

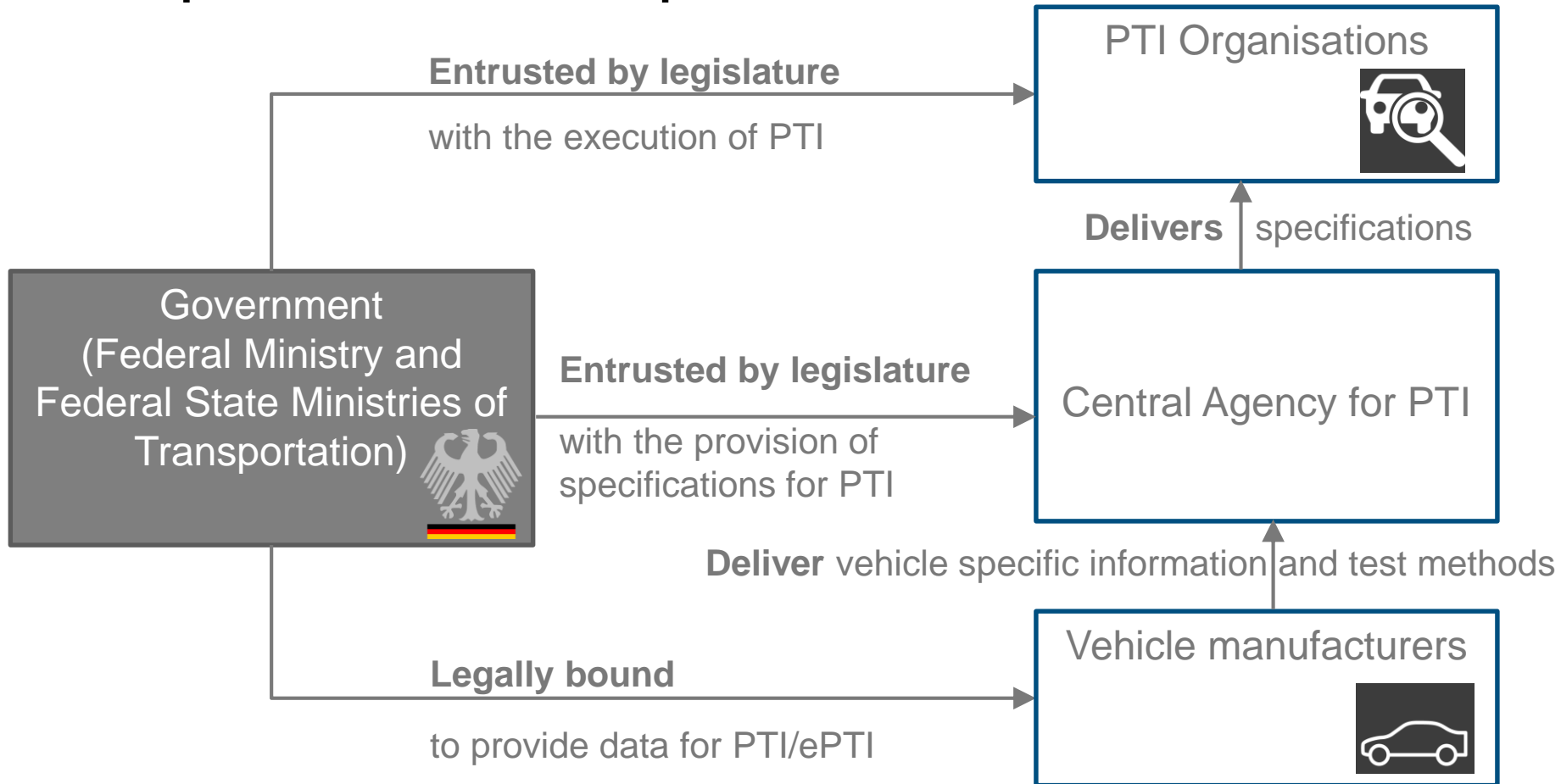


Federal Ministry  
of Transport and  
Digital Infrastructure

# Overview of the German system of periodic roadworthiness tests (PTI) for motor vehicles and their trailers

# German system of PTI

## Participants in PTI and work process



# German system of PTI

## Legal entrusting with the execution of PTI

- Federal State Ministries for Transportation entrust PTI organizations for their respective federal state upon application.
- The requirements for PTI organizations are defined in a regulation with a nationwide validity.
- Every federal state government supervises the compliance with the requirements in their respective federal state.



# German system of PTI

## National legislation for PTI



Road Traffic Licensing  
Regulation (StVZO):

**§ 29 and Annexes**

### - Inspection of motor vehicles and trailers (§ 29)

Owner is responsible that his vehicle is subject to a roadworthiness test within certain intervals

An inspection sticker is placed on the vehicle's number plate only if the vehicle complies with requirements of StVZO (Annex VIII).



PTI sticker

- Inspection of vehicles (StVZO Annex VIII)
- 24 Mio. Inspections per year in Germany

Vehicle category	Intervals for PTI
M <sub>1</sub> ; N <sub>1</sub>	first after <b>36</b> months, then every <b>24</b> months
M <sub>2-3</sub> ; N <sub>2-2</sub>	every <b>12</b> months with intermediate inspections every <b>6(3)</b> months for trucks (buses) depending on the age of the vehicle
Special vehicles of M and N	every <b>12</b> months (taxis, rental cars, ambulances, etc. up to 8 passenger seats)
L	every <b>24</b> months
O <sub>1-4</sub>	first after <b>36</b> months, then every <b>24</b> months (O <sub>1-2</sub> ); every <b>24</b> months (O <sub>3</sub> ); every <b>12</b> months (O <sub>4</sub> )

# German system of PTI

## National legislation for PTI

### - Inspection of vehicles (cont.)

During a PTI vehicles are checked according the legal provisions of StVZO Annex VIIIa and the appropriate national directives for

- Roadworthiness
- Environmental sustainability (exhaust and noise emissions)
- Compliance with the existing design regulations and performance requirements

### - Execution of roadworthiness tests (StVZO Annex VIIIa and national PTI directive)

Requirements concerning the contents and recommended methods of testing

Item ( <i>example</i> )	Method	
	Required inspection	Supplementary inspection
Steering linkage	<ul style="list-style-type: none"><li>• Condition<ul style="list-style-type: none"><li>– Anomalies</li></ul></li><li>• Function</li></ul>	<ul style="list-style-type: none"><li>• Adjustment</li><li>• Specification</li></ul>

# German system of PTI

## National legislation for PTI

- Assessment of deficiencies (Annex VIIIa and national PTI directive)  
Deficiencies found during a roadworthiness test have to be assessed and classified

Category of deficiency	Level of severity	Result of PTI / sticker
None	In line with the legal provisions or directives	passed / sticker placed
Minor	A short term non-compliance from legal provisions or directives can be accepted due to the deficiencies, having no significant effect on the safety of the vehicle or impact on the environment	passed / sticker placed (if the immediate remedy of deficiencies can be expected)
Major	Deficiencies that may prejudice the safety of the vehicle or have an impact on the environment or put other road users at risk, or other more significant non-compliances	failed / no sticker / subsequent roadworthiness test within 1 month
Dangerous	Deficiencies constituting a direct and immediate risk to road safety or having an impact on the environment which lead to prohibition of use of the vehicle on public roads.	failed / removal of current sticker / no use on public roads / vehicle licensing authority has to be informed

# German system of PTI

## National legislation for PTI

### - Recognition of PTI organizations (Annex VIIIb)

PTI organisations are authorized by the competent federal state government

Requirements on	Contents (main points)
Organizations	<ul style="list-style-type: none"><li>• Proper execution of roadworthiness tests at a constant level according legal provisions and the national directives</li><li>• Appointment of a technical director (responsible for the first bullet point)</li><li>• QM system according ISO/IEC 17020 with internal audits</li><li>• Inspectors shall be impartial, objective and economically independent of the number and the outcome of roadworthiness tests</li></ul>
Inspectors	<ul style="list-style-type: none"><li>• Studies of mechanical, vehicle or electrical engineering</li><li>• Driving licence for all categories of vehicles</li><li>• Appropriate initial training and examination (theoretical and practical) of at least 6 months</li><li>• Refresher trainings 5 days a year at least</li><li>• Employed by one PTI organisation only</li></ul>

# German system of PTI

## National legislation for PTI

### - Testing facilities and equipment (Annex VIId)

Testing facilities where inspectors perform roadworthiness tests are authorized and supervised by the competent federal state government

Category of testing facility	Description	Test equipment
Testing centre (Prüfstelle)	Premises where PTI's are performed <u>regularly</u> and which is under the control of the PTI organization.	Test hall; lift or pit or with wheel play detectors; roller or plate brake tester; deceleration recording instrument; facilities for the testing of air brake systems; headlamp aiming device; chronometer; tape measure; sound level meter; gas-analyser for petrol and Diesel engines ; device to connect to the electronic vehicle interface
Testing site (Prüfstützpunkt)	Premises where PTI's are performed by inspectors of a PTI organization using the test equipment of a garage and which is under control of the workshop owner.	
Testing ground (Prüfplatz)	Space where PTI's of a vehicle fleet or agricultural vehicles are performed by inspectors of a PTI organization	Some exceptions in equipment for testing grounds if vehicles with a maximum speed $\leq 40$ km/h are tested



# German system of PTI

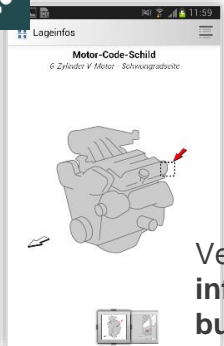
## National legislation for PTI

### - Specifications for PTI (Annex VIIIe)

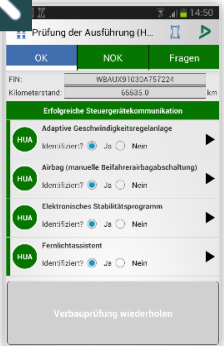

Main contents:


- development, verification, preparation and provision of specifications for PTI,
- supervision and control of the Central Agency for PTI,
- development of new testing technologies,
- content, recipients and conditions for the provision of the results of PTI

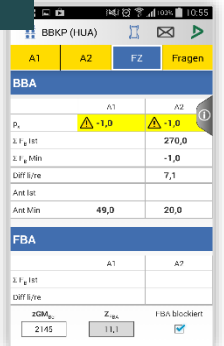

Content of the specifications information system (excerpt):



Vehicle specific information about built-in-systems







Test methods  
(manual identification  
and function /  
efficacy test)

# Thank you for your attention!

## Contact

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