

COMMISSION OF THE EUROPEAN COMMUNITIES

COM(91) 154 final - SYN 340

Brussels, 10 June 1991

Proposal for a
COUNCIL DIRECTIVE
relating to the sulphur content of gasoil

(presented by the Commission).

EXPLANATORY MEMORANDUM

1. Background

Directive 87/219/EEC, amending Directive 75/716/EEC on the approximation of the laws of the Member States relating to the sulphur content of certain liquid fuels, fixed a new maximum level for the sulphur content of gasoils as a means of reducing emissions of gaseous pollutants from diesel engines for use in motor vehicles and from heating plant, including industrial installations.

It reduced the permissible sulphur content from 0.5% to not more than 0.3% by weight and provided that in zones where the environment, the national heritage or the health of the population called for increased protection the use of gasoils with a sulphur content of 0.2% could be required.

Article 6 requires that the Commission should monitor the effects of applying this Directive and submit a report to the Council accompanied by an appropriate proposal with a view to the establishment of a single value for sulphur content.

The said report must take account of any new information available on the atmospheric sulphur dioxide pollution levels recorded, on progress towards defining air quality objectives, on the state of the environment, on the harmful effects of air pollution and on conditions on the gasoil market.

2. Current situation

Under Article 5 of Directive 87/219/EEC Member States are allowed to require the use of gasoils with a sulphur content equal to 0.2% by weight in certain defined circumstances. Belgium, Denmark, the Federal Republic of Germany, Luxembourg and The Netherlands apply this provision throughout their territory. The underlying aim of this lower value is to reduce SO₂ emissions even further.

Although the total consumption of gasoil has remained essentially constant since 1980, there has nevertheless been a significant increase in the use of gasoil for diesel fuel at the expense of heating oil, and this trend is expected to continue. In 1987, approximately 52% of gasoil was used for heating, 41% for diesel engine fuel and 7% in industry.

Overall SO₂ emissions in the Member States, including those arising from the use of gasoil, have fallen by some 30% since 1980. SO₂ emissions from gasoil in the Member States currently account for a relatively small proportion of total SO₂ emissions (between 2 and 18%, with a Community average of 5%).

Although the Directive requires a report to be submitted in 1990 concerning a further reduction in SO₂ emissions, no data are yet available for 1989 on the latest position with regard to ambient air quality or the effects of the entry into force of the Directive on 1 January 1989. However, it is possible to identify a number of reasons and new developments which justify the need for a further reduction in SO₂ emissions in general, and sulphur emissions from gasoil in particular.

First, SO₂ limit values are still being exceeded, especially in some urban areas, and in many instances levels are higher than the guide values - which are meant as targets to aim for.

Secondly, the Commission's proposal for a further reduction in gaseous pollutant and particulate emissions from diesel engines for use in vehicles (COM (90) 174 final SYN 272 of 15.06.90) comprises two stages. The first stage (in 1992/93) does not require a sulphur content lower than 0.2%. For the second stage (1995/96) more stringent limits for pollutants, especially particulates, will require a lower sulphur content in diesel fuel in line with the more stringent limits being introduced in the United States.

Because of the clear linkage of this proposal and the above mentioned proposal on emissions from diesel engines, this proposal is also linked to the internal market. For this reason, the 100A procedure has to be followed.

3. Limit values

First stage

Directive 87/219/EEC states, in Article 6, that the Commission shall submit an appropriate proposal with a view to the establishment of a single value for sulphur content in gasoils. In order to press ahead with the further reduction of sulphur emissions, the Commission is proposing a single value sulphur content in gasoil in 1994 as a first step.

The value envisaged for this first stage is a sulphur content of 0.2% by weight for all types of gasoil by 1 October 1994. This deadline is based on the time required by the refineries, after the approval of this Directive, for constructing or modifying the necessary additional facilities.

Second stage

The further reduction of emissions from diesel engines requires a lower sulphur content in diesel fuel. For this reason the sulphur content in diesel fuel for automotive use will be reduced to 0.05% by weight by 1 October 1996 in order to help the reduction of the particulate emissions and to allow catalytic converters to be used.

This will reduce emissions of CH and NO_x in pursuance of the proposal on gaseous emissions from diesel-engined heavy duty motor vehicles.

The production of 0.05% sulphur by weight level in diesel fuel will require additional infrastructure in refineries and after the incorporation of the Directive in national law the time of 3 years will be fully needed for designing, obtaining planning permission for and constructing the necessary additional facilities in all Member States.

The Commission's proposals for a Council Directive fixing certain rates and target rates of excise duty on mineral oils (COM(91)43 final) and on the harmonization of the structures of excise duty on mineral oils (COM(91)434 final) do not foresee a diesel (= auto-motive gasoil) of 0.05 % sulphur by weight.

In the proposal concerning the fixing of certain rates and targets of excise duty on mineral oils in article 3 is stated that the excise duty in diesel shall be not less than 245 ECU or more than 270 ECU per 1,000 litres. This gives a rate band of 25 ECUs.

As is stated in paragraph III.4 of the report, the calculation of the additional costs of production for the 0.05 % sulphur by weight level varies from US \$ 4.5 to \$ 14 pro ton which is equivalent to 3.2 ECU to 9.9 ECU pro 1,000 litres. The average will probably be around 5-6 ECU pro 1,000 litres. This means that the proposed band is sufficient to incorporate a tax incentive for diesel with a low sulphur content.

Since the Environmental Council on the 18th and 19th of March 1991 took the common position that the second phase of new types of heavy duty trucks will be entered on the 1st of October 1995, there is the need for the availability on the market of the low sulphur content diesel fuel.

For this reason the Directive requires the availability and balanced distribution of this fuel from this date. The Commission is aware of the difficulties for Member States to be obliged to implement such an article. However this article is only necessary for a limited period of time (from 1.10.1995 to 30.09.1996) for the heavy duty trucks to meet the low emission standards. Therefore the Commission considers it as a satisfactory solution that Member States encourage this balanced distribution of low sulphur diesel by using the possibility of the tax incentive. One should speak of a sufficient availability and balanced distribution if 25 % of the offered automotive gasoil contains the low sulphur level.

At this moment there is a tendency in some EFTA countries to come to a further reduction of the sulphur content in gasoil for other uses such as heating. For instance Austria and Switzerland applied a limit of 0.1 % sulphur by weight in heating oil. This points to the application of a lower value than 0.2 % sulphur content by weight by the end of the 90's.

The Commission proposes 0.1 % sulphur content by weight for 1999. Announcing this value now will allow the refineries to be prepared for this future demand in the rationalisation and modernization which is going to take place in the next 7 to 8 years.

Since the necessary investment to achieve 0.1 % are foreseen to take place in connection with other investments it is not possible at this stage to mention the level of investment that can be attributed to this stricter limit value.

As a consequence of these developments in the different required sulphur values of gasoil, a distinction has to be made between gasoil used for diesel engines on the one hand and gasoil for heating, bunker and industrial use on the other.

Future action

At the moment there does not appear to be any immediate need to introduce stricter reductions. The level of 0.05% sulphur by weight is stringent enough for the development and use of catalytic converters for diesel engines not only in heavy duty but also in passenger cars.

Moreover, for other types of gasoil 0.1% sulphur by weight seems to be strict enough, but the development of the air quality can still bring the need for further steps. Other sources of SO₂, such as heavy bunker oil or coal, currently generate emissions on a far more serious scale. A French memorandum draws attention to these other sources of SO₂ emissions and future activities will concentrate on reducing them.

4. Conclusions

The announcement of these sulphur content reductions (to 0.1% and 0.05%) opens up the prospect of lower sulphur emissions in the future. The timescale proposed for both the 0.05 % and 0.1% sulphur content by weight gives the industry the opportunity to design, obtain building permission for and construct the necessary facilities and infrastructure. Furthermore, the motor industry can take this into account in the development of new engines and catalytic converters suited to this low sulphur content.

A tax incentive introduced by Member States on this type of diesel fuel will encourage its early introduction and use on the market, bringing the earliest possible return on investment.

Proposal for a
COUNCIL DIRECTIVE
relating to the sulphur content of gasoil

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community and in particular Article 100a thereof,

Having regard to the proposal from the Commission,⁽¹⁾

In cooperation with the European Parliament,⁽²⁾

Having regard to the opinion of the Economic and Social Committee,⁽³⁾

Whereas in order to improve air quality with regard to sulphur dioxide and other emissions, the Community has to take measures to reduce progressively the sulphur content of gasoil used for automotive, heating, industrial and bunker purposes;

Whereas, under Articles 2(1) and 5(1) of Council Directive 75/716/EEC,⁽⁴⁾ as amended by Directive 87/219/EEC,⁽⁵⁾ the provisions in force in the Member States lay down two limits with respect to the sulphur content of liquid fuels; whereas these provisions differ from one Member State to another;

Whereas these differences oblige Community oil companies to adjust the maximum sulphur content of their products, depending on which Member State is being supplied; whereas the differences thus constitute a barrier to trade in these products, thereby directly influencing the establishment and functioning of the Single Market;

(1) OJ No C

(2) OJ No C

(3) OJ No C

(4) OJ No L 307, 27.11.1975, p. 22.

(5) OJ No L 91, 3.4.1987, p. 19.

Whereas, in addition, Article 6 of Directive 75/716/EEC provides that in the light of any new information available the Commission is to submit a report to the Council accompanied by an appropriate proposal with a view to the establishment of a single value;

Whereas successive action programmes of the European Communities on the environment⁽⁶⁾ stress the importance of preventing and reducing air pollution;

Whereas in addition, the Community is, by virtue of Council Decision 81/462/EEC,⁽⁷⁾ a contracting party to the Convention on long-range transboundary air pollution, which provides in particular for the development of strategies and policies to limit and, as far as possible, gradually reduce and prevent air pollution;

Whereas reducing the sulphur content of gasoil serves to further one of the Community's objectives, which is to preserve, protect and improve the quality of the environment and to contribute towards protecting human health, rectifying environmental damage at source;

Whereas, in accordance with Directive 75/716/EEC, several Member States have already fixed a value of 0.2 % by weight; whereas some EFTA countries have decided to require a sulphur compound limit of 0.1 % by weight in heating gasoils;

Whereas Council Directive 88/77/EEC,⁽⁸⁾ as amended by Directive 91/.../EEC,⁽⁹⁾ concerning the emission of gaseous pollutants from diesel engines requires, inter alia, a substantial reduction in sulphur content in the second half of the 1990s; whereas meeting second-step standards for particulate emissions under that Directive supposes amongst others the availability on the market and the balanced distribution of automotive

(6) OJ No C 112, 20.12.1973, p. 1, OJ No C 139, 13.6.1977, p. 1 and OJ No C 46, 17.2.1983, p. 1.

(7) OJ No L 171, 27.6.1981, p. 11.

(8) OJ No L 36, 9.2.1988, p. 33.

(9) OJ No L

gasolins with a sulphur compound content not exceeding 0.05 % by weight as from 1 October 1995 and there is, therefore, a need to take appropriate measures for availability and balanced distribution of such fuel;

Whereas the increasing use of gasoline for motor vehicles implies further efforts with regard to automotive gasoline, in order to limit the adverse effects on air quality of this increase; whereas to fix a maximum sulphur content of 0.05 % by weight applicable from 1 October 1996 for automotive gasoline provides the industries concerned with a sufficient period for the technical adaptation required;

Whereas a sudden change in crude oil supplies leading to an increase in average sulphur content may, in view of the available desulphurization capacity, jeopardize supplies to consumers in a Member State; whereas it would therefore seem advisable to authorize that Member State to derogate under certain conditions from the sulphur content limits laid down in respect of its own market;

Whereas checks should be carried out to ascertain the sulphur content of gasolins placed on the market; whereas a uniform method based on the best available technology should be adopted for this purpose;

Whereas it is to be expected with a view to Directive 91/.../EEC that there will be a switch to the use of automotive gasoline with a low sulphur content of 0.05 % by weight where this does not entail excessive costs for the consumer;

Whereas Member States can in general introduce fiscal incentives to make it beneficial for consumers to buy environmentally inoffensive products provided such incentives are compatible with the Treaty; whereas the need for a rapid improvement in air quality especially in urban areas and the fulfilment of the requirements laid down by the EEC Directives on the reduction of gaseous pollutants from diesel engines make it particularly appropriate to take advantage of this possibility to make available as quickly as possible automotive gasoline with a sulphur content of 0.05 % by weight,

HAS ADOPTED THIS DIRECTIVE:

Article 1

1. For the purposes of this Directive, gasoil shall mean any petroleum product falling under CN codes 2710 00 61, 2710 00 65, or 2710 00 69, or any petroleum product which, by reason of its distillation limits, falls into the category of middle distillates intended for use as fuel and of which at least 85 % by volume, including distillation losses, distills at 350°C.
2. This Directive shall not apply to gasoils:
 - contained in the fuel tanks of vessels or of motor vehicles crossing a frontier between a third country and a Member State,
 - intended for processing in the refining industry.

Article 2

1. Member States shall take all necessary steps to ensure that automotive gasoils can be marketed in the Community only if their sulphur compound content, expressed in sulphur (hereinafter "sulphur content"), does not exceed:
 - 0.2 % by weight as from 1 October 1994,
 - 0.05 % by weight as from 1 October 1996.
2. Member States shall ensure the availability and balanced distribution of automotive gasoils with a sulphur content not exceeding 0.05 % by weight as from 1 October 1995. Gasoil of this quality shall represent, as from this date, not less than 25 % of the total amount of automotive gasoil distributed in each Member State.

3. Member States shall take all necessary steps to ensure that heating, industrial and bunker gasoils can be marketed in the Community only if their sulphur content does not exceed:

- 0.2 % by weight as from 1 October 1994,

- 0.1 % by weight as from 1 October 1999.

4. If, as the result of a sudden change in the supply of crude oil or petroleum products, it becomes difficult for a Member State to apply the limit on the maximum sulphur content of gasoil, that Member State shall inform the Commission thereof. The Commission may authorize a higher limit to be applicable within the territory of that Member State for a period not exceeding six months, and notify its decision to the Council. Any Member State may refer the Commission's decision to the Council within one month. The Council, acting by a qualified majority, may take a different decision within two months.

Article 3

Member States may not, as from the dates of application laid down in Article 2 (1) or (3), prohibit, restrict or impede the marketing of gasoils, on the grounds of sulphur content, provided they comply with the requirements of this Directive.

Article 4

1. Member States shall take the necessary measures to check by sampling the sulphur content of gasoils which are marketed.
2. The reference method adopted for determining the sulphur content of gasoils which are marketed shall be that defined by method ISO 8754. The statistical interpretation of the results of the checks made to determine the sulphur content of the gasoils marketed shall be made according to standard ISO 4259 (1979 edition).

Article 5

As from the date laid down in Article 6, Directive 75/716/EEC is replaced by this Directive.

Article 6

Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive not later than 1 October 1993.

They shall forthwith inform the Commission thereof.

When Member States adopt these provisions, these shall contain a reference to this Directive or shall be accompanied by such reference at the time of their official publication. The procedure for such reference shall be adopted by Member States.

Article 7

This Directive is addressed to the Member States.

Done at Brussels,

For the Council
The President

IMPACT ASSESSMENT FORM

THE IMPACT OF THE PROPOSAL ON BUSINESS
with special reference to small and medium sized
enterprises (SMEs)

Title of proposal :

Report and draft proposal from the Commission on the implementation of Directive 87/219/EEC, on the approximation of the laws of the Member States relating to the sulphur content of certain liquid fuels

Reference Number (Répertoire) : 397.2

The proposal

1. Taking account of the principle of subsidiarity, why is Community legislation necessary in this area and what are its main aims?
Article 6 of Directive 87/219/EEC requires that the Commission should monitor the effects of applying this Directive and submit a report to the Council accompanied by an appropriate proposal with a view to the establishment of a single value for sulphur content. The aim is to come to further reductions of sulphur, particulates and HC/CO emissions from vehicles. The 0.05 % sulphur is especially required to reach the emission standards as mentioned for the 2nd stage of the recent adopted common position by the Council on the Directive for heavy duty diesel engines.

The impact on business

2. Who will be affected by the proposal?

- which sectors of business?

The oil companies (refineries, distribution service stations) and the SME's (supply, storage marketing).

- which sizes of business (what is the concentration of small and medium sized firms)?

Several thousands (from big to small).

- are there particular geographical areas of the Community where these businesses are found?

The refineries and storage/distribution facilities are often found near harbour and railway infrastructure

3. What will business have to do to comply with the proposal?

The refineries have to install additional installations mainly for the reduction to the level of 0.05 % sulphur level.

4. What economic effects is the proposal likely to have?

- on employment
The additional infrastructure has to be build.
- on investment and the creation of new businesses
The total investment is estimated 0.5 - 4 milliard US dollar
- on the competitive position of businesses
Independent distributors could have a problem in obtaining the low sulphur content gasoil on the market in case the refineries do not offer a surplus on the market for selling outside their own distributing system. The European refineries have the advantage that they can distribute their low sulphur content gasoil immediately after the production is started.

5. Does the proposal contain measures to take account of the specific situation of small and medium sized firms (reduced or different requirements etc.)?

No

Consultation

6. List the organisations which have been consulted about the proposal and outline their main views.

CONCAWE (environment office of the oil industry) and UPEI (independent oil merchandisers) and both can agree with the proposals of the draft Directive.

Europe can agree with the reduction to 0.2% sulphur but prefers a more detailed examination before a decision could be taken on the necessity of the 0.05% for automotive use.

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