- **Evolution of Traffic**
  
  - The long-term forecast of traffic growth has still begun
  - The forecast has already been overtopped at 6%; even 8 years earlier measured to the planned year of BVWP (2015)
  - The net capacity for handling up the goods traffic is an essential question mark for the business location of Germany.

<table>
<thead>
<tr>
<th></th>
<th>goods traffic forecast up to 2015 (BVWP)</th>
<th>long-term forecast 2025</th>
<th>actual performance 2007</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Railways</td>
<td>148 bn tkm</td>
<td>152 bn tkm</td>
<td>114 bn tkm</td>
<td>18</td>
</tr>
<tr>
<td>Roads</td>
<td>374 bn tkm</td>
<td>704 bn tkm</td>
<td>466 bn tkm</td>
<td>78</td>
</tr>
<tr>
<td>Waterways</td>
<td>86 bn tkm</td>
<td>80 bn tkm</td>
<td>65 bn tkm</td>
<td>10</td>
</tr>
<tr>
<td>Goods Traffic total</td>
<td><strong>608 bn tkm</strong></td>
<td><strong>936 bn tkm</strong></td>
<td><strong>645 bn tkm</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Challenges for Transport Infrastructure

- Serviceability of federal trunk roads (Bundesstraßen)
- Condition of bridges in federal roads network
  app. 45% need renovation
Planning process in transport policy

- Disposition of a national transport plan (BVWP) to specify the needs and to divide them by priority
- Mid-term investment strategies are fixed in five-year plans. Investment framework gives certainty for planning and investments up to 2010
- Declaration of annual financial needs for the disposition of the budgets

Important strategy plans for the transport sector are picking up PPP-issues explicitly

- Master plan for good traffics and logistics (draft 2008)
- Target of federal government: achieving a part of 15% of PPP on the whole investments of the federal budget
Financing of PPP-Projects

- Financing of PPP in federal budget
  - Commitment authorities (VE‘s) for PPP-projects decrease the free disposable quantity in roads budget for following years
  - Whereas in A-Models the quality is determined during the transfer period and the financing is secured by the commitment authorities, it is not the same in conventional schemes
  - The structural underfinanced budget is getting worse by a-models, so that the economic variant could not be chosen in case of the almost constant ceiling.
- The PPP-strategy of transport policy currently concentrates on project level
  - PPP for realization for several projects (in a more economic way)
  - PPP is not established as an instrument for a sustainable modernization of administrations
Financing adjusted to the needs in infrastructure

- To come up to the responsibility for a transport infrastructure with financing adjusted to the needs the policy requires solutions in treasury politics
  - Proposal of the Pällmann-Kommission: change of the system from tax financing to user financing should guarantee the good quality and quantity of the supplied transport infrastructure.

  - Conclusion of the Pällmann-Kommission: PPP as a variant for procurement cannot display its full economic advantages in the total system until this change is implemented.

  - Current proposals for financing transport infrastructure from several alliances and scholarship are based upon these principles, even though the implementation in detail is favoured in different ways.
The success and the acceptance of PPP-projects is highly influenced by the fact, that there is a clear political statement over the whole lifetime of the projects.

- PPP today is often still noticed as a compromise to solve financial problems. This leads to an interior distance to the project.
- PPP should not be seen as a „stand-alone“-solution. PPP offers a positive share to solutions when it is understood as part of an combined conceptional approach of PPP and conventional procurement.
- A clear and positive position of decision makers to the projects and participants after project start is also necessary.
- This helps to reduce the participant’s reservation against PPP.