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R E P O R T

of the Committee on the Environment, Public Health and Consumer Protection

on the Commission proposal for a Council directive amending Directive 88/77/EEC on the approximation of the laws of the Member States relating to the measures to be taken against the emission of gaseous pollutants from diesel engines for use in vehicles

(COM(90) 0174 final - C3-0209/90 - SYN 272)

Rapporteur: Mr Siegbert ALBER

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A Series: Reports - B Series: Motions for Resolutions, Oral Questions - C Series: Documents received from other Institutions (e.g. Consultations)

* = Consultation procedure requiring a single reading

**II = Cooperation procedure (second reading) which requires the votes of a majority of the current Members of Parliament for rejection or amendment

**I = Cooperation procedure (first reading)

*** = Parliamentary assent which requires the votes of a majority of the current Members of Parliament

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By letter of 2 July 1990 the Council consulted the European Parliament, pursuant to Article 100a of the EEC Treaty, on the Commission proposal to the Council for a directive amending Directive 88/77/EEC on the approximation of the laws of the Member States relating to the measures to be taken against the emission of gaseous pollutants from diesel engines for use in vehicles.

At the sitting of 9 July 1990 the President of Parliament announced that he had referred this proposal to the Committee on the Environment, Public Health and Consumer Protection as the committee responsible and the Committee on Economic and Monetary Affairs and Industrial Policy and the Committee on Transport and Tourism for their opinions.

At its meeting of 17 July 1990 the Committee on the Environment, Public Health and Consumer Protection appointed Mr Alber rapporteur.

At its meetings of 16 October and 18 December 1990 it considered the Commission proposal and draft report.

At the latter meeting it adopted the draft legislative resolution with 14 votes in favour and 3 abstentions.

The following took part in the vote: Collins, chairman; Schleicher, vice-chairman and acting chairman; Scott-Hopkins, vice-chairman; Alber, rapporteur; Avgerinos, Banotti, Bjørnvig, Bowe, Di Rupo, Gaibisso, Green, Hadjigeorgiou (for Chanterie), C. Jackson, Jensen, Llorca Vilaplana, Monnier-Besombes, Partsch, Pollack, Roth-Behrendt, Valverde Lopez, Van Hemeldonck (for Muntingh), Vernier, Vertemati and Vittinghoff.

The opinions of the Committee on Economic and Monetary Affairs and Industrial Policy and the Committee on Transport and Tourism are attached.

The report was tabled on 19 December 1990.

The deadline for tabling amendments will appear on the draft agenda for the part-session at which the report is to be considered.

A

Commission proposal to the Council for a directive amending Directive 88/77/EEC on the approximation of the laws of the Member States relating to the measures to be taken against the emission of gaseous pollutants from diesel engines for use in vehicles

Commission text¹

Amendments

(Amendment No. 1)

Third recital

Whereas Council Directive 88/77/EEC² lays down the limit values for the emissions of carbon monoxide, unburnt hydrocarbons and nitrogen oxides from diesel engines for use in motor vehicles on the basis of a test procedure representative for European driving conditions for the vehicles concerned; whereas in accordance with Article 6 of that Directive these limit values should be further reduced and a limit value for particulate emissions established;

Whereas Council Directive 88/77/EEC² lays down the limit values for the emissions of carbon monoxide, unburnt hydrocarbons and nitrogen oxides from diesel engines for use in motor vehicles on the basis of a test procedure representative for European driving conditions for the vehicles concerned; whereas in accordance with Article 6 of that Directive these limit values should be further reduced in the light of technical progress and a limit value for particulate emissions established;

(Amendment No. 2)

Third recital a (new)

Whereas, in laying down the new standards and test procedures, it is necessary to take into account future traffic growth in the European Community; whereas an increase in vehicle registrations, particularly lorries, may be anticipated as a result of the internal market;

¹ Full text: COM(90) 174 final - OJ No. C 187, 27.7.1990, p. 6

² OJ No. L 36, 9.2.1988, p. 33

Commission text

Amendments

(Amendment No. 3)
Fourth recital

Whereas the work undertaken by the Commission in that sphere has shown that the Community motor industry has available, or is currently perfecting, technologies which allow a further reduction of the limit values in question and compliance with a stringent particulate standard;

Whereas the work undertaken by the Commission in that sphere has shown that the Community motor industry has had available for some time or is currently perfecting technologies which allow a considerable reduction of the limit values in question and the particulate standard;

whereas, because of this and the likely increase in the number of motor vehicles in Europe as a result of the internal market, it is imperative to reduce emission limit values radically in the interests of environmental protection and public health;

(Amendment No. 4)
Fourth recital a (new)

Whereas a particularly large increase in the number of new goods vehicles registered is being universally forecast;

Whereas the Commission must therefore submit an environment report examining the environmental implications of increased motor car and goods vehicle traffic and setting out what measures should be taken to avert a dangerous increase in air pollution from vehicle emissions and to reduce such pollution in general, this examination to include transport policy measures, tax measures and traffic engineering alternatives;

(Amendment No. 5)

Fifth recital

Whereas it is appropriate to introduce these more severe standards in two steps, the first step coinciding with the implementation dates of the new stringent European emission standards for passenger cars; whereas the second step aims at the establishment of a longer-term orientation for the European motor industry in fixing limit values which are based on the expected performance of technologies which are still under development, granting to industry a sufficient lead time for perfecting such technologies; whereas the enforcement of the second stage requires as prerequisite the meeting of certain framework conditions in relation to the availability of low-sulphur diesel fuel and of a corresponding reference fuel for emissions testing, to the progress achieved on emission control technologies, and to the availability of an improved method for the control of production conformity which the Commission adopts in application of the procedure for adaptation to technical progress set out in Article 4 of Directive 88/77/EEC; whereas the Commission will present, before the end of 1993, a comprehensive report on these matters to the Council enabling the latter to decide for 30 September 1994, which of the proposed limit values for the particulate emission will be retained for the second stage;

Whereas it is necessary to fix now, as a two-stage process, the most stringent standards required in the interests of the environment and public health and hence to grant the industry an adequate lead time in which to prepare for the limit values that will be subsequently applicable; whereas the limit values will be based on technology that already exists or is under development and enforcement of the second stage will be facilitated by enhanced framework conditions in relation to the availability of low-sulphur diesel fuel and of a corresponding reference fuel for emissions testing that reflects the progress achieved in emission control technologies; whereas, furthermore, an improved method for the control of production conformity is required; whereas the Commission will submit without delay, and at the latest by 31 March 1991, a draft directive proposing quality requirements - in terms of sulphur content, cetane number and distillation range - for diesel fuel for sale at filling stations;

Commission text

Amendments

(Amendment No. 6)

Fifth recital, sentence 3a (new)

Whereas it is appropriate to introduce these more severe standards in two steps, the first step coinciding with the implementation dates of the new stringent European emission standards for passenger cars; whereas the second step aims at the establishment of a longer-term orientation for the European motor industry in fixing limit values which are based on the expected performance of technologies which are still under development, granting to industry a sufficient lead time for perfecting such technologies; whereas the enforcement of the second stage requires as a prerequisite the meeting of certain framework conditions in relation to the availability of low-sulphur diesel fuel and of a corresponding reference fuel for emissions testing, to the progress achieved on emission control technologies, and to the availability of an improved method for the control of production conformity which the Commission adopts in application of the procedure for adaptation to technical progress set out in Article 4 of Directive 88/77/EEC;

Whereas it is appropriate to introduce these more severe standards in two steps, the first step coinciding with the implementation dates of the new stringent European emission standards for passenger cars; whereas the second step aims at the establishment of a longer-term orientation for the European motor industry in fixing limit values which are based on the expected performance of technologies which are still under development, granting to industry a sufficient lead time for perfecting such technologies; whereas the enforcement of the second stage requires as a prerequisite the meeting of certain framework conditions in relation to the availability of low-sulphur diesel fuel and of a corresponding reference fuel for emissions testing, to the progress achieved on emission controlled technologies, and to the availability of an improved method for the control of production conformity which the Commission adopts in application of the procedure for adaptation to technical progress set out in Article 4 of Directive 88/77/EEC; whereas the maximum permitted sulphur content in diesel fuel should be reduced to 0.05 per cent;

(Amendment No. 7)

Fifth recital, sentence 3b (new)

Whereas until the second stage comes into force, a limit value for CO₂ should also be laid down, defined not in terms of engine performance but in g/km or g/test;

(Amendment No. 8)

Fifth recital, sentence 3c (new)

Whereas sampling and testing methods shall be laid down in the annexes along with the limit values; whereas two methods for the measurement of particulates shall be included, full-flow-dilution on the American model and 'partial-flow-dilution'; whereas the description of partial-flow-dilution given in point 2.3 of Annex 5 covers several procedures, the results of which should be equivalent to the full-flow-dilution system; whereas, to check that this is the case, comparative measurements should be carried out;

(Amendment No. 9)

Fifth recital, sentence 3d (new)

Whereas the European thirteen-mode test for checking the limit values of gaseous pollutants should be complemented by including dynamic processes such as acceleration; whereas the Commission shall submit the relevant proposals;

(Amendment No. 10)

Fifth recital, sentence 3e (new)

Whereas, under the spot check procedure in production testing, the production limit value for pollutants need only be maintained on average; whereas an improved sampling procedure would be highly desirable; whereas the Commission shall submit the relevant proposals;

Commission text

Amendments

(Amendment No. 11)

Fifth recital, sentence 3f (new)

Whereas, so that the limit values laid down can be complied with effectively, a special annual mandatory exhaust test must be introduced for all the vehicles in question; whereas the Commission will submit relevant proposals;

(Amendment No. 12)

Fifth recital, sentence 3g (new)

Whereas, furthermore, observance of speed limits for goods vehicles and omnibuses can help to reduce pollutant emissions; whereas the Commission will examine the scope for making mandatory the fitting of commercial vehicles with speed governors;

(Amendment No. 13)

Fifth recital a (new)

Whereas this report shall also contain the results of the ISO standards project for laying down requirements for diesel engines used in vehicles other than lorries, such as rail vehicles, ships engines, industrial tractors and machinery;

(Amendment No. 14)

Sixth recital

Whereas in order to allow the European environment to benefit the maximum from these provisions and at the same time ensure the unity of the market, it appears necessary to implement the more stringent European standards based on total harmonization;

Whereas in order to allow the European environment to benefit the maximum from these provisions and at the same time ensure the unity of the market, it is necessary to impose the new, very stringent standards;

Commission text

Amendments

(Amendment No. 15)
Seventh recital (new)

Whereas it would be appropriate for the Member States to promote, by means of tax incentives, lower emission levels than those in force, provided that such incentives were applicable to all models marketed in the Member State concerned;

(Amendment No. 16)
Article 1(2)

- | | |
|---|---|
| 2. Annexes I, II, III, V and VIII are amended in accordance with the Annex to this Directive. | 2. Annexes I, II, III, <u>IV</u> , V and VIII are amended in accordance with the Annex to this Directive. |
|---|---|

(Amendment No. 17)
Article 2b (new)

1. Lorry manufacturers with their registered office in the European Community may apply to the Commission for temporary exemption from exhaust limit values. Manufacturers must demonstrate that for technical or economic reasons they are not in a position to meet the new limit values by the dates stipulated. After considering such applications, the Commission may grant temporary exemption. Exemption may be granted for a maximum of two years.
2. Member States may introduce fiscal incentives for the sale of lorries which are eligible for exemption but which meet the new emission values before the deadline.

Commission text

Amendments

3. Member States shall develop schemes to encourage the purchasers of new vehicles to scrap their old vehicles or, as far as possible, surrender them for recycling. Incentives of this kind should be offered in respect of lorries that have been in service for 12 years or more. The Commission is required to submit as soon as possible a proposal for a Community-wide scheme, to enter into force on or before 1 October 1993.

(Amendment No. 18)
Article 2c (new)

Member States shall jointly research into and develop alternative systems of propulsion, alternative fuels and the corresponding transport plans as well as provide financial support for R&D in these fields.

(Amendment No. 19)
Article 2d (new)

All commercial vehicles shall be fitted with equipment limiting their speed to 80 kph

(Amendment No. 20)
Article 4

Not later than 30 September 1994, the Council shall decide, on the basis of a report and a proposal to be submitted by the Commission before the end of 1993, on the limit value for emission of particulate matter to be retained in line B, fourth column, of the tables of items 6.2.1. and 8.3.1.1. of Annex I to Directive 88/77/EEC.

Not later than 31 December 1991, the Council shall decide, on the basis of proposals for directives to be submitted by the Commission by 31 March 1991, on

- (a) the definition and the availability of improved diesel fuel, with a view to the following quality requirements:

Commission text

In its report the Commission will give account of the progress achieved on

- the techniques to control air-polluting emissions from diesel engines;

- the definition and the availability of improved diesel fuel (e.g. sulphur content, aromatics content, cetane value) and of a corresponding reference fuel for emissions testing;

- a new statistical method for the control of production conformity to be adopted in accordance with Article 4 of Directive 88/77/EEC.

Amendments

- 0.05% maximum sulphur content by weight
- a minimum cetane number of 50
- an aromatics content of less than 10%
- 90% final boiling point at 240°

(b) measures to ensure regular testing of emissions from, and of the operability of equipment fitted in, all vehicles and to lay down minimum inspection requirements;

(c) a new statistical method for the control of production conformity to be adopted in accordance with Article 4 of Directive 88/77/EEC.

(Amendment No. 21)
Article 5 (new)

The Council, acting by a qualified majority on the basis of a Commission proposal, shall decide not later than 31 December 1992 measures intended to:

- limit emissions during the transport of fuel and its distribution to retailers;

- contain transport of goods by road by reducing the relative price of transport by inland waterway and rail.

Commission text

Amendments

(Amendment No. 22)

Article 6 (new)

In good time before the start of the second stage - the limit values laid down in 6.2.1. - and at the latest by 31 December 1991, the Commission shall submit a proposal to convert the definition of commercial-vehicle emission limits from ...g/kWh to ...g/km.

(Amendment No. 23)

Article 7 (new)

1. Fuel producers shall be required to supply precise information on the additives used by them to the authorities responsible, in particular information on the extent to which they are environmentally harmful.
2. Additive producers shall be required to notify the authorities responsible of the composition of and chemical nature of additive packages and the environmental properties of the additives concerned.
3. After receiving this information, the Commission shall without delay take appropriate measures to counter any potential risk to the environment or to health.

Commission text

Amendments

(Amendment No. 24)
Annex I, point 6.2.1.

6.2.1. The mass of the carbon monoxide, the mass of the hydrocarbons, the mass of the oxides of nitrogen, and the mass of the particulates shall not exceed the amounts shown in the table below:

6.2.1. The mass of the carbon monoxide, the mass of the hydrocarbons, the mass of the oxides of nitrogen, and the mass of the particulates shall not exceed the amounts shown in the table below:

Mass of carbon monoxide (CO) g/kWh	Mass of hydrocarbons (HC) g/kWh	Mass of nitrogen oxides (NOx) g/kWh	Mass of particulates (PT) g/kWh
			<u><85kW>85kW</u>

Mass of carbon monoxide (CO) g/kWh	Mass of hydrocarbons (HC) g/kWh	Mass of nitrogen oxides (NOx) g/kWh	Mass of particulates (PT) g/kWh
			<u>Lorries</u>
			<u>Buses</u>

A
(1.7.92)

4.5 1.1 8.0 0.63 0.36

B
(1.10.96)

4.0 1.1 7.0 0.3/0.15*

* to be decided according to Article 4

A
(1.7.92)

4.5 1.0 7.0 0.3 0.1

B
(1.10.97)

2.0 0.6 5.0 0.1

Commission text

Amendments

(Amendment No. 25)
Annex I, point 8.3.1.1.

'8.3.1.1 An engine is taken from the series and subjected to the test described in Annex III. The mass of the carbon monoxide, the mass of the hydrocarbons, the mass of the oxides of nitrogen and the mass of particulates shall not exceed the amounts shown in the table below:

Mass of carbon monoxide (CO) g/kWh	Mass of hydrocarbons (HC) g/kWh	Mass of nitrogen oxides (NOx) g/kWh	Mass of particulates (PT) g/kWh
			<u><85kW>85kW</u>

A
(1.7.92)
4.9 1.23 9.0 0.7 0.4

B
(1.10.96)
4.0 1.1 7.0 0.3/0.15*

* to be decided according to Article 4

'8.3.1.1 An engine is taken from the series and subjected to the test described in Annex III. The mass of the carbon monoxide, the mass of the hydrocarbons, the mass of the oxides of nitrogen and the mass of particulates shall not exceed the amounts shown in the table below:

Mass of carbon monoxide (CO) g/kWh	Mass of hydrocarbons (HC) g/kWh	Mass of nitrogen oxides (NOx) g/kWh	Mass of particulates (PT) g/kWh
			<u>Lorries</u> <u>Buses</u>

A
(1.7.92)
4.5 1.0 7.0 0.3 0.1

B
(1.10.96)
2.0 0.6 5.0 0.1

(Amendment No. 26)
ANNEX IV

Sulphur content - max. 0.05 per cent

(Amendment No. 27)
ANNEX V, Point 2.3.1. (new)

Comparative measurements shall be carried out in order to check the equivalence of the results obtained from the full-flow-dilution system and the partial-flow-dilution system.

DRAFT LEGISLATIVE RESOLUTION
(Cooperation procedure: first reading)

embodying the opinion of the European Parliament on the Commission proposal to the Council for a directive amending Directive 88/77/EEC on the approximation of the laws of the Member States relating to the measures to be taken against the emission of gaseous pollutants from diesel engines for use in vehicles

The European Parliament,

- having regard to the Commission proposal to the Council (COM(90) 174 final - SYN 272)¹,
 - having been consulted by the Council pursuant to Article 100a of the EEC Treaty (C3-0209/90),
 - having regard to the report of the Committee on the Environment, Public Health and Consumer Protection and the opinions of the Committee on Economic and Monetary Affairs and Industrial Policy and the Committee on Transport and Tourism (A3-0368/90),
1. Approves the Commission proposal subject to Parliament's amendments and in accordance with the vote thereon;
 2. Calls on the Commission to amend its proposal accordingly, pursuant to Article 149(3) of the EEC Treaty;
 3. Asks to be consulted again should the Council intend to make substantial modifications to the Commission proposal;
 4. Calls on the Council to incorporate Parliament's amendments in the common position that it adopts in accordance with Article 149(2)(a) of the EEC Treaty;
 5. Instructs its President to forward this opinion to the Council and Commission.

¹ OJ No. C 187, 27.7.1990, p. 6

B

EXPLANATORY STATEMENT

Introduction

The number of commercial vehicles currently in use in the European Community is approximately 5 978 900 (see Annex I). In 1989 there were 1 717 138 new registrations in the twelve countries of the European Community. Approximately 90 per cent of these vehicles are equipped with diesel engines.

In view of the expected increase in commercial goods traffic due to the expansion in economic activity following the completion of the internal market and economic reorganization of central and eastern Europe - not to mention the adverse effects on the environment - drastic cuts in the pollutants emitted by lorries and buses are required. For metropolitan areas and other centres of population vehicle emissions represent a major source of pollution both to human beings and the environment, as noted by the Commission of the European Communities in its green paper on the city and the environment, which summarizes the current state of scientific knowledge about the main causes of urban pollution. The biggest producers of nitrogen oxides, carbon monoxide, diesel particles and lead are motor vehicles.

I. Contents of the proposal for a directive

A year and a half behind schedule, the Commission is submitting standards for reducing gaseous and particulate emissions from commercial vehicles driven by diesel engines on the basis of existing test procedures. Cuts in the pollutants carbon monoxide (CO), hydrocarbons (HC), nitrogen oxides (NO_x) and diesel particles are to be introduced in two stages.

The first stage begins for all new types of commercial vehicle equipped with diesel engines (type approval) on 1 July 1992, and for all new diesel powered vehicles put on the market on 1 January 1993. In the first stage, a distinction will be introduced between large and small engines in respect of particulate standards, depending on whether engine power exceeds 85 KW or not. A distinction will also be made in the first stage - in contrast to the United States, Switzerland and Austria - between type-approval and production conformity with regard to the limit values. Exhaust standards may be less stringent for the series than for the type, with a tolerance of 10 per cent.

The second stage begins on 1 October 1996. The intention is to dispense with separate limit values for type-approval and production conformity and with different particulate emission standards based on engine performance. The Commission does not lay down any binding limit value for particulates in the second stage. It proposes two alternative values. The final limit for particulate emissions will be decided by the Council on the basis of a report to be submitted by the Commission in late 1992 on the progress achieved in particulate filter techniques and the availability of improved diesel fuel.

According to the Commission, the first-stage standards are comparable to current US standards and identical to those due to come into force in the two EFTA countries, Switzerland and Austria, on 1 October 1991. The second-stage standards are said to be attainable using technology currently under development.

II. Assessment

1. Limit values

It is very difficult to compare US and European standards because of differences in measurement procedures. In the view of experts from the European Environment Bureau and the German Federal Environment Agency, the HC and NOx limits proposed by the Commission in the first stage exceed the US limits, whereas the CO standard is much more rigorous than in the US. The particulate values are scarcely comparable.

As far as the second stage is concerned, it is not just the timetable for the Commission's standards (as conceded in the explanatory memorandum to the Commission proposal) that is lagging behind the measures planned in the United States. In the view of experts (including the 'Stockholm Group', a loose association of environmental and motor vehicle experts from the EFTA countries, the Netherlands and Germany), far stricter targets could be imposed by the deadline.

The motor vehicle industry itself has repeatedly asked legislators for clear standards on which to base technical developments.

These demands for far-reaching cuts in gaseous emissions which have been taken over by the European Parliament entail extensive redesigning of engines in the second stage, for which appropriate lead times must be allowed.

In the view of the European Parliament, efforts should also be made to achieve, in this second phase, a noticeable cut in fuel consumption and a reduction in noise emissions, as well as regulations governing spray suppression devices (in wet conditions).

The standards proposed by the European Parliament for the first stage are attainable using available technology and better-quality diesel fuel.

The European Parliament considers these drastic measures necessary if success in cutting exhaust emissions from individual vehicles is to lead to an overall cut in total vehicle emissions, bearing in mind anticipated transport developments.

Border blockades for lorries on the Italian-Austrian border make it quite plain that radical measures to protect the environment may also benefit the future development of north-south transport in the hardest-hit transit countries, viz Switzerland and Austria.

In addition, the European Parliament considers it wholly inappropriate for Europe to lag behind the United States as it has done so far. The traffic situation in a country the size of the United States cannot be compared to the traffic density in such a heavily populated Continent as Europe. In fact, the situation in Europe warrants far greater efforts by European industry.

In the long term, it even may be necessary to set technology off on a completely different track, using new fuels and methods of propulsion, in order to achieve zero-level emissions in the transport sector.

In any event, we should implement forthwith the standards that are within the reach of technology.

This is the reason why the European Parliament is opposed to differing standards for type-approval and production conformity and to differing particulate emission standards based on engine performance in the first stage.

2. Further demands

(a) Diesel fuel quality requirements

In the explanatory memorandum to its proposal the Commission also refers to the significance of improved diesel fuel quality. Beyond the planned report on its availability and the non-binding enumeration of lower standards, however, there is no indication that the Commission intends to propose any actual legislative measures.

Under Directive 75/716/EEC of 30 March 1987, the Commission is obliged to submit a draft amendment to the 'gas oil directive' (the sulphur content of certain liquid fuels). At the same time, the Commission could submit the limit values proposed by the European Parliament for the sulphur content of diesel fuel, the cetane number, lower aromate contents and the volatility range, and redefine under the existing directive, the reference fuel specified in Directive 88/77/EEC.

The European Parliament calls on the Commission to do so, reminding it that the Commission is continually insisting on its right to initiate European legislation. In view of the significance of this measure, it is quite incomprehensible that the Commission has been endeavouring in vain since 1986 to come up with a sensible proposal.

By improving the quality of diesel fuel it is possible to cut the pollutants emitted both by new and old diesel-powered vehicles. With low sulphur diesel fuel it is also possible to use catalytic converters, mainly to reduce CO and HC, as well as particulate, emissions. This supplementary technical measures will also increase the chances of achieving a further and more rapid cut in NO_x limit values. It is putting the cart before the horse if one seeks to cut the emission of pollutants without simultaneously improving fuel.

The standards proposed by the European Parliament for the second stage are crucially dependent on the availability of a standardized, high-quality diesel fuel throughout Europe.

(b) The limit value for CO₂ emissions

It is becoming increasingly plain that CO₂ emissions are a major cause of the climatic problems looming up ahead. In addition to further cuts in fuel consumption, technical solutions must be found to the problem of limiting CO₂ emissions. As no such solutions are currently practicable, the European Parliament calls on the Commission to redouble its efforts and to propose a limit value that is independent of engine performance and defined in terms of g/km or g/test, preferably before the implementation of the second stage. Putting the accent on performance means, in practical terms, that larger engines are permitted greater emissions than small engines.

(c) Sampling and testing methods

To guarantee the effectiveness of the measures proposed it is necessary to ensure that the approved procedures specified by the Commission - the flow-dilution system adapted to European conditions, as well as the American full-flow sampling system - yield comparable results. The partial-flow sampling technique was developed to make it possible to incorporate particle measurement devices with smaller calibrations into existing testing equipment. The full-flow sampling system requires a 'dilution tunnel' 4-5 metres long and 0.5 m in diameter. In the case of the partial-flow sampling system, however, the dilution tunnel is only 1.5 metres long with a diameter of approximately 15 centimetres. On the basis of the Commission definition, the approved partial-flow sampling method covers two procedures - known as the minitunnel and the microtunnel. Comparability of findings does not seem to be guaranteed in every case. The European Parliament therefore calls for comparative measurements to be carried out in order to guarantee equivalence and to ensure that the same standards are applied in all the Member States.

In addition, the European 13-mode steady state test for checking levels of gaseous pollutants needs supplementing by taking dynamic processes into account, for example, acceleration. Until now, engines being tested have been run at a steady speed. But technical processes such as acceleration have a major impact on the level of gaseous emissions.

In accordance with the statistical methods applied hitherto, samples are required to reach average limit values only. According to reports, proposals for improving sampling methods are currently being drawn up. If the real level of compliance actually required was raised, this would lead to more effective conformity with standards overall. Proposals to this effect should be supported by the Commission and submitted as soon as possible.

(d) Other commercial vehicles in addition to lorries and buses are also equipped with diesel engines, for example, ships, rail locomotives, industrial tractors and other machines. Although emissions from these types of vehicle cause less pollution, limit values and standardized measurement procedures should be drawn up to cover them in the near future. The ISO standards project is already engaged in this task. The Commission is asked to make the results of this work the basis of European legislation as soon as possible.

Conclusion

Vehicle ownership in the European Community is only one indicator of European prosperity. If the economy and the transport sector are to continue growing, we need 'smart technology', enabling us to break the link between growth and environmental pollution/use of resources. As one of the world leaders in technology, Europe must set a good example. In the long term, zero emissions are inevitable, as otherwise overall pollution levels will continue to increase despite cuts in emissions from individual vehicles, because of the constant increase in the number of motor vehicles in use. This is the ultimate challenge facing research and technology.

EC Para Estimates (000 units)

1989	Trucks over 3.5 t	Trucks 3.5 to 15 t	Trucks over 15 t	Buses and coaches
W. Germany	823.2	444.5	378.7	70.5
France	430.4	135.6	294.3	68.0
United Kingdom	423.6	191.9	231.7	73.8
Italy	418.0	196.5	221.5	82.0
Spain	309.7	117.7	192.0	45.2
Netherlands	121.8	36.5	65.3	11.9
Belgium	143.2	52.0	91.2	16.4
Denmark	48.2	19.3	28.8	8.0
Ireland	23.6	11.0	12.6	3.3
Portugal	51.3	24.1	27.2	3.2
Total	2783.0	1229.1	1563.9	392.9

Note : Engine power for trucks over 15 t is generally included between 160 kW and 370 kW.

Source : DRI estimates/Industry estimates/OC III estimates.

OPINION

(Rule 120 of the Rules of Procedure)

of the Committee on Economic and Monetary Affairs and Industrial Policy

for the Committee on the Environment, Public Health
and Consumer Protection

Draftsman: Mr Bouke BEUMER

At its meeting of 17 July 1990 the Committee on Economic and Monetary Affairs and Industrial Policy appointed Mrs Ernst de la Graete draftsman.

At its meetings of 15-16 October and 5-7 November 1990 it considered the draft opinion.

At the latter meeting, it adopted the amendments by 14 votes to 7 with 2 abstentions.

After the vote, the draftsman announced that she did not wish to continue as draftsman. The chairman will accordingly submit the opinion to the committee responsible.

The following took part in the vote: Beumer (chairman and draftsman), de Montesquiou (vice-chairman), P. Beazley, Cassidy, Cox, David (for Barton), De Piccoli, de Donnea, Ernst de la Graete, Friedrich, Herman, Hoppenstedt, Lataillade, Martinez (for Megret), Merz, Metten, Pinxten, Read, Roumeliotis, A. Smith (for Seal), Tongue, Van Hemeldonck (for Rogalla) and von Wogau.

1. Content of the proposal

The main purpose of the proposal for a Council Directive amending Directive 88/77/EEC is to adapt the standards relating to gaseous pollutants emitted by diesel engines (CO, HC, NOX), as stipulated under Article 6 of that directive. The Commission is also taking the opportunity to add a standard on particulate emissions and to amend, having regard to the new standards, the test procedure designed to ensure compliance.

2. Fixing of standards

A preliminary comment appears essential here: once again, as was already the case with the proposal for a Council directive amending Directive 70/220/EEC¹, the Commission is content with relying on the supposed capability of European industry to absorb more restrictive standards or, more precisely, it has probably consulted the latter to determine just how far it was prepared to go. The following extract from the explanatory statement leaves little doubt in that connection: 'The expert consultations undertaken by the Commission have shown that the European motor industry has available, or is at present perfecting, technologies which allow considerable reductions of the emissions from diesel engines of commercial vehicles. In consideration both of the state of development of these technologies and the progress in improving the diesel fuels, it appears appropriate to introduce more severe European standards in two stages'².

Consultation will of course be essential, but it would perhaps have been more appropriate to have gone for a more committed programme, together with the means of enabling European industry to conform to it, one that could have been announced and launched as early as 1988. The wait-and-see approach is again evident in the explanatory memorandum in relation to particulate emissions and the need to improve diesel fuels (p. 4).

There is certainly every reason to ask why European industry should not be capable of producing diesel engines also capable of rapidly complying with the more severe standards existing elsewhere in the world (standards relating to emissions, the conduct of the test procedures and the tolerance between the limit values applicable on receipt and those used for monitoring production conformity), or even more severe ones still to give a long-term competitive advantage.

It should be noted in this connection that European vehicles will have to comply with more severe American standards (except for CO) than the standards proposed by the Commission.

¹ See the Opinion of the Committee on Economic and Monetary Affairs on the proposal for a Council directive amending Directive 70/220/EEC on the approximation of the laws of the Member States relating to the measures to be taken against atmospheric pollution by motor vehicle emissions (PE 140.043)

² COM(90) 174 final - SYN 272, p. 3

3. Economic considerations

3.1. General considerations

Fixing more restrictive standards, especially if their severity has been increased substantially, obviously imposes various costs on diesel engine manufacturers. If, moreover, the new standards result in an accelerated renewal of the vehicle fleet (which is not provided for by the proposal to amend Directive 88/77/EEC) or in higher unit costs (which is not certain), users of such vehicles will also be subject to costs as a result of the fixing of standards.

But the possible costs should not be over-estimated. Firstly because they are absorbed into the total of costs relating to technical progress, and then because they must be set against the highly important social and ecological costs resulting from the various kinds of pollution caused, directly or indirectly, by diesel engines. For example, the role of SOX³ in acid rain needs no further demonstration.

3.2. The need to reduce social and ecological costs rapidly

These social and ecological costs must consequently be reduced as quickly as possible. In that connection the proposal to amend Directive 88/77/EEC is certainly a step in the right direction. But it is too little too late. For four reasons:

1. The standards proposed have no absolute significance. They apply only in relation to the characteristics of tests carried out to monitor adherence to these standards.

Two specific points should be noted here:

- an obvious requirement is that the test procedure should be as close as possible to the conditions of everyday use of the vehicles tested;
 - the state of equipment in reality (wear and tear, poor tuning, miscellaneous defects) is often far removed from that of the equipment utilized in the tests.
2. The most common standards do not apply to all the pollutants emitted. Thus the emissions most often tested are those of CO, NOX and HC, whereas other toxic organic compounds (e.g. aldehydes) of a particulate nature originating other than in the combustion process are ignored (and that is without going into the problem of fuel vapour emissions during tanker transport or in service stations).
 3. Even with absolute adherence to these standards, a significant or adequate fall in atmospheric pollution cannot on that account alone be guaranteed in Europe for several reasons:
 - A significant effect can only be obtained through an adequate rate of fleet renewal;

³ Emitted as a result of the presence of sulphur in diesel fuel.

- Several types of pollution are cumulative; to reduce the level of total emissions will not necessarily lead to a reduction in the stock of stable pollutants in the atmosphere;
- Reduced pollution per kilometre travelled must not be allowed to be cancelled out by a significant growth in total kilometrage⁴;
- Certain special circumstances (climatic conditions and/or excessive traffic) ensure, even with a fleet of decidedly cleaner vehicles, (temporary) concentration of certain pollutants in the atmosphere will be above approved health standards. Thus for example, the OECD considers that the federal standards for ozone (one of the secondary pollutants of combustion) will probably not be adhered to even by the year 2000 in Los Angeles, despite the general stringency of the road traffic control programme implemented in that city.
- Reductions in emissions of the pollutants subject to controls could be cancelled out by a significant increase in emissions of non-standard pollutants.

4. Nor does atmospheric pollution due to the use of transport stop at directly toxic pollutants. There is also the production of CO₂ in addition to the CO₂ generated by other uses of fossil fuels and other gases that can intensify the greenhouse effect.

4. Amendments

The Commission's text should consequently be amended in order to:

- step up the severity of these standards;
- enable the Member States who so wish to go faster than Community standards;
- urge the Commission to adapt the terms of the directive to developments in technologies both in relation to vehicles and to fuels;
- incorporate the imposition of standards into an overall programme to contain road transport.

The Committee on Economic and Monetary Affairs and Industrial Policy consequently invites the committee responsible to incorporate the following amendments in its report.

⁴ As anticipated by the report by the Task Force on the Environment and the Internal Market (in particular Chapter 5).

(Amendment No. 1)

Fifth recital

Commission text

Whereas it is appropriate to introduce these more severe standards in two steps, the first step coinciding with the implementation dates of the new stringent European emission standards for passenger cars; whereas the second step aims at the establishment of a longer-term orientation for the European motor industry in fixing limit values which are based on the expected performance of technologies which are still under development, granting to industry a sufficient lead time for perfecting such technologies; whereas the enforcement of the second stage requires as a prerequisite the meeting of certain framework conditions in relation to the availability of low-sulphur diesel fuel and of a corresponding reference fuel for emissions testing, to the progress achieved on emission control technologies, and to the availability of an improved method for the control of production conformity which the Commission adopts in application of the procedure for adaptation to technical progress set out in Article 4 of Directive 88/77/EEC; whereas the Commission will present, before the end of 1993, a comprehensive report on these matters to the Council enabling the latter to decide, before 30 September 1994, which of the proposed limit values for the particulate emissions will be retained for the second stage;

Amendments

Whereas it is appropriate to introduce these more severe standards as regularly as possible; whereas it is appropriate to adapt standards as rapidly as possible to take account of technical progress; whereas it is essential to take every opportunity to secure rapid success in minimizing pollution by implementing Community support to all research and development in this area.

(Amendment No. 2)
after the last recital add the following new recital

Whereas, in order to improve further the European environment, Member States who so wish must be authorized to use tax incentives or other means to secure rapid renewal of their fleets of commercial vehicles;

(Amendment No. 3)
Article 4(a) (new)

Commission text

Amendments

The Council, acting by a qualified majority on the basis of a Commission proposal, shall decide not later than 31 December 1992 measures intended to:

- organize regular checks and, where necessary, replacement, repair, maintenance procedures for additional or specific fixtures so as to ensure that the fixed standard values continue to be adhered to permanently by the vehicles concerned;

- to limit emissions during the transport of fuel and its distribution to retailers

- to develop an R and D programme to:

* measure other pollutants and assess their impact on the environment in general and on human health in particular,

* market diesel fuel in its cleanest possible form;

- contain transport of goods by road by reducing the relative price of transport by inland waterway and rail.

OPINION

of the Committee on Transport and Tourism

Letter from the chairman of the committee to Mr Ken COLLINS, Chairman of the Committee on the Environment, Public Health and Consumer Protection

28 November 1990

Subject: Proposal for a Council Directive amending Directive 88/77/EEC on the approximation of the laws of the Member States relating to measures to be taken against the emission of gaseous pollutants from diesel engines for use in vehicles
COM(90) 174 final - C3-209/90 - SYN 272

Dear Mr Collins,

At its meeting of 27 November 1990 the Committee on Transport and Tourism examined the above-mentioned proposal by the Commission.

It noted that this proposal intends to make the present limit values for gaseous emissions from vehicles with diesel engines more severe and introduce limit values for particulate emissions for the first time. In this connection it asks the Commission to define the specifications for diesel fuel within the next six months, aiming for a low sulphur and aromatics content, low volatility and a high cetane number.

The Commission is proposing a procedure in two stages: in the first stage, limit values such as can be met using available technology - approximately conforming to present US emissions standards - shall apply from 1 July 1992. At the same time a decision has already been made on more severe limit values for the second stage to come into force on 1 October 1996, for the implementation of which the technology is still in the development stage. The Committee on Transport and Tourism takes the view that these limit values should come into force earlier, i.e. on 1 October 1994.

This Commission proposal is part of the efforts to develop a more environmentally friendly heavy goods vehicle, which has already been called for by the Committee on Transport of the European Parliament with particular reference to the problem of transit traffic in the Alpine countries¹. The integration of environmental concerns into transport planning is to be the subject of an own-initiative report by the Committee on Transport.

¹ See Topmann report - A2-168/88

The Committee on Transport welcomes the laying down of more severe limits. The most recent developments show that the manufacturers of vehicles are quickly able to adapt production and develop the required technologies if clear and timely decisions are made by the legislators. The reduction of environmentally damaging effects improves the public acceptability of traffic, thus making a contribution to the harmonious development of this sector.

The Commission has taken account of the fact that problems could arise because the necessary technologies for stricter limits at the second stage have not yet been developed to the production stage, by allowing for a certain level of flexibility in terms of technical specifications, which should, in the opinion of the Committee on Transport and Tourism, apply to the period from 1994 to 1996.

Bearing in mind that the detailed examination of the technical specifications and limit values falls into the remit of the Committee on the Environment as the committee responsible, the Committee on Transport and Tourism approves the proposal by the Commission².

Yours sincerely,

Rui AMARAL

² The following were present for the vote: Amaral, chairman; Topmann, vice-chairman; Braun-Moser (for Bonetti), Coimbra Martins (for Stamoulis), McIntosh, Müller, Romera i Alcazar, Schodruch, Simpson, Siso Cruellas (for Fantini), Visser, van der Waal and Wijsenbeek.

