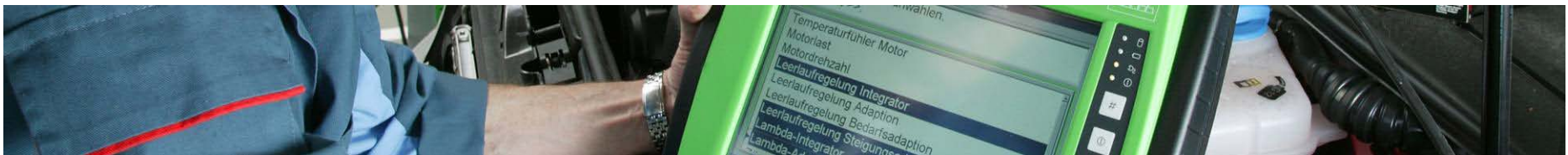


# EGEA WG 2 Meeting

31st March 2011, Brussels



# Euro 5 – Diagnostic information for tool producers



# Follow-up Euro 5 Amendments

## Parts Identification Data and Validation of VCIs



# Parts Identification Data

## Parts identification data...

... a set of information (a correlation of numbers) which attributes a spare part (as identified by the vehicle manufacturer's original spare part number) to a specific vehicle (as identified by its VIN number).

It is the relationship between the VINs and the allocated vehicle manufacturer's OE spare parts numbers in a digital form, which enables access to and processing of the data with standard IT systems.

**= relationship between VIN + allocated vehicle manufacturer's OE spare parts numbers**



# Validation of VCI`s

## ➤ Experience with pass thru?

### Examples:

- BMW, no official validation with BMW,
- VW, no support available; DAG, RSA, PSA, support available, but feedback partly only with long delays

## ➤ Cost of the validation process?

no information

## ➤ Is there any action necessary?



# New Competition Law Framework for the automotive sector

- impact for tools and test equipments manufacturers -



# BER: Guidelines for the Automotive Sector

- **§62: Access to technical information by Independent Operators**

VMs must grant access to technical information  
(‘IO’ includes manufacturers of repair equipment or tools)
- **§65: Cross-reference with Euro 5 to assess whether a specific piece of information is to be considered as ‘technical information’ and cannot therefore be withheld**
  - Test to be applied **few exceptions:**
    - commercial information
    - information for the manufacturing of spare parts or tools

# Euro VI Regulation for Heavy Duty Vehicles, Coaches and Buses





# Report of last meetings on Euro VI technical part

## ▶ EC Timetable for drafting of technical Implementing Measures:

- Spring 2011 (aim to finalise full HDV legislation by 11/2011)

## ▶ AFCAR meetings with VMs and EC:

- 25th February 2011 organised and chaired now by the European Commission!
- 2<sup>nd</sup> March 2011
- 18<sup>th</sup> March
- 30<sup>th</sup> March
- 6<sup>th</sup> April organised by the European Commission

# Euro VI - Heavy Duty Vehicles (HDV)

## VM arguments against full access to RMI: “Look differently at RMI for HDV”

1. Exemption for production of small series and unique products (customer adaptations)
2. Certain RMI information can not be given to protect the “competitiveness” of the HDV Industry against ‘China’
3. VMs worried about ‘safety’ and ‘quality’ of repair  
→ ACEA claims widespread use of Security Forum Accreditation for Safety HDV features
4. Multi-stage built
5. Some technical adaptations: OK for ACEA

# Euro VI - Heavy Duty Vehicles (HDV)

## Approach for “EGEA List” in Euro VI (1/3)

- ▶ **Transpose & merge Annex 1, appendix 5 of 692/2008 with guidance paper**
- ▶ **80-90% successfully done**
- ▶ **Open Point between EGEA and ACEA**
  - **Definition “not restricted to emission-relevant information”:**
    - ACEA agrees in the substance but wants to shift this to chapter “definitions”
    - EGEA wants to keep this in the appendix
  - **Guidance paper on chapter 3.2**
    - ACEA wants merge guidance on this point into legislation
    - EGEA wants to keep this as guidance

# Euro VI - Heavy Duty Vehicles (HDV)

## Approach for “EGEA List” in Euro VI (2/3)

### ▣ Open Point between EGEA and ACEA

- **Exception in format requirements (electronically processable”) for carry-over ECUs from Pre-Euro VI vehicles**
  - EGEA wants to delete this exception since there is a lead time of almost 2 years
  - ACEA wants to keep this exception
  
- **Guidance paper chapter 8 “Product liability incidents”**
  - EGEA wants to delete this chapter
  - ACEA wants to keep this chapter

# Euro VI - Heavy Duty Vehicles (HDV)

## Approach for “EGEA List” in Euro VI (3/3)

### ▸ Regulations on anti-theft related information

- EGEA proposed text on the basis of the guidance paper
- Criteria list as annex to the Euro VI implementing regulation
- Additional criteria in list (knock-out criteria):  
Is the tool manufacturer committed not to use or implement the anti-theft related functions as defined within the contractual frame into their products.
- ACEA wants to include also anti-tampering in addition to anti-theft

# Euro VI - Heavy Duty Vehicles (HDV)

## Re-programming of ECUs (1/2)

### ▣ Standard for re-programming in Euro VI

- SAE J2534
- ISO22900-2
- TMC RP1210: request from ACEA to add this standard
- ACEA wants to include to use serial (USB) or LAN communication as further possibility for re-programming

### ▣ Validation of VCI

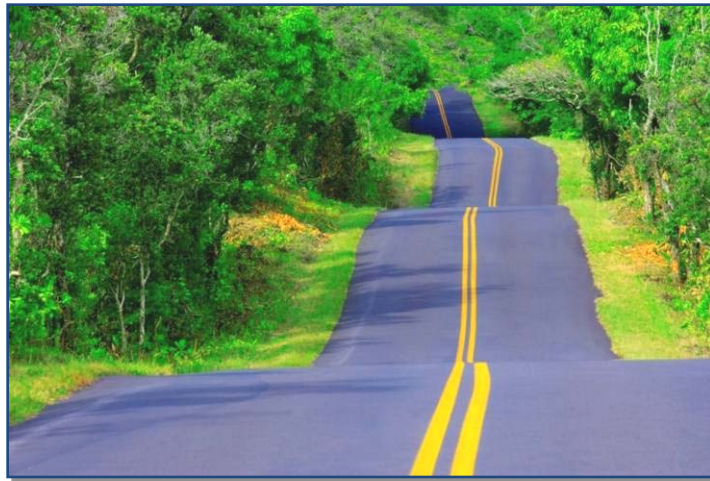
- EGEA wants to transpose regulations also to Euro VI
- ACEA refuses to integrate the validation part

## Re-programming of ECUs (2/2)

### ▶ ACEA requests derogation for carry-over ECUs

- ACEA: 5% of ECUs can not be re-programmed according to the above standards
- AFCAR to accept a derogation if kind of ECUs are clearly defined and derogation period is limited
- VM must offer proprietary tool during derogation period: e.g. special conditions for loan

# Revision of the “Roadworthiness Testing” Directive 2010/48/EU





# **TEDDIE STUDY**

**Study on a new emission test for diesel at roadworthiness test using NO/NO<sub>2</sub> and particulate measurement**

# TEDDIE STUDY

## Preamble: Chapter 11

(11) Further work needs to be done in the field of developing alternative test procedures to check the maintenance condition of diesel driven vehicles, particularly concerning NOx and particulates taking into account new emission after-treatment systems.

# TEDDIE study – new emission test ...

- Tender from the Commission in 2010
- CITA won this bid
- Study started January 2011
- Project Contractor is CITA
- Stakeholders are: CITA, TÜV Nord, DEKRA, IERC (Germany), GOCA (Belgium), SGS (Switzerland), TRL Limited (UK), Stricker (Austria), R Oliver
- EGEA is involved in this study (Partner)
- Project should be finished end of 2011 (final report Dec 2011)

# TEDDIE study – new emission test ...

## Project structure (working packages)

- WP 01 Project Management (Leader TÜV Nord)  
Project management, Workpackage development, administration
- WP 02 Internal Review (Dr. Stricker)
- Review of literature on relevant research and studies and collection of information on existing test regimes and results, including procedures, instruments and future plans
- WP 03 Instrument comparison (DEKRA)
- Measurements with alternative measurement devices and correlation calculations
- WP 04 Vehicle- and Engines Measurements (GOCA) Laboratory emission measurements on passenger cars, LDVs and HDVs including NO, NO<sub>2</sub>, PM and OBD

## Project structure (working packages)

- WP 05 Data analysis and new PTI method
- Analysis of data from measurement programmes. Proposal for a new test method and threshold values for emission testing at PTI in Europe
- WP 06 Cost-benefit analysis  
Cost benefit analysis of proposed new PTI test method
- WP 07 Reporting  
Interim and final reports
- WP 08 Project Meetings  
Kick off, interim and final project meetings

# ASA Activities

## Particulate Measurement



# ASA Activities particulate measurement

## Study Emission 2010 (DEKRA, TÜV, ZDK, ASA)

- OBD does not detect all emission faults (particulate trap)
- Limit values are too high ( $1.5 \text{ m}^{-1}$ ) for Euro 4/5
- New measuring technique (scattered light) can detect faults on emission related systems
  - ⇒ The new opacimeter should be launched after homologation over a three year period

## Study UBA (technical office ministry of environment)

- New measuring technique for Diesel and Petrol engines
- Limit values should drop down to  $0,1 \text{ m}^{-1}$  (Particulate trap)
- Measure particulate for petrol engines too (higher than for diesel with trap)

## Study PTB

- Members of ASA financed a project with PTB (150 TE)
- Focus is on correlation between particle mass concentration and opacity
- Homologation is not part of this project

# Reference to the plate value





# Directive 2010/48/EU – Plate Value

- ➔ Since July 2010, there is a new directive for the periodical technical inspection of vehicles (EC 2010/48)
- ➔ Directive deals with european wide inspection of vehicles in general  
(History EC 96/96 – EC 2009/40 – EU 2010/48 – EU 201x/xx)
- ➔ Directive has to be launched latest 01.01.2011
- ➔ Only the part documentation (print out of test report), deadline is end of 2012

➔ Under chapter 8.2.2 (EC 2009/40) was written:

## Limit values:

1. The level of concentration must not exceed the level recorded on the plate pursuant to Directive 72/306/EEC ( 1 ).
2. Where this information is not available **or where Member States' competent authorities decide not to use it as a reference**, the level of concentration must not exceed the level stated by the manufacturer or the limit values of the coefficient of absorption that are as follows:

# Reference to the Plate Value in Directive 2010/48/EU

## → Directive 2010/48/EU says:

(a) For vehicles registered or put into service for the first time after the date specified in requirements ( a ), opacity exceeds the level recorded on the manufacturer's plate on the vehicle;

(b) Where this information is not available or requirements ( a ). do not allow the use of reference values,

for naturally aspirated engines:  $2,5 \text{ m}^{-1}$  ,

for turbo-charged engines:  $3,0 \text{ m}^{-1}$  , or,

for vehicles identified in requirements ( a ). or first registered or put into service for the first time after the date specified in requirements ( a ),  $1,5 \text{ m}^{-1}$  ( 7 ).

**This means, that beginning of January 2012 all countries have to use the plate value as the limit value!**



**What does “plate value“ mean??**

# What is the Plate Value?

- Is determined during the homologation procedure of the vehicles—free acceleration (see ECE R24)
- $X_L = S_L / S_M * X_M$  (m<sup>-1</sup>) or  $X_L = X_M + 0,5$  (m<sup>-1</sup>)
- Plate value is determined since 1972 (EC 70/220)
- Is sometimes part of the type plate or fixed otherwise (left doors)
- Range of the plate value drops down to 0,19 m<sup>-1</sup>



# Efficiency testing of electronic components (ABS, ESC)



# Directive 2010/48/EU: new items

 **New testing items on modern electronic safety systems (Not comfort systems!) :**

- **Anti-lock Braking System (ABS) – EGEA focus**
- **Electronic Brake System (EBS)**
- **Electronic Power Steering (EPS)**
- **Electronic Stability Control (ESC) – EGEA focus**
- **Safety Belt Load Limiter**
- **Safety Belt pre-tensioner**
- **Airbag**
- **SRS Systems**

## ABS and ESC

**Method:**

**Combination of dynamic and  
diagnostic test methods**

# ABS: EGEA Proposal

## ABS



- **AVAILABILITY CHECK**

  - Identification of the system components and its variants

- **SELF DIAGNOSIS STATUS CHECK**

  - Polling the status of system lamp of the system control unit

- **FUNCTIONALITY TEST BY ACTIVATING THE ACTUATORS**

  - Pressure build-up in the brake circuits

- **EFFICIENCY TESTS THROUGH PLAUSABILITY OF ACTUAL SIGNALS**

  - Sensors driving dynamics (in discussion)

  - Sensors capture of actual state brake system

  - Sensors capture of driver activities

  - Buttons/switches



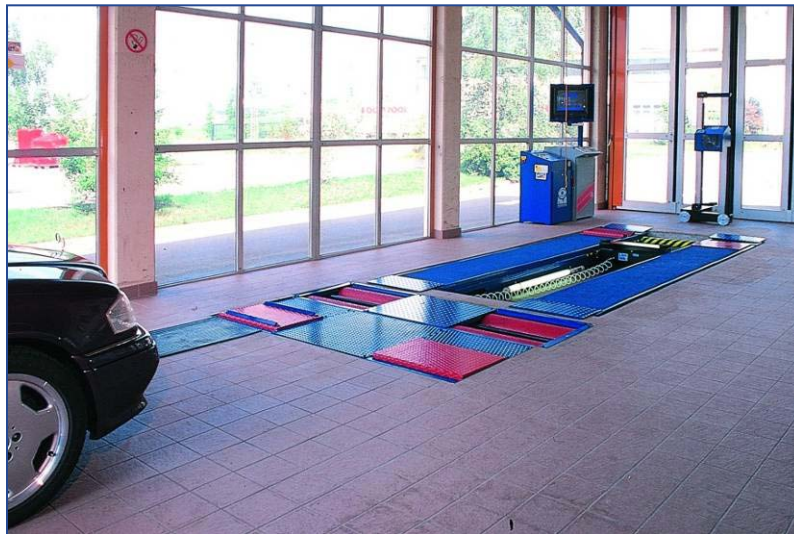
# ESC: EGEA Proposal

## ESC

- **AVAILABILITY CHECK**  
Identification of the system components and its variants
- **SELF DIAGNOSIS STATUS CHECK**  
Polling the status of system lamp of the system control unit
- **FUNCTIONALITY TEST BY ACTIVATING THE ACTUATORS**  
Pressure build-up in the brake circuits
- **EFFICIENCY TESTS THROUGH PLAUSABILITY OF ACTUAL SIGNALS**  
Sensors driving dynamics (in discussion)  
Signal driving dynamic  
Sensors capture of actual state brake system  
Sensors capture of tyre pressure  
Sensors capture of driver activities  
Buttons/switches



# Car brake testers and interface protocols for OBD Data



# Car brake testers and new interfaces

## At stake?

New national directive in Germany for brake testers to be equipped with some new interfaces

Every brake tester sold within Germany has to have the data interface “ASA Livestream” that is exclusively sold by ASA Netzwerk GmbH.

The data interface is used for data exchange between tester and vehicle and will become an integrated part of the HU adapter is available through FSD (vehicle system data) only.



**There will be two monopolies for just simple tester/interface communication that all VCI manufacturers would easily offer the market.**

## Next steps?

- The German directive is currently in publication/disclosure.
- The period for possible rejection from member states ends March 31<sup>st</sup>.

## EGEA Position?

- To be discussed today

# Revision of the “Measuring Instrument Directive” (MID) 2004/22/EC



# “MID” 2004/22 EC

- **Directive for harmonisation of homologation procedures**
- **At this moment only for gas analyser (4-gases)**
- **Commission plans to extend this directive to gas analysers for motor bikes**
- **Commission plans to extend this directive to opacimeter but some reluctances from WELMEC Group**
- **Commission asked EGEA input**

## EGEA Position Paper:

- ➔ **At this moment only for gas analyser (4-gases)**
- ➔ **EGEA asked for inclusion of 1-/2-/3-gas tester (motorbikes)**
- ➔ **EGEA asked for inclusion of diesel exhaust gas measuring instruments**
- ➔ **EGEA asked for inclusion of optical filters**
- ➔ **EGEA supports the inclusion of TPG (tyre pressure gauges) within the scope of MID**

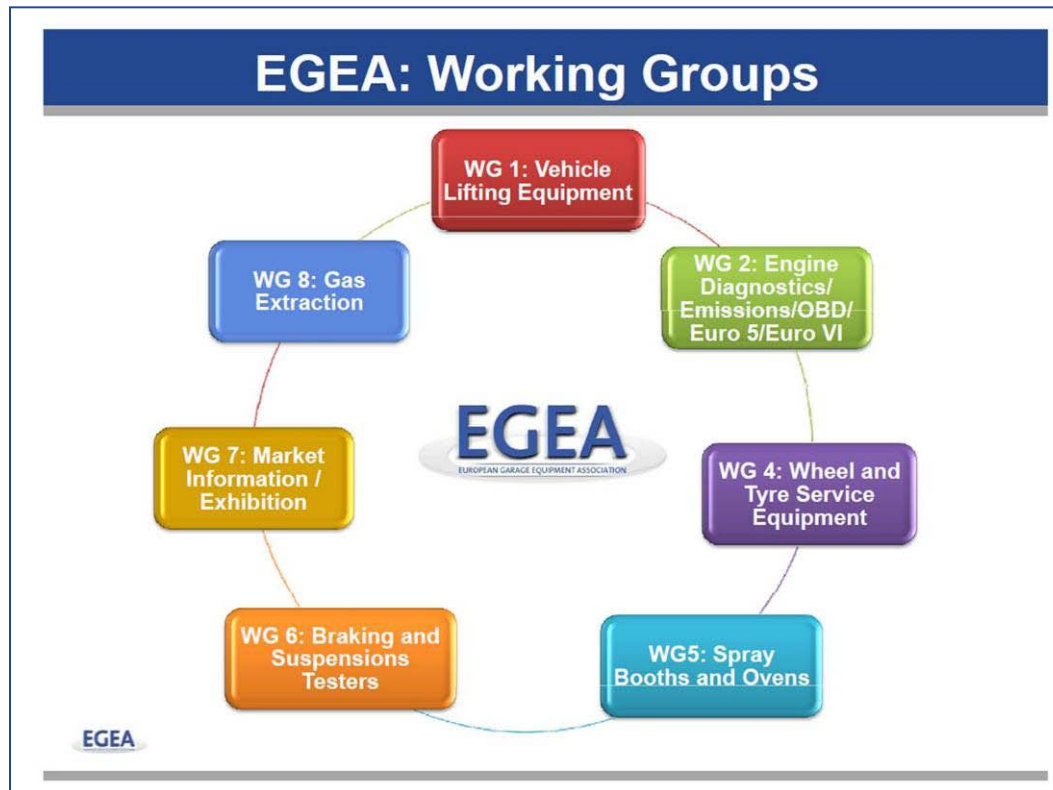
# “MID” 2004/22 EC: Next Steps

- Commission working on a communication for the end of April on MID and next steps
- Commission plans an impact assessment but at present no sufficient information from industry
- Therefore, Commission plans to have a next round of ‘closed’ consultations with industry.
- Commission will invite EGEA together with DG MOVE to discuss gas analyser issues
- Current debates at UNECE level for TPG
- Next MID WG meeting planned on 16<sup>th</sup>-17<sup>th</sup> June 2011 (tbc)



# EGEA Working Groups

## - Rules of procedure -





**Thank you!**

