



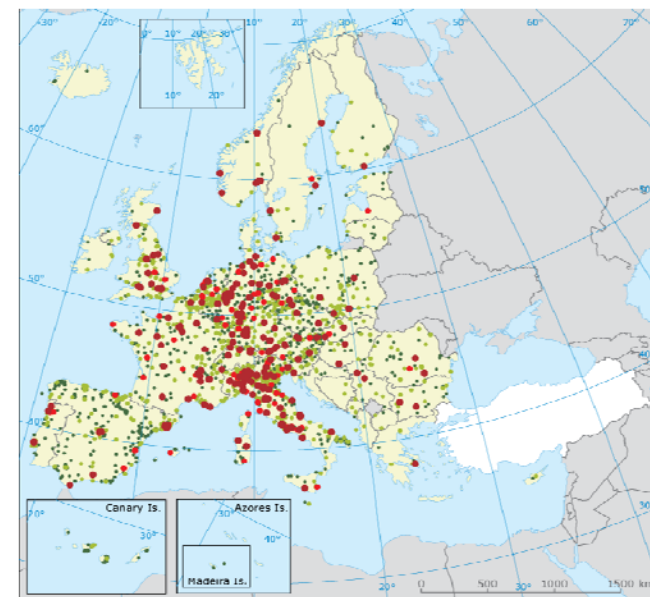
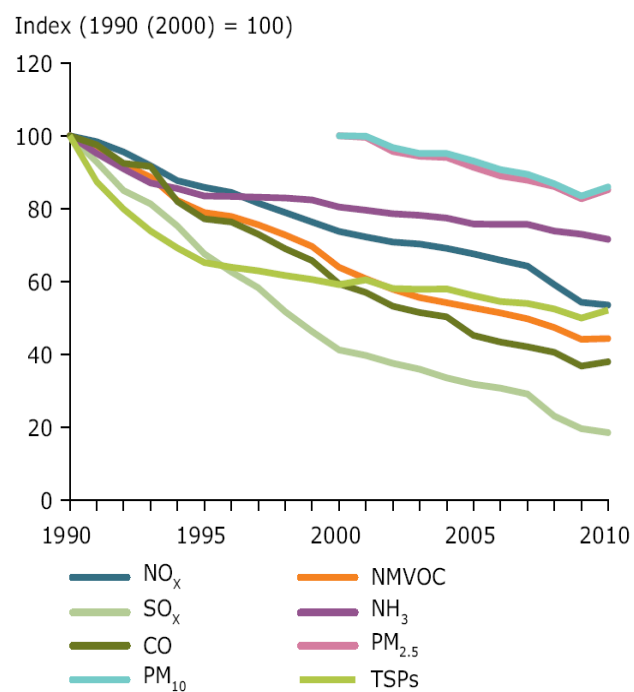
Real Driving Emissions (RDE) Technical seminar

Organised by AECC on 29 April 2015

“Current status of RDE Euro 6 legislation”

**Its importance for improving urban air quality and
for NO₂/NO_x related health impacts.**

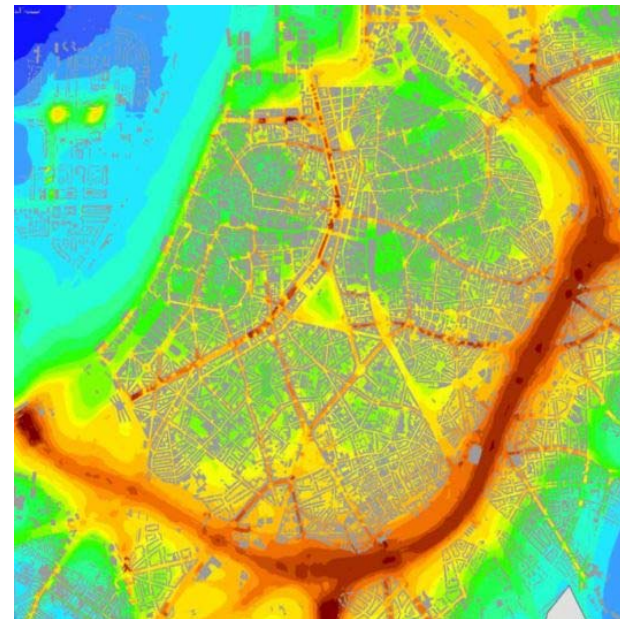
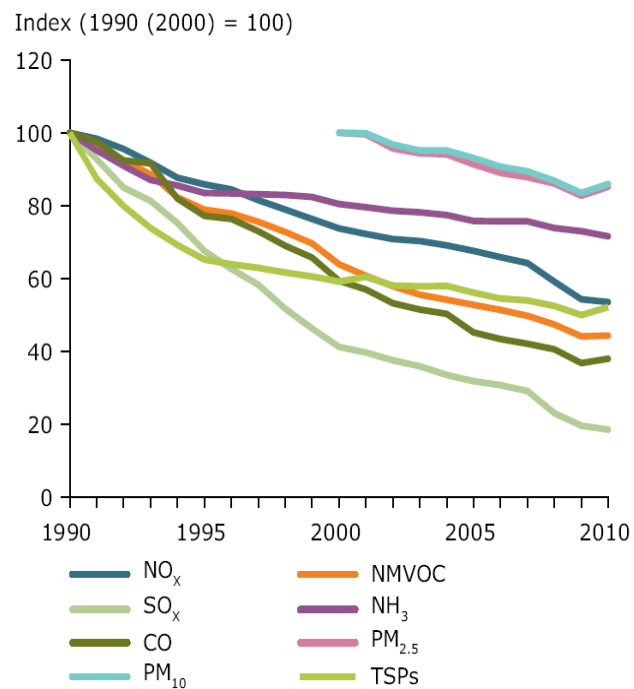
Jan Cortvriend, DG Environment, European Commission



EEA reporting on annual NO₂ average []

- Continued high percentage of EU population exposed to air pollutant concentrations above existing EU limit values, set to offer a minimum protection of human health against harmful effects mainly on PM, NO₂, and O₃.
- Compared to WHO recommendations (tighter on PM and O₃), more than 80% of EU citizens are exposed to harmful levels.
- Commission identifies non-compliance with AQ legislation in many Member States.
- Legal procedures ongoing against 17 Member States mainly on PM₁₀, increasing on NO₂.

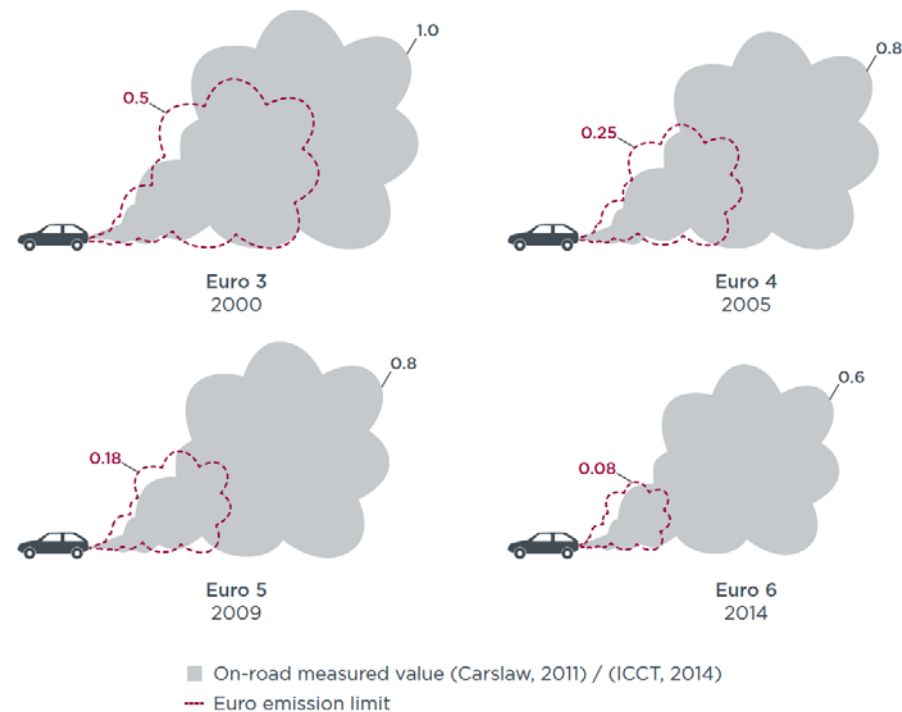
Antwerp, NO₂, 2012



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Where is the Problem?

Diesel cars: Nitrogen oxides (NO_x) emissions (in g/km)



- Diesel cars are the main cause of NO_2 exceedance and are the main obstacle for reaching the standards set forward by the Air Quality Legislation
- Some Member States claim they cannot comply **because** of the Euro5/6 legislation

Where is the solution? Amending the Euro 6 legislation!

“The Commission shall monitor situation of RDE and amend test procedures, if necessary. If the test cycle does not deliver the regulatory objectives set by Euro 5/6 co-decision regulation, it should be changed.” (Reg. 715/2007)

An RDE expert group of MS Member States, industry, experts & Commission was composed.

Tasks:

- Developing a real world emission measuring method and an associated vehicle test procedure
- Developing a proposal for a legal commitment act amending Reg 715/2007 and the subsequent implementing legislation Reg 692/2008.

This work is now concluded and a proposal was tabled



The retained Method for “Real Driving Emission testing” for i.a. type approval: **Portable emission measurement systems**

- The core item: “PEMS” testing: put all measuring equipment on the car and run.
- Important issues:
 - Boundary conditions, ambient conditions and the driver’s temperament
 - Cold start issues
 - Regeneration issues
 - Fuel quality issues
 - Origin of signals
 - Plug in and hybridisation
 - Selection/composition of driving routes
 - Statistical method for treating PEMS data
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Structure of the RDE (Real Driving Emissions) “Proposal amending Regulation 692/2008”.

- Main amending act I, establishing the amendment
- New annex for Reg. 692/2008
 - Pollutant scope (gases ... particles)
 - General requirement for verifying real driving emissions
 - (Global) boundary conditions for testing
 - Trip requirements
 - Operational requirements for testing
 - The normalisation concept and trip evaluation
- Appendices 1-9

Test procedures, determining the emissions, statistical methods, family building, reporting requirements,





“RDE Proposal amending Regulation 692/2008”.

Step-wise introduction

- **RDE Act I**, now tabled for TCVM opinion will come into force in two phases in line with the CARS2020 consensus in CARS2020 and with the consecutive Commission Communication :
 - Communication phase foreseen by CARS2020: 2014-2017
 - Compliance phase: starting from 2017 on
 - Act I is qualitative in line with the two phases approach (Communication and Regulatory).
- **RDE Act II**, foreseen for middle 2015 quantifies the legislation
 - Defines numerical values for conformity factors
 - Sets dynamic trip (=boundary) conditions, avoiding i.a. to soft driving
 - Quantifies modalities for testing under extended conditions
- Further developments foreseen in 2015, 2016 (PN, cold start, regeneration etc.)



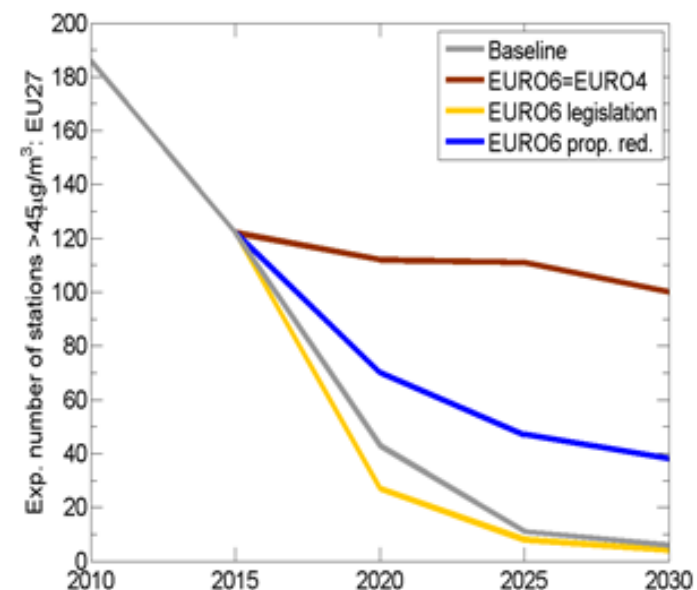
Alternative / Parallel measures leading to better air quality

- Ref: White Paper for Transport (2011).
- Traffic restrictions, Low Emission Zones, toll rings, selective road charges (modulated upon Euro class and fuel type).
- Selective measures, banning diesels from certain urban centers and hot spots etc. pending introduction of fully clean diesel cars.
- Fiscal measures in view of the environment, not acting against.
- Encouraging the use of public transport, walking, cycling, ...
- Any measure to reduce the use of cars



What is at stake if the Euro 6 process goes wrong?

- In December 2013 the Commission presented the so-called “Clean Air Package”, containing an updated strategy until 2030 and 2 legislative proposals (NECD & MCP).
- The principle objective for 2020 is to achieve broad compliance with existing air quality standards relating to PM, NO₂, and NO_x.
- The principle objective for 2030 is to reduce health impacts by over 50% (from 400 000 premature deaths each year to “only” 200 000).

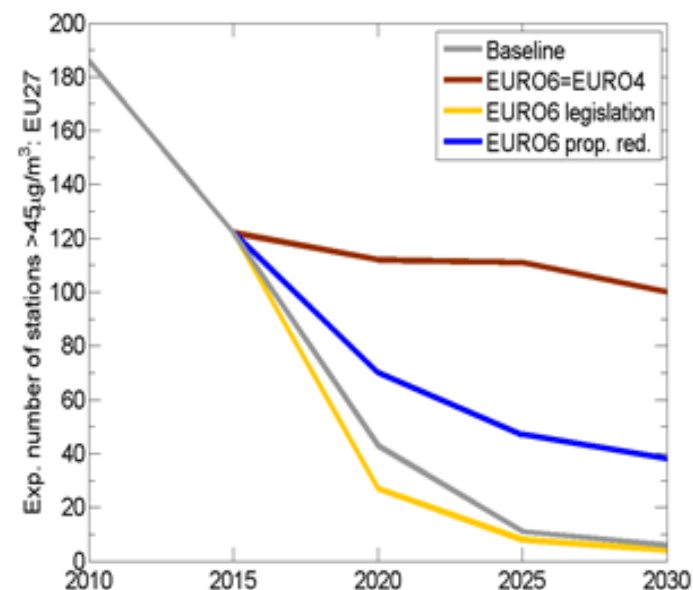


What is at stake if the Euro 6 process goes wrong?

Failing to address RDE through an effective implementing act adopted in line with Cars 2020 agreement/Communication will:

- increase the risk that MS that do not keep NO₂ exceedance as short as possible (as a result of first stage infringements) and will face penalties in the second stage;
- leave (urban) authorities with less options to reduce NO₂ pollution levels and/or population exposure;
- continue to cause market distortions and reputational damage to diesel cars and manufacturers producing them (including those that produce truly clean diesels);

There is increasing concern (in EP and Council) that failing to address Euro 6 RDE may also impact the feasibility to meet proposed NO_x reduction targets for 2030.



Conclusion:

- We face AQ and health problems and infringements, we also face a fair competition issue.
- Member States say they cannot comply unless the RDE issue is resolved, but they do not act accordingly.
- The current emission issue is an obstacle for reaching better air quality and reaching the targets of the Air Quality Package.
- All technology needed to reach the Euro 6 RDE Standards is available at reasonable cost.
- Some cars perform at desired level.
- The RDE Regulation is the chance to solve the problems of the car industry and the environment at the same time:

Thank you for your attention ...

