

Motor vehicles: type approval with respect to emissions and on access to repair information

2005/0282(COD) - 21/12/2005 - Legislative proposal

PURPOSE : to lay down harmonised rules on the construction of motor vehicles with respect to emissions and to provide for a high level of environmental protection regarding atmospheric emissions and to amend Directive 72/306/EEC.

PROPOSED ACT : Regulation of the European Parliament and of the Council

CONTENT : Euro 4 emission limits for cars came into force on 1 January 2005 for new type approvals.

Several Member States have a history of using tax incentives to accelerate the introduction of cleaner vehicles. In order to avoid disruption of the single market through various Member States introducing fiscal incentives in January 2005 based on differing limit values, the Commission services published a staff working paper which suggested a limit value for particulate matter. The working paper invited those Member States wishing to introduce fiscal incentives to base their incentives on the 5 mg/km value set out in the working paper. With no change in the policy of reducing emission levels for motor vehicles, there is a high risk that the functioning of the internal market would be impaired with Member States seeking to take unilateral action. Poor air quality will also remain an issue in the EU with atmospheric pollution continuing to have a detrimental impact on human health.

This proposal makes the following points:

- The main aspect of this Regulation is that it requires a further tightening of vehicle emission limits for particulate matter and nitrogen oxides (NOX).
- a large reduction (80%) in the mass of particulate emissions from diesel vehicles will be required. While this lower emission limit does not prescribe a particular technology, it will de facto require the introduction of diesel particulate filters (DPFs).
- At present, the emission limit selected can only be met by closed filters, which have the benefit of reducing the ultra fine particles that are considered most harmful to health. To prevent the possibility that in the future open filters are developed that meet the new particulate mass limit but enable a high number of ultra fine particles to pass, there will be introduced at a later stage a new standard limiting the number of particles that can be emitted. At the moment, it is not appropriate to define a number standard as research is being conducted at the UN/ECE under the Particulate Measurement Programme (PMP). The UN/ECE working party is still examining this issue. Once the results of the PMP programme are available, a number standard will be implemented through comitology.
- The PMP programme is also testing a new protocol for measuring particulate emissions. A key benefit of the new approach is that it provides for greater repeatability in measuring emissions in the laboratory. Once the programme is complete, consideration will be given to replacing the current measurement procedure with the new approach. When the new measurement procedure is implemented, the Commission will have to recalibrate the PM mass emission limits set out in this proposal, as the new technique records a lower level of mass than the current method.
- For diesel vehicles, only a small reduction (20%) in NOx is planned. This emission limit has been set so that reductions can be achieved by further internal engine measures. As the proposal will lead to the

installation of particulate filters in the exhaust stream, the Commission wished to avoid an obligation for installing an additional NO_x after-treatment system at this stage. As the technology for further NO_x reduction is not yet mature, it is therefore proposed not to reduce NO_x emissions beyond the 200 mg/km limit value.

- The proposal includes further reductions in emissions from petrol cars. The Commission proposes a 25% reduction in NO_x with a limit value of 60 mg/km and a 25% reduction in hydrocarbons (HC) with a limit value of 75 mg/km. Many petrol vehicles currently sold in the EU are comfortably beneath this proposed emission limit, others can be made to respect it at relatively low cost.

- Emission limits on the mass of particulate emissions from petrol engines are also proposed. These limits apply only to direct injection vehicles operating in lean burn mode, as PM emissions are not an issue for petrol vehicles that operate with purely stoichiometric combustion.

- A further change is the proposal that the durability period over which manufacturers must ensure the functioning of pollution control devices has been extended from 80 000 km to 160 000 km. This change will more realistically reflect the actual life of vehicles and ensure that emission control systems continue to function throughout the life of the vehicle.

- The proposal includes a requirement that vehicle repair information be made available through websites in the standardised format developed by a technical committee of stakeholders (the so-called 'OASIS standard').

- A final aspect is the removal of the exception in previous legislation which enabled heavy passenger vehicles (Class M1, over 2 500 kg) to be type approved as light commercial vehicles. There is no longer seen to be any justification for this exemption.

- Directive 70/220/EEC will, consequently be repealed.

- Since the Commission proposes to integrate into this Regulation and its implementing measures the requirements and test procedures for measuring carbon dioxide emissions and fuel consumption of light duty vehicles set out in Directive 80/1268/EEC, the latter Directive can also be repealed.

- The Commission also integrates the test requirements for measuring diesel smoke contained in Directive 72/306/EEC into this proposal. Council Directive 72/306/EEC will be amended as all requirements related to the measurement of smoke opacity with light duty vehicles should be included in this Regulation and its implementing measures. This Directive will be able to be repealed in the future when similar requirements are introduced into emissions legislation relating to heavy duty vehicles.

The Commission intends to review in 2009 the issue of further improvements of emissions, following the mid-term review of the CARS 21 report, with a view to proposing a further significant reduction of limit values (including NO_x) that reflect the development in vehicle emission technology at that point in time and cost-effectiveness considerations.