



# Developments in testing Diesel Particulate Filters

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**RDW** 

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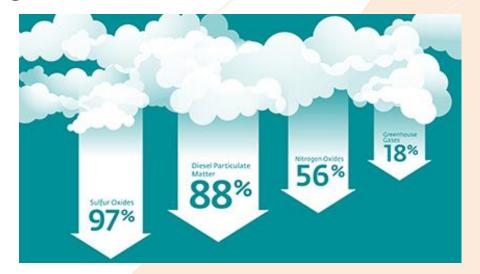
#### PTI in EU

- Since May 2018 PTI is more standardized in EU: *Directive EU 2014/45*:
- Standardized inspection methods and results
- Harmonised skills for inspectors
- Harmonised requirements for equipment
- Fields defined on the inspection report



#### Emission and 2014/45

- For diesel vehicles, the emission requirements have become more stringent
- EOBD can be used
- Exhaust measuring of smoke





# Developments during the implementation time





- Modern Diesels are equiped with a Diesel Particulate Filter that is very efficient.
- Up to 99% efficiency
- It cleans the air when it comes to particulate matter

• We want to preserve these benefits for the environment



## A new reality

- New emission systems really help to keep the air cleaner, but malfunction and tampering is undoing this profit
- We need to find new methods of testing to act against these practices



#### **DPF**

- Wear
- Broken
- Not performing sufficiently
- Manipulated
- Removed





Not possible to check this in the current PTI practice

# NPTI workgroup

 Belgium, Germany, Switzerland, UK and NL

Manufacturers of particle counters



# Organisations involved in NL



Ministry of Infrastructure and Water management



Netherlands Vehicle authority



Netherlands Metrology Institude



National research organisation



# Objectives NPTI group

- Possibility to check PN in a PTI environment
- Suitable equipment for a reasonable price
- A short test method
- Intended for EU-wide use
- Setting limit values
- Correlation between type approval and PTI



#### Delivered

- Requirements for test equipment
- Proposal for the test method (parameter)
- Proposal for limit values
- Corrolation between type approval and PTI
  - TNO and JRC

- During the proces the group extended
- More than 10 Manufacturers involved
  - High availability Equipment on short term
  - Reasonable prices expected
  - Testmethod is simple
- All information is freely available and can be used by all EU memberstates

### Prototype particle counters for PTI





#### Introduction in PTI

- Targetdate of introduction:
  - Belgium in 2020
  - Germany in 2021
  - Netherlands in 2021

Attention: This can lead to export of vehicles that do not meet the requirements





#### Aim of this presentation is

- to inform all EU Member States about the short term solutions
- Try to achieve a European approach on a voluntary basis
- Sharing knowledge
- Keep working on a sustainable World

- In South and Middle America some countries are measuring PN.
- Emissions was a topic on the CITA conference in Korea last April
- Tampering is a key topic on the meeting for policymakers and non profit organizations in October in Londen, feel Welcome.

# Thank you for your attention

