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Federal Department of the Environment,  
Transport, Energy and Communications DETEC

**Federal Office for the Environment FOEN**

Air pollution control and chemicals division



**UNIVERSITY OF LEEDS**

Institute for Transport Studies  
**FACULTY OF ENVIRONMENT**

# **WG remote sensing**

## **James Tate & Harald Jenk**

ERMES Plenary meeting, 14.11.2017

# Activities 2017

## CONOX project:



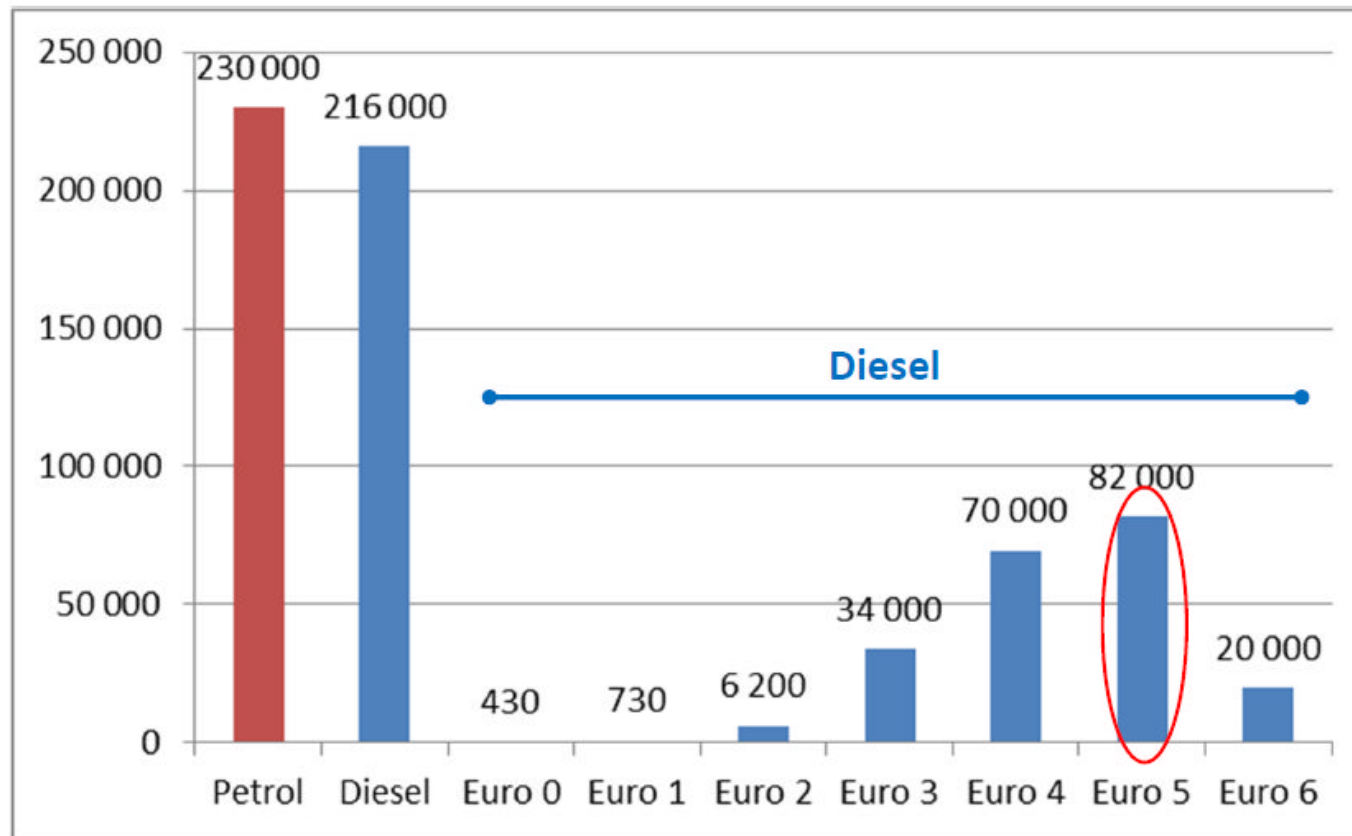
- Emerged from first European On-Road Emission Remote Sensing Workshop, 6-7 September 2016, Gothenburg, Sweden
- Establishing of theERMES remote sensing database and pooling and sharing data of remote sensing measurements
- Developing of a method that allows comparison of the emission rates from laboratory and PEMS studies with those derived from remote sensing
- Comparing remote sensing data with PEMS and other official tests data.
- Participation at the Remote Sensing Day at the European Parliament, 28 September 2017

# CONOX/ERMES remote sensing database

- ~750,000 remote sensing measurements from across Europe, and growing...
- Covering different fleets (makes & models), vehicle ages, Euro standards, etc....
- Covering a wide range of driving conditions and ambient conditions
- **Keywords:** pooling, sharing and collaborating – a great ground for understanding and monitoring real driving emissions in Europe (and elsewhere)

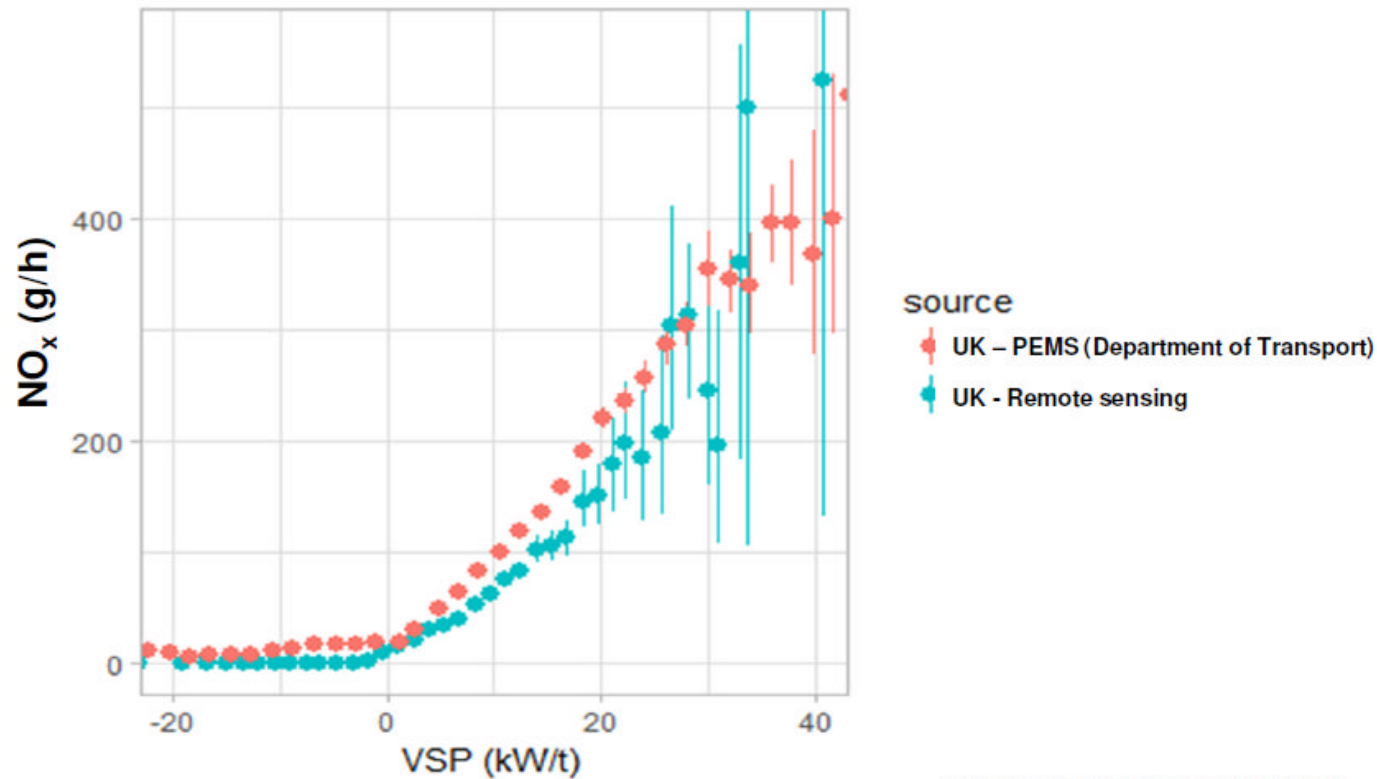
# CONOX/ERMES remote sensing database

No. of database records for **passenger cars**



# How RSD and on-board (i.e PEMS) results compare for NO<sub>x</sub> emissions ?

- Instantaneous NO<sub>x</sub> emissions for Euro 6 diesel passenger cars as a function of the vehicle specific power



Preliminary results based on CONOX data

# Future activities

- Looking for ways on how to finance the on-going remote sensing database
- Agreement on how new users can use and share the data in the database
- H2020 Call:  
LC-MG-1-1-2018: InCo flagship on reduction of transport impact on air quality. Sub-task C) Sensing and monitoring emission in urban road transportation system.