



COMMISSION OF THE EUROPEAN COMMUNITIES

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96/0164 (COD)

Amended proposal for a

**EUROPEAN PARLIAMENT AND COUNCIL DIRECTIVE**

relating to measures to be taken  
against air pollution by emissions from motor vehicles and amending Council  
Directives 70/156/EEC and 70/220/EEC

(presented by the Commission pursuant to Article 189 a (2)  
of the EC-Treaty)

## **EXPLANATORY MEMORANDUM**

### **1. Background**

#### **1.1. Objective of the proposal**

The objective of the proposed amendments is to complete the proposal relating to measures against air pollution by emissions from motor vehicles and amending Council Directive 70/156/EEC and 70/220/EEC (COM(96) 248 final), by measures relating to light commercial vehicles (international category N<sub>1</sub>). This category of vehicles is covered by the scope of both Directives.

The global Community strategy developed on the basis of the Auto/Oil Programme and set out in the above mentioned proposal has as its aim the reduction of the air polluting emissions from all categories of motor vehicles. However, the technical measures contained in that proposal are limited to passenger cars, as the decision on the limit values for the present (1997/1998) stage of requirements for light commercial vehicles was still pending. Since these limit values have been definitively established by Directive 96/69/EC of 1 November 1996 amending Directive 70/220/EEC, it is now possible to complete the initial proposal in order to ensure parallelism of the emission standards for cars and light commercial vehicles after the year 2000. The latter vehicles would then be covered by emission standards of the same level of severity as those for passenger cars. It is for this reason that this proposal amends the Commission's proposal of June 1996 (COM(96) 248 final).

Furthermore, it is proposed to amend Article 5 of Directive 70/220/EEC concerning the adaptation to technical progress of the annexes of Directive 70/220/EEC and to delete the possibility for extension of type-approval of M<sub>1</sub> or N<sub>1</sub> vehicle to M<sub>2</sub> or N<sub>2</sub> vehicles;

### **2. Legal basis**

The proposed measures amend the Commission's earlier proposal (COM(96) 248 final) based on Article 100 A of the Treaty. Consequently they are made under Article 189a(2) of the Treaty of the Union.

The measures proposed are part of the European type-approval system for motor vehicles and compliance with them will be mandatory for new approvals to be issued by national authorities. The measures reflect the traditional legislative approach followed in this sector namely total harmonization of all relevant technological prescriptions.

### **3. Content of the proposal**

#### **3.1. Limit values for light commercial vehicles for the year 2000/2001**

In accordance with the results of the Auto/Oil Programme, the Commission proposes that the emission standards for light commercial vehicles are tightened and improved by the adding of new requirements. It is proposed that these measures (discussed below in detail) should apply

- from the year 2000 for new vehicle types of Class I,
- from the year 2001 for new vehicle types of Classes II and III,
- from the year 2001 for all new vehicles of Class I,
- from the year 2002 for all new vehicles of Classes II and III.

These application dates will ensure the stability of the regulatory framework for the vehicles concerned, taking into account the implementation dates set by Directive 96/69/EC for the previous stage of emission standards, and allow the industry to make the necessary changes to ensure compliance with the proposed limit values.

A second regulatory stage should also be envisaged to be applied from the year 2005 for new vehicle types. As in the case of car emissions, this will have to be confirmed by the Council and the Parliament following a new Commission proposal to be made in 1998 (see below).

The proposed new limit values - measured in the improved European test cycle of Directive 91/441/EEC without the 40 second idling period - to be applied from the year 2000/2001 represent reductions, against the Stage 1997 emission standards, of

- 40% nitrogen oxides, 40% total hydrocarbons and 30% carbon monoxide for gasoline light commercial vehicles;
- 20% nitrogen oxides, 65% hydrocarbons, 40% carbon monoxide and 35% particulate matters for diesel light commercial vehicles.

### **3.2. Onboard diagnostic (OBD) systems for light commercial vehicles**

OBD systems have been identified by the Auto/Oil Programme as a cost-effective means of assuring that the emissions of a motor vehicle are effectively controlled during its useful life. The Commission therefore proposes to apply the OBD requirements also for light commercial vehicles. While the technology has already been proven for gasoline vehicles, OBD technologies are at a far less developed stage for diesel vehicles. The Commission proposes, therefore, that the requirements for diesel light commercial vehicles are, in a first stage, optional.

### **3.3. Second stage 2005 for light commercial vehicles and fiscal incentives**

The proposal also sets out indicative limit values to be applied for a second stage to reduce light commercial vehicle emissions in the year 2005. These indicative limit values can be used by Member States in the same way as those envisaged in the car directive i.e. to grant fiscal incentives to encourage the early marketing of clean vehicles.

### **3.4. Article 5 of Directive 70/220/EEC**

Article 5 of Directive 70/220/EEC lays down, that amendments of Annexes I to VII, which were the early Annexes of Directive 70/220/EEC at the time of its adoption, can be adapted to technical progress in accordance with the procedure laid down in Article 13 of Directive 70/156/EEC. In the meantime the Directive has been completed by several other Annexes and it appears expedient that in future all Annexes of Directive 70/220/EEC can be adopted to technical progress in accordance with the procedure laid down in Article 13 of Directive 70/156/EEC. For this reason an amendment is proposed allowing such adaptations to be undertaken.

### **3.5. Deletion of the extension of type-approval**

At present, and at the request of the manufacturer, type-approval pursuant to Directive 70/220/EEC may be extended from M<sub>1</sub> or N<sub>1</sub> vehicles equipped with diesel engines which have already been type-approved, to M<sub>2</sub> and N<sub>2</sub> vehicles having a reference mass not exceeding 2 840 kg. Normally such M<sub>2</sub> and N<sub>2</sub> vehicles need a type-approval pursuant to Directive 88/77/EEC. For these vehicles it appears easier to achieve compliance with Directive 70/220/EEC than with Directive 88/77/EEC when the same technology is used.

In order to ensure an applicable type-approval regime for these vehicles and a more better environmental protection, it is expedient to delete this possibility to extend type-approvals granted for M<sub>1</sub> and N<sub>1</sub> vehicles having a reference mass not exceeding 2 840 kg.

**Amended proposal for a  
European Parliament and Council Directive relating to measures to be taken  
against air pollution by emissions from motor vehicles and amending Council  
Directives 70/156/EEC and 70/220/EEC**

**1. Whereas:**

**a. The 5th whereas reads as follows:**

'...; whereas a cost/effectiveness study within the Auto/Oil Programme has shown that a further improvement of vehicle technology was necessary with a view to achieving air quality in year 2010 as described in the Communication by the Commission on the Auto/Oil Programme;'

**b. The 6th whereas reads as follows:**

'Whereas improvement of requirements for new passenger cars and light commercial vehicles in Directive 70/220/EEC constitute a part of a consistent global Community strategy which will also include a revision of standards for ~~light commercial vehicles~~ and heavy duty vehicles from year 2000, an improvement of motor fuels and more accurate assessment of in-use vehicle emission performances; whereas alongside these measures, additional cost/effective local measures will nevertheless be needed to achieve the air quality criteria in the most polluting areas;'

**c. The 8th whereas reads as follows:**

'Whereas reductions of the Type I test limits applicable from year 2000 corresponding to abatements of 40% nitrogen oxides, 40% total hydrocarbons, 30% carbon monoxide for gasoline passenger cars and gasoline light commercial vehicles, 20% nitrogen oxides, 20% for the combined value for hydrocarbons plus nitrogen oxides, 40% carbon monoxide, 35% particulate matter for indirect injection diesel passenger cars and 40% nitrogen oxides, 40% for the combined value for hydrocarbons plus nitrogen oxides, 40% carbon monoxides and 50% particulate matter ~~have~~, for direct injection diesel passenger cars, 20% nitrogen oxides, 65% hydrocarbons, 40% carbon monoxide and 35% particulate matter for diesel light commercial vehicles have been identified as key measures to achieve sufficient medium-term air quality; whereas these reductions have been applied to hydrocarbons and nitrogen oxides with the assumption that nitrogen oxides represents respectively 45% and 80% of the weight of the combined value measured for gasoline/diesel light duty vehicles complying with Directive 94/12/EC and Directive 96/69/EC respectively; whereas separate limit values are now normally fixed for gasoline vehicles in order to monitor the emissions of both pollutants; whereas a combined limit value is maintained for diesel vehicles for which the Stage 2000 standards are the most demanding, with a view to facilitating engineering of future engines; whereas these reductions will take

into account the effect on real emissions of a modification also adopted for the test cycle with a view to better representing emissions after a cold start ("deletion of the 40 second idling period");

- d. **After the 15th whereas the following new whereas' are added to read as follows:**

'Whereas Article 5 of Directive 70/220/EEC lays down, that amendments of Annexes I to VII, can be adapted to technical progress in accordance with the procedure laid down in Article 13 of Directive 70/156/EEC; whereas in the meantime the Directive has been completed by several other Annexes and it is essential expedient that in future all Annexes of Directive 70/220/EEC can be adopted to technical progress in accordance with the procedure laid down in Article 13 of Directive 70/156/EEC;

Whereas, at present and at the request of the manufacturer, type-approval pursuant to Directive 70/220/EEC may be extended from M<sub>1</sub> or N<sub>1</sub> vehicles equipped with diesel engines which have already been type-approved, to M<sub>2</sub> and N<sub>2</sub> vehicles having a reference mass not exceeding 2 840 kg; whereas, in normal circumstances such M<sub>2</sub> and N<sub>2</sub> vehicles would need a type-approval pursuant to Directive 88/77/EEC; whereas, for reasons of regulatory coherence and the need to ensure better environmental protection it is expedient to delete this possibility for extension of type-approval;

2. **Article 2 reads as follows:**

*'Article 2*

Directive 70/220/EEC is hereby amended as follows:

1. In Article 5 the words 'Annexes I to VII' are replaced by 'the Annexes'.
2. The Annexes are amended in accordance with the Annex to this Directive.'

3. **Article 3 reads as follows:**

*'Article 3*

1. With effect from 1 January 1998, Member States must accept compliance with the requirements of Directive 70/220/EEC, as amended by this Directive, for the purposes of Articles 4(1) and 7(1) of Directive 70/156/EEC.

2. With effect from 1 January 2000 for vehicles of category M, as defined in Annex II Section A to Directive 70/156/EEC, - except vehicles designed to carry more than six occupants including the driver and vehicles whose maximum mass exceeds 2 500 kg - and of Class I and with effect from 1 January 2001 for vehicles of Classes II and III, as defined in the Table in Section 5.3.1.4 of Annex I to Directive 70/220/EEC, Member States may no longer grant:

- EC type-approval in accordance with Article 4(1) of Directive 70/156/EEC,  
or
- national type-approval, except where the provisions of Article 8(2) of Directive 70/156/EEC are invoked.

for a new vehicle type on grounds relating to air pollution by emissions, if it fails to comply with the provisions of Directive 70/220/EEC, as amended by this Directive.

For the Type I test the limit values set out in row A and C of the Table in Section 5.3.1.4 of Annex I to Directive 70/220/EEC are to be used.

3. With effect from 1 January 2001 for vehicles of category M - except vehicles designed to carry more than six occupants including the driver and vehicles whose maximum mass exceeds 2 500 kg - and of Class I and with effect from 1 January 2002 for vehicles of Classes II and III, Member States must:

- consider certificates of conformity which accompany new vehicles in accordance with the provisions of Directive 70/156/EEC as no longer valid for the purposes of Article 7(1) of that Directive; and
- refuse the registration, sale or entry into service of new vehicles which are not accompanied by a certificate of conformity in accordance with Directive 70/156/EEC, except where the provisions of Article 8(2) of Directive 70/156/EEC are invoked,

on grounds relating to air pollution by emissions, if the requirements of Directive 70/220/EEC, as amended by this Directive, are not fulfilled,

For the Type I test the limit values set out in row A and C of the Table in Section 5.3.1.4 of Annex I to Directive 70/220/EEC are to be used.

4. Until the dates referred to in paragraphs 2 and 3 type-approval is granted and conformity of production verifications are carried out in accordance with the provisions of Directive 70/220/EEC as amended by Directive 96/69/EC.'

#### 4. Article 4 reads as follows:

##### *'Article 4*

Member States may make provision for tax incentives only in respect of motor vehicles which comply with Directive 70/220/EEC, as amended by this Directive. Such incentives must comply with the provisions of the Treaty and satisfy the following conditions:

- they shall be valid for all new vehicles offered for sale on the market of a Member State which comply in advance with either the mandatory limit values set out in row A and C of the Table in Section 5.3.1.4 of Annex I to

Directive 70/220/EEC, as amended by this Directive, or, the indicative limit values set out in row B and D of the same Table;

- they shall be terminated with effect from the mandatory application of the emission limit values laid down in Article 3(3) for new motor vehicles, or by 1 January 2005 in the case of the indicative limit values set out in row B and D of the Table in Section 5.3.1.4 of Annex I to Directive 70/220/EEC, as amended by this Directive;
- for each type of motor vehicle, they shall be for an amount lower than the additional cost of the technical solutions introduced to ensure compliance with the values set in Article 3(3), or the indicative limit values set out in row B and D of the Table in Section 5.3.1.4 of Annex I to Directive 70/220/EEC, as amended by this Directive, and of their installation on the vehicle.

The Commission shall be informed ~~in sufficient time~~ of any plans to institute or change the tax incentives referred to in the first paragraph in sufficient time to submit its observations.'

**5. Number 3 of the Annex reads as follows:**

'Section 1 reads as follows:

**1. SCOPE**

This Directive applies to

- the tailpipe emissions, evaporative emissions, emissions of crankcase gases, the durability of anti-pollution devices and on-board diagnostic (OBD) systems for all motor vehicles equipped with positive-ignition engines
- and
- the tailpipe emissions, the durability of anti-pollution devices and on-board diagnostic (OBD) systems from vehicles of category M<sub>1</sub> and N<sub>1</sub> <sup>(1)</sup>, equipped with compression-ignition engines

covered by Article 1 of Directive 70/220/EEC in the version of Directive 83/351/EEC <sup>(2)</sup>, with the exception of those vehicles of categories N<sub>1</sub> for which type-approval has been granted pursuant to Directive 88/77/EEC <sup>(3)</sup>.'

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<sup>(1)</sup> As defined in Annex II Section A to Directive 70/156/EEC.

<sup>(2)</sup> OJ No L 197, 20.7.1983, p 1.

<sup>(3)</sup> OJ No L 36, 9.2.1988, p. 33.



**6. Number 10 of the Annex:**

The Table is replaced by the following new Table:

'Type approval test	Positive-ignition engined vehicles of categories M and N	Compression ignition engined vehicles of categories M <sub>1</sub> and N <sub>1</sub>
Type I	Yes (mass ≤ 3,5 t)	Yes (mass ≤ 3,5 t)
Type II	Yes (mass > 3,5 t)	-
Type III	Yes	-
Type IV	Yes (mass ≤ 3,5 t)	-
Type V	Yes (mass ≤ 3,5 t)	Yes (mass ≤ 3,5 t)
In Service Compliance (Section 8)	Yes (mass ≤ 3,5 t)	Yes (mass ≤ 3,5 t)
On Board Diagnostics (Section 9)	Yes (Capacity ≤ 6 occupants) (mass ≤ 3,5 t)	Optional
Extension conditions	Section 6	Section 6 -M <sub>2</sub> and N <sub>2</sub> with reference mass not more than 2 840 kg'

7. Number 11 of the Annex reads as follows:

'Section 5.3.1.4:

The Table is replaced by the following Table to read as follows:

' Table I.5.3.1.4.

			Reference mass  (RW)  (kg)	Limit values								
				Mass of carbon monoxide  (CO)		Mass of hydrocarbons  (HC)		Mass of oxides of nitrogen  (NO <sub>x</sub> )		Combined mass of hydrocarbons and oxides of nitrogen  (HC + NO <sub>x</sub> )		Mass of particulates <sup>(1)</sup>  (PM)
				L1 (g/km)		L2 (g/km)		L3 (g/km)		L2 + L3 (g/km)		L4 (g/km)
category	class		Petrol	Diesel	Petrol	Diesel	Petrol	Diesel	Petrol	Diesel	Diesel	
A (2000)	M <sup>(2)</sup>	-	all	2,3	0,64	0,20	-	0,15	0,50	-	0,56	0,05
B (2005) *	M <sup>(2)</sup>	-	all	1,0	0,50	0,10	-	0,08	0,25	-	0,30	0,025
C (2000)	N <sub>1</sub> <sup>(3)</sup>	I	RW≤1250	2,3	0,64	0,20	-	0,15	0,50	-	0,56	0,05
		II	1250<RW≤1700	4,17	0,80	0,25	-	0,18	0,65	-	0,72	0,08
		III	1700<RW	5,22	0,95	0,29	-	0,21	0,78	-	0,86	0,11
D (2005) *	N <sub>1</sub> <sup>(3)</sup>	I	RW≤1250	1,0	0,50	0,10	-	0,08	0,25	-	0,30	0,025
		II	1250<RW≤1700	1,81	0,63	0,13	-	0,10	0,33	-	0,39	0,04
		III	1700<RW	2,27	0,74	0,15	-	0,11	0,39	-	0,46	0,06

(<sup>1</sup>) For compression ignition engines.

(<sup>2</sup>) Except: - vehicles designed to carry more than six occupants including the driver,  
- vehicles whose maximum mass exceeds 2 500 kg.

(<sup>3</sup>) And those category M vehicles which are specified in note 2.

(\*) Indicative limit values to be applied to new types of vehicles from 1 January 2005 which are subject to confirmation by the Council and the European Parliament. These limit values can be the subject of tax incentives referred to in Article 3 of Directive [number of current amending directive].

**8. Number 14 of the Annex:**

**Section 9.1 reads as follows:**

9.1. Vehicles of

- category M<sup>(1)</sup> with a maximum mass not exceeding 3 500 kg and

- category N<sub>1</sub><sup>(1)</sup>

equipped with positive-ignition engines shall be fitted with an on-board diagnostic (OBD) system for the emission control in accordance with Annex XI. If other vehicles of category M and N<sub>1</sub> are fitted with an on-board diagnostic (OBD) system, the OBD system must meet the requirements of Annex XI.'

**9. Number 26 of the Annex:**

**a. Section 1 (of Annex XI) reads as follows:**

1. Scope

This Annex applies to the functional aspects of on-board diagnostic (OBD) systems for the emission control of all motor vehicles of

- category M <sup>(1)</sup> with a maximum mass not exceeding 3 500 kg and

- category N<sub>1</sub><sup>(1)</sup>

equipped with positive-ignition engines and all motor vehicles of category M<sub>1</sub> and N<sub>1</sub> equipped with compression-ignition engines covered by Article 1 of this Directive.'

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<sup>(1)</sup> As defined in Annex II Section A to Directive 70/156/EEC.

b. Section 5.3.2 (of Annex XI) reads as follows:

5.3.2. The OBD system shall indicate the failure of an emission related component or system when that failure results in an increase in emissions above the limits given in Table XI.5.3.2.

Table XI.5.3.2.

			Reference mass (RW)  (kg)	Limit values						
				Mass of carbon monoxide (CO)		Mass of hydrocarbons (HC)		Mass of oxides of nitrogen (NO <sub>x</sub> )		Mass of particulates <sup>(1)</sup> (PM)
				L1 (g/km)		L2 (g/km)		L3 (g/km)		L4 (g/km)
category	class		Petrol	Diesel	Petrol	Diesel	Petrol	Diesel	Diesel	
A(2000)	M <sup>(2)</sup>	-	all	3,2	3,2	0,4	0,4	0,6	1,2	0,18
B(2005)	M <sup>(2)</sup>	-	all	1,4	2,5	0,2	0,2	0,3	0,6	0,09
C(2000)	N <sub>1</sub> <sup>(3)</sup>	I	RW≤1250	3,2	3,2	0,4	0,4	0,6	1,2	0,18
		II	1250<RW≤1700	5,8	4,0	0,5	0,5	0,7	1,6	0,23
		III	1700<RW	7,3	4,8	0,6	0,5	0,8	1,9	0,28
D(2005)	N <sub>1</sub> <sup>(3)</sup>	I	RW≤1250	1,4	2,5	0,2	0,2	0,3	0,6	0,09
		II	1250<RW≤1700	2,5	3,2	0,3	0,3	0,4	0,8	0,14
		III	1700<RW	3,2	3,7	0,3	0,3	0,4	0,9	0,22

(1) For compression ignition engines.

(2) Except: - vehicles designed to carry more than six occupants including the driver,  
- vehicles whose maximum mass exceeds 2 500 kg.

(3) And those category M vehicles which are specified in note 2.'

## IMPACT STATEMENT ON COMPETITIVENESS AND JOBS

**Draft amendments to the proposal of the Commission (COM(96) 248 final) for a European Parliament and Council Directive relating to measures to be taken against air pollution by emissions from motor vehicles and amending Council Directive 70/156/EEC and 70/220/EEC.**

I. What is the main justification of the measure?

**The proposed amendments shall complete the proposal relating to measures against air pollution by emissions from motor vehicles and amending Council Directive 70/156/EEC and 70/220/EEC (COM(96) final 248), by measures relating to light commercial vehicles (international category N<sub>1</sub>).**

II. Characteristics of the companies involved, more particularly:

- Do they include a large number of small- and medium-sized businesses?

**No**

- eligible for Member State regional aid? **No**
- eligible under the European Regional Development Fund? **No**

III. What obligations are imposed on those companies? **No obligations**

IV. What obligations are likely to be imposed indirectly upon those companies via the local authorities? **No additional obligation**

V. Do any special measures apply to small- and medium-sized businesses? **No**

VI. What is the foreseeable outcome:

- on company productivity? **No negative effect**
- on jobs? **No negative effect**

VII. Have both sides of industry been consulted? **No**

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