Improving Transport Emission Inventories
And the JRC Involvement

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JRC, Transport and Air Quality Unit

Where does the JRC fit in the European Commission?

President Barroso

Commissioner Potočnik
Science and Research

Joint Research Centre (JRC)
Research DG (RTD)

27 Commission Members
The Mission of the Joint Research Centre

… is to provide customer-driven scientific and technical support for the conception, development, implementation and monitoring of EU policies.

As a service of the European Commission, the JRC functions as a reference centre of science and technology for the Union.

Close to the policy-making process, it serves the common interest of the Member States, while being independent of special interests, whether private or national.

Our Structure: 7 Institutes in 5 Member States

IRMM - Geel, Belgium
Institute for Reference Materials and Measurements

ITU - Karlsruhe, Germany
Institute for Transuranium Elements

IE - Petten, The Netherlands
Institute for Energy

IPSC - Ispra, Italy
Institute for the Protection and Security of the Citizen

IES - Ispra, Italy
Institute for Environment and Sustainability

IHCP - Ispra, Italy
Institute for Health and Consumer Protection

IPTS - Seville, Spain
Institute for Prospective Technological Studies

~ 2800 staff  ~ 300 M€/y budget
(+ 40 M€/y competitive income)
The JRC TAQU Past Work in the UNECE-TFEIP

- Previously engaged in the Combustion and Industry Panel as co-leader
- Organised thematic workshop (HM&POP, Small Sources, PM) and training workshops (EU candidate countries, on uncertainties, QA/QC, COPERT 4)
- Wrote one chapter on small combustion installations (B216)
- Organised the TFEIP Winter meeting in Pallanza, Italy in October 2004

The JRC TAQU Work in the TFEIP

- Although Combustion and Industry is still very important, our Unit shifted the focus to transport

- JRC/IES is already contributing since some years with experimental work
  - new methodology for evaporative emissions and
  - motorcycle EF
- Continuous experimental programme in 7 labs, which can be used to produce work for the Transport Emission Inventories
- Working closely with JRC/IPTS who is now developing the TRANSTOOLS and TREMOVE models
## Main Activities of the JRC Transport Lab (VELA)

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<tr>
<th>VELA 1 &amp; 2</th>
<th>VELA 3</th>
<th>VELA 4, 5, 6 &amp; 7</th>
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<tr>
<td><strong>Passenger cars and Light Duty Vehicles</strong></td>
<td><strong>Motorcycles</strong></td>
<td><strong>Heavy Duty Vehicles (On/Off-road)</strong></td>
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<td>Inside EU</td>
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| • EURO 5  
  • New limit values  
  • PMP programme  
  • Beyond EURO 5  
  • New test cycle  
  • Off-cycle emissions  
  • PEMS programme | • EURO 3  
  • New limits  
  • Beyond EURO 3  
  • Emissions from mopeds (collaboration with CH) | • EURO VI  
  • PMP programme  
  • PEMS programme  
  • NRMM Directive Review (Dir.2004/26/EC) |
| Outside EU | Outside EU | Outside EU |
| • PMP Programme (coordination with UK) | • WMTC – New Worldwide Test Cycle | • NRMM GTR  
  • New test cycle  
  • PMP Programme (coordination with UK) |

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<th>Fuels</th>
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<td>Inside EU</td>
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</table>
| • Fuel Directive Review  
  • Biofuels  
  • Evaporative emissions  
  • Metallic additives  
  • Alternative fuels  
  • Well to Wheels analysis  
  • European H2FC platform | |
But transport emission inventories need more

- Contrary to popular belief transport emission inventories still need improvement
- Many more gaps and needs for transport emission inventories, in aviation, shipping, rail, non-road mobile machinery and yes also road….

- In discussion today

Thanks for your attention.

And please contact me with any further suggestions for improvements or areas to look at…

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