Stakeholder Workshop of Performance Schemes
4 April 2008 Brussels

German trial of Performance Scheme
Steffen Kerth, VDV, Germany
VDV: German Association of Public Transport and Railways

- About 550 full members in 5 sections
  - Passenger transport with buses
  - Passenger transport with trams, light rail transit systems, metros or comparable systems
  - Association and principal organisations
  - Passenger transport with railways
  - Rail freight transport

- Members in the railway sectors
  - 70 railway undertakings with passenger transport
  - 160 railway undertakings with freight transport
  - 160 infrastructure managers
    - managers of public railway tracks
    - managers of service facilities
    - managers of non public railway infrastructure
What we are doing

- Ensuring exchange of experience and supporting cooperations
- Supporting members in legal, technical and commercial issues
- Developing model contracts and business conditions for procurement and sale
- Preparing und developing operational, legal, technical and economical principles and rules
- Representing interests of members towards parliaments, authorities and other organisations on national and international level
- Public relations
- Website  www.vdv.de
Railways in Germany

- 361 public railway undertakings (RU)
  - 301 companies licensed for rail freight transport
  - 288 companies licensed for passenger transport

- 164 public infrastructure managers (IM) (only managers of rail lines)
  - 160 IMs
  - 4 federal IMs
Market share and transport performance of private and regional railways in German rail freight market
Market share and transport performance of private and regional railways in local and regional traffic

Bestellermarkt SPNV: Entwicklung der Betriebsleistungen


Verband Deutscher Verkehrsunternehmen
Performance schemes in Germany
Legal provisions

- Regulation for the use of railway infrastructure (entered into force on 1 August 2005)
  
  ➔ § 21.1 obliges the infrastructure manager to create components of charging schemes which shall encourage RUs and IMs to minimise disruption and improve the working capacity of the railway network.

  ➔ The principles of these components of the charging system are to be applied to the whole network.

  ➔ The Network Statement must include detailed informations about these components.
Recommendations of VDV for IM to implement the legal provisions

- In 2005 the German railway sector had no experience with performance schemes.
- The German regulation contains general requirements and objectives for a performance regime. The IM is in charge of creating concrete provisions.
- A first approach has been developed in a VDV working group with participation of IM (DB Netz AG, SMEs), RU and the German Regulatory Body (BNetzA).
- Results have been published as VDV-Report 9036 in October 2005.
- It contains recommendations to put the legal provisions into operative practice of the IM.
Key elements of the VDV-Report

- General requirements
  - The administration effort should be as low as possible
  - Low additional staff costs
  - No expensive technical solutions
  - The risks should be calculable for all parties

- Performance should be indicated by punctuality

- Penalties for delays should be implemented as an incentive for RU and IM to avoid delays

- Penalties should be paid by the party in charge (IM and RU)

- Only primary delays should be considered (no consideration of consequential delays)

- Payments should be calculated as simple as possible
VDV-Report  9036 in practice

- Most of the existing performance schemes of German IM are based on the basical principles of the VDV-Report

- Also the performance regime of DB Netz AG is based on these recommendations

- In practice the performance regime of DB Netz AG is the most important and therefore the most discussed system in Germany

  ➔ But: It is being applied at present without payments on account of a court decision. This decision is based on civil law, not on railway law.
Performance Regime of DB Netz AG
Overview

Key elements of the Performance Scheme

- Measurement of delay-minutes between defined measuring points
- Attribution of delay-minutes to causes and causers (only delays > 2 min)
- Error checking by RU and correction (if accepted by DB Netz AG)
- Monthly calculation of payments
- Delays caused by third parties, force majeure or consequential delays are not taken into account

Calculation of payments

- The payment will be calculated on a basis of 0,10 € per delay-minute

Examples:

<table>
<thead>
<tr>
<th>DB Netz</th>
<th>RU</th>
<th>Balance</th>
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</thead>
<tbody>
<tr>
<td>1000 min</td>
<td>300 min</td>
<td>700 min</td>
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</table>

Payment by DB Netz: 700 min x 0,10 € = 70,- €

| 500 min | 800 min | 300 min |

Payment by RU: 300 min x 0,10 € = 30,- €
Performance Regime of DB Netz AG

Essential points of critique

- High costs for monitoring, checking, discussing and correcting the data of delay and the causes of delay

- Insufficient transparency of the delay attribution process (responsibility of the dispatcher)

- No payment for certain causes of delay, especially consequential delays and delays caused by working sites

- Equality of treatment for all running trains without taking into account the real need of punctuality

- No differentiation of penalties
  - for different causers (especially between IM and RU)
  - for different times of day (rush hour, off-hour)
  - for the use of lines with different train frequencies
Responsibilities and causes with and without obligation of payment

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<th>Verantwortung EVU im Güterverkehr</th>
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<td>Verspätete Übergabe an BdS (40,60)</td>
<td>Verspätete Übergabe an BdS (50, 70)</td>
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<td>Personalbedingte Ursachen (41, 61)</td>
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<td>Haltezeitüberschreitung/apl. Halt (43, 63)</td>
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<td>Triebfahrzeugstörung (45, 65)</td>
<td>Äußerplanm. Unterwegsbehandlung/Halt (53, 73)</td>
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<td>Ursachen im Bereich eines anderen BdS (08)</td>
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<td>Abweichung von Fahrplandaten (48, 68)</td>
<td>Wagenstörung (56, 76)</td>
<td>Eingeschränkte Fahrwegverfügbarkeit (14)</td>
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<td>BU-Störung (24)</td>
<td>Sonstiges (49, 69)</td>
<td>Abweichung von Fahrplandaten (58, 78)</td>
<td>Baumaßnahmen (21)</td>
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<td>Fahrzeugübergang am Bahnsteig (47, 67)</td>
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<td>Störung an Telekommunikationsanlagen (29)</td>
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Verband Deutscher Verkehrsunternehmen
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Update of the VDV-Report 9036
The process

- The system was tested twice by DB Netz in 2006 (first including only 4 different RU, then including all RU using the northern sector of the network)
- The Performance regime started officially in Dec 2006
- The indicated weak points of the system have been recognised very quickly
- In Feb 2007 the VDV-Working group started to update the VDV-Report 9036
- Today the boards of management of the railway sections are discussing and likely adopting the Update of the VDV-Report
Update of the VDV-Report 9036
The approach

- The basic structure of the system approach recommended in 2005 shall not be changed

- Amendments are necessary where indicated by RU, IM or BNetzA

- Legal uncertainties exist on account of current court proceedings an cannot be solved in a VDV-Report

- Therefore, another update may be necessary in two or three years
Update of the VDV-Report 9036
Key elements

- General requirements remain the same
  - The administration effort should be as low as possible
  - No expensive technical solutions
  - The risks should be calculable for all parties

- Punctuality (measured in delay-minutes) should be used as indicator for the quality of performance, which still is legally defined as
  - minimising disruption
  - improving the working capacity of the railway network
Update of the VDV-Report 9036
Different requirements for punctuality

- Passenger transport: punctuality on the way measured at served stations

- Freight transport: punctuality at destinations
  
  ➞ Additional: Freight trains with a high need for punctuality (e.g. less than 30 min delay) should be distinguished from trains with low punctuality requirements (e.g. less than 4 or 8 hours delay)

- Some types of train should not be registered within the performance regime
Update of the VDV-Report 9036
Optimum transparency

- Causes of delay are to be attributed manually including high risks of error and as a consequence low acceptance.

- High transparency is a key element for both to minimise risk of error and to improve acceptance.

- Data (time, place, delay-minutes, cause of delay, causer) should therefore be available for involved RU online in real time.
Update of the VDV-Report 9036
Procedure of error checking and correcting

- A written procedure of error checking and correcting is recommended as before

- Controversial cases should be periodically solved (e.g. quarterly) in a general approach without discussing the particular case in detail
Delays caused by third parties and force majeure should generally not be taken into account.

Three different approaches are recommended to handle consequential delays:

1. Consequential delays should be attributed to the company having caused the underlying primary delay.
2. Consequential delays should not be taken into account.
3. Consequential delays should generally be attributed to the IM in charge.
A lot of methods are in principal available to calculate payments (e.g. bonus-penalty schemes, pure penalty schemes or benefit schemes).

Therefore, the VDV-Report does not recommend a detailed system.

A simple penalty scheme meets likely meets the general requirement best.

All other systems are admissible if they are neutral and free from discrimination.
Update of the VDV-Report 9036
Calculation of payments (2)

- To hold the system as simple as possible
  - Minimum value for delays taken into account
  - Maximum amount for penalties
Update of the VDV-Report 9036
Schematic Overview

Measurement of punctuality
- Registration of delays
- Consideration of limit values
- Attribution of delay causes
- Checking and correcting data

Determination of relevant delay minutes
- Selection of relevant causes and minutes of delay
- Distribution of delay minutes to IM and RU

Calculation of payments
- Definition of the calculation method
- Calculation of total payment on IM- and RU-side on the basis of distributed delay-minutes
- Surcharges for quality and capacity
- Consideration of maximum values
Update of the VDV-Report 9036
Key performance indicators (KPI)

- The costs of operating a performance regime are relevant for all parties involved (IM and RU)
- But: It is expected that the overall benefits cover the costs
- At present we can neither verify nor reject this expectation on the basis of reliable empirical data.
- On the contrary: The majority of the Rail sector is believing that the costs of the performance regime will be durably higher than the benefits.
- KPI (e.g. percentage of trains delayed, medium weight delay per train) should ensure to make evident statements.
- On this basis it will be possible to adjust the performance regime or to change the legal provisions.
Delay caused by a third party

Thank you very much for listening!!!