

2006 CITA CONFERENCE

Conclusions

WORKSHOP 3

Emission Testing

Chairperson

Mr. Axel Richter

TÜV Nord

Germany

Titels

- **German Solution for Exhaust Emission Testing on Motorbikes**

Speaker : Hans Jürgen Mäurer
Organization : DEKRA
Country : Germany

- **Emission Test with Engine Speed Measurement on Motorbikes
By the View of a Emission Tool Manufacturer**

Speaker : Paul Matt
Organization : AVL
Country : Austria

- **Cost-Effective Measurement and Testing of Diesel Particle Emissions**

Speaker : Klaus Burger
Organization: MAHA Maschinenfabrik
Country : Germany

- **Remote-Sensing – New Developments and Experiences in Austria**

Speaker : Walter Nissler
Organization: Federal Office for Transport
Country : Austria

Conclusions

- Due to the fact of the high numbers of motorcycles in Asia and the exhaust emission situation from this vehicle category, reduction of exhaust emissions must have the highest priority.
- Measures like the improvement of fuel quality, introduction of type approval procedures, reduction of the type approval limits and periodic emission tests will improve the environmental situation.
- As shown in an example from Germany the benefits of the periodic emission test (PTI) for motorcycles are to reduce exhaust emissions and improve the maintenance.
- The sampling probe equipment to measure the exhaust emissions from motorcycles must be extra designed to avoid influence by dilution and for two stroke engines to avoid damage of the analyser due to the high rate of unburned fuel in the exhaust stream.

Conclusions

- For the measurement of particulates during PTI cost effective equipment is needed. Measurement devices are developed and in the evaluation phase now.
- Remote sensing is a capable method to gather emission factors under real world conditions for gasoline- and diesel vehicles.
- Remote sensing can be used as a pre selection tool for roadside spot checks.
- The existing test procedure for diesel vehicles has to be improved due to modern diesel engine technology and after-treatment systems.
- The final conclusion is, that different technical measures and actions like type approval, PTI, gathering of real world emission factors, improvement of fuel quality.. will improve the environmental situation sustainable. Beside the technical part political decisions are also necessary.