



European Commission

Enterprise and Industry
Directorate-General

The European Legislation on Mobile Air Conditioning Systems

VDA Alternative Refrigerant Winter Meeting 2008

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Mobile Air Conditioners (MACs)

Subject matter

- **Type - approval** of vehicles as regards emissions from, and the safe functioning of air conditioning systems fitted to vehicles
- **Retrofitting and refilling** of such systems

Scope

- passenger cars - M1
- certain commercial vehicles - N1 class I

Mobile Air Conditioners (MACs)

3 legal acts

- **Directive 2006/40/EC** relating to emissions from air conditioning systems in motor vehicles
- **Commission Regulation (EC) No 706/2007** laying down administrative provisions for the EC type-approval of vehicles, and a harmonised test for measuring leakages from certain air conditioning systems
- **Commission Directive 2007/37/EC** amending Annexes I and III to Council Directive 70/156/EEC

Mobile Air Conditioners (MACs)

- All 3 acts applicable as from

5 January 2008

- Voluntary type-approval possible as from that date

The main objectives of MACs Directive

The **control of leakage** of certain fluorinated greenhouse gases with a global warming potential (GWP) higher than 150 in MACs

Mandatory type-approval

- **21 June 2008** for new types of vehicles
- **21 June 2009** for all new vehicles

The main objectives of MACs Directive

The **prohibition** of MACs using F-Gases with
GWP>150 from dates

- **1 January 2011** for new types of vehicles
- **1 January 2017** for all new vehicles

Training programmes for personnel

Regulation (EC) No 842/2006 on certain fluorinated greenhouse gases

- F-gases (also in mobile equipment) shall, to the extent that it is technically feasible and does not entail disproportionate cost, **be recovered by appropriately qualified personnel**, to ensure their recycling, reclamation or destruction
- Rules on appropriate qualification of personnel recovering F-gases from MACs to be established

Training attestation to personnel

Commission Regulation to be adopted soon

- Minimum requirements for training programmes of personnel
- Conditions for mutual recognition

Training attestation to personnel

- Training course covering **minimum skills and knowledge** (set out in the legislation) introduced
 - Training attestation holder considered **appropriately qualified**
 - **Attestation body** to be provided by law or designated by the competent authority
 - Member States shall give **mutual recognition** to training attestations issued in other Member States
- **Transitional period** introduced

CO₂ Communication

Communication from the Commission (7.02.2007) on the review of the Community Strategy to reduce CO₂ emissions from cars

- **Average new car fleet** will have to reduce emissions to no more than **130 g/km CO₂** through **vehicle technology**
- Additional 10 g/km by **other technological improvements** and increased use of bio-fuels

These **complementary measures** include efficiency improvements for car components with the highest impact on fuel consumption:

- **Efficiency requirements for air-conditioning systems**
- Tyre pressure monitoring systems
- Low rolling resistance tyres
- Gear shift indicators
- **Mandatory fuel efficiency targets for LCV**

CO₂ strategy

1st step

- CO₂ proposal adopted by the Commission on 19 December 2007
- Based on Article 95 EC Treaty
- The proposed Regulation implements part of the integrated approach by establishing emission performance standards for new passenger cars

CO₂ strategy

Next steps

- Complementary measures
 - ✓ Vehicle Safety Regulation – proposal to be adopted soon
 - ✓ Efficiency requirements for MACs

Efficiency requirements for MACs

- Legislative proposal to be expected
- Commission looking currently at different options
 - Virtual testing
 - Physical testing
- Public consultation to be launched



Thank you!

Thank you for your attention!

http://ec.europa.eu/enterprise/automotive/pagesbackground/pollutant_emission/index.htm#macs