European Economic and Social Committee

NAT/172

Sulphur content of marine fuels

Brussels, 14 May 2003

OPINION

of the European Economic and Social Committee

on the

Proposal for a Directive of the European Parliament and the Council amending Directive 1999/32/EC as regards the sulphur content of marine fuels

COM(2002) 595 final – Vol. II - 2002/0259 (COD)

2 Rue Ravenstein, B-1000 Brussels Tel. +32 (0)2 546 90 11 Fax +32 (0)2 513 48 93 Internet http://www.esc.eu.int

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On 10 December 2002 the Council decided to consult the European Economic and Social Committee, under Article 251 of the Treaty establishing the European Community, on the

Proposal for a Directive of the European Parliament and the Council amending Directive 1999/32/EC as regards the sulphur content of marine fuels
COM(2002) 595 final – Vol. II – 2002/0259 (COD).

The Section for Agriculture, Rural Development and the Environment, which was responsible for preparing the Committee's work on the subject, adopted its opinion on 1 April 2003. The rapporteur was **Mr Retureau**.

At its 399th plenary session (meeting of 14 May 2003), the European Economic and Social Committee adopted the following opinion by 101 votes to two with eight abstentions:

1. Commission proposal

1.1 Environmental impact of burning marine fuels containing sulphur

1.1.1 Emissions of sulphur dioxide (SO_2) and secondary inorganic sulphate particles formed as a result of its oxidation, as well as of primary soot particles and nitrogen oxides (NOx), are given off into the atmosphere when fossil fuels that naturally contain sulphur are burnt in ships' engines. These emissions can damage human health and the environment (acidification, damage to sensitive environments and certain materials, formation of ground-level ozone).

1.1.2 The impact of ships' emissions on exceedances of critical loads of acidity is particularly noticeable in countries bordering on the North Sea, the Baltic Sea, the English Channel and the Irish Sea. In northern European countries, maritime transport contributes to exceedances of critical loads of acidity by more than 50% in most coastal areas, while in the EU as a whole ships' emissions are responsible for 20-30% of the air concentrations of secondary inorganic particles in most coastal areas, according to a study commissioned by the Commission.

1.1.3 Ships' emissions as a whole have a measurable harmful impact on human health throughout the European Union, in terms of effects on mortality and morbidity (illnesses, including exacerbation of asthma, higher incidence of bronchitis and heart failure).

1.2 Aims of the proposal

1.2.1 The proposal aims to reduce ships' emissions of sulphur dioxide and particulate matter by amending Directive 1999/32/EC and, in particular, by:

– introducing a 1.5% sulphur limit for marine fuels used by all seagoing vessels in the North Sea, the English Channel and the Baltic Sea (SOx emission control areas = SOxECAs), in line with MARPOL Annex VI[1];

– introducing a 1.5% sulphur limit for marine fuels used by passenger vessels on regular services to and from any Community port, in order to improve air quality around ports and coasts, including outside the emission control areas defined in MARPOL Annex VI, and to create sufficient demand to ensure an EU-wide supply of low sulphur fuel;

– introducing a 0.2% sulphur limit for fuel used by seagoing vessels at berth in Community ports and by inland vessels, in order to reduce local emissions of sulphur dioxide and particulate matter and improve air quality locally.

1.2.2 Two other types of amendments supplement the amendments concerning marine fuels:

– amendments to the inland heavy fuel provisions arising from Directive 2000/80/EC relating to large combustion plants, and

– the creation of a regulatory committee to agree future technical amendments which do not require political co-decision.

1.3 **Cost-benefit analysis**

1.3.1 With regard to the cost to EU refiners of producing lower sulphur marine fuels, it has been shown that the greater the quantity of low sulphur fuels produced, the greater the unit production costs per tonne. This means that as the demand for low sulphur fuels rises, so does the price.

1.3.2 The Commission assumes that the costs borne by Community refiners will be passed onto shipowners in the form of higher fuel prices. The annual incremental cost of the SOxECA proposal for 2006 is assumed to be (7m x €50) + (7m x €55) = €735m. The annual incremental cost of the passenger vessel proposal for 2007 is assumed to be (4m x €50) = €200m. The annual incremental cost of the in-ports proposal for 2006 is assumed to be (2.3m x €57.75) = €133m. From 2008, the sulphur limit will decrease from 0.2% to 0.1% and consumption will increase to 2.4 million tonnes. The annual incremental cost of the in-ports proposal for 2008 is assumed to be (2.4m x €2) = €4.8m.

1 Convention of the International Maritime Organisation (IMO) for the prevention of marine pollution; to enter into force, Annex VI must be ratified by at least 15 flag states representing at least 50% of the gross tonnage of the world's merchant shipping. Only 25% of the gross tonnage is represented so far, but the expected date of entry-into-force has been brought closer by the announcement that Panama is going to ratify.

1.3.3 The overall benefits of the proposal are derived from the reduced emissions of conventional air pollutants associated with reducing the sulphur content of marine fuels consumed in the SOxECA and in EU ports. Reductions in conventional pollutants have a number of direct benefits for human health and the environment.

1.3.4 In its quest to weigh up the costs against the benefits in money terms, the Commission thinks that some of the effects can be monetised by attaching a benefit to each tonne of pollutant reduced but that others (acidification) cannot be monetised. Nevertheless, it concludes that on balance its proposals will have a positive impact.

1.3.5 The annual net benefits are estimated to be:

- €645,721,000 for the SOxECAs (2006);
- €209,400,000 for the passenger vessels proposal (2007);
- €787,975,000 and €26,194,000 for the in-ports proposal (2006 and 2008).

1.3.6 This is based on a conservative estimate which does not take account of the fact that of the 50 ports with the highest emissions, ten have a population of around 500,000 or more. Of these, five are European capitals and four have a population of one million or more. In these areas, the monetised benefit per tonne of SO_2 and PM reduced will be 5 to 15 times greater than that used for the purpose of the cost-benefit analysis, because more people benefit from the emissions reductions.

1.3.7 Reducing the sulphur content of marine fuel will also have a slight effect on emissions of carbon dioxide (CO_2), the principal greenhouse gas which contributes to climate change. Desulphurising fuels is energy-intensive and leads to increased CO_2 emissions from refineries. On the other hand, lower sulphur fuels have a higher specific energy, leading to lower CO_2 emissions from vessels. Consequently, the Commission has not taken CO_2 into account in its cost-benefit analysis.

2. General comments

2.1 The Committee approves the aim of the Commission's proposals, which seek to reduce the pollution caused by emissions from ships' engines.

2.2 It notes that these proposals comply with the provisions in Annex VI of the MARPOL Convention, although the number of countries that have ratified Annex VI so far and the commercial tonnage they represent show that the hopes of a rapid entry-into-force are too optimistic unless IMO members display more political will.

2.3 The Committee firmly hopes that all the EU member countries and candidate countries which have not yet ratified MARPOL Annex VI will consider all the opportunities available to them

for doing so as soon as possible. Annex VI is an important instrument for protecting human health and the environment, which are particularly under threat in all port areas (especially when they are densely populated) and numerous countries (especially the coastal states of the North Sea, the English Channel, the Baltic Sea and the Mediterranean countries).

2.4 It considers that the Commission proposals for reducing the sulphur content of marine fuels constitute a strong political case worldwide in favour of the ratification of Annex VI and that they are likely to speed up the entry-into-force worldwide of the MARPOL provisions for reducing emissions of SO_2, NOx and particulate matter resulting from the combustion of heavy fuel oils and marine gas oils.

2.5 The Committee thinks that the maximum limit of 1.5% is fair at the present stage and that opting for this ceiling is bound to speed up its entry-into-force worldwide. This will soon put an end to the main source of distortions of competition with third countries, because they will be subject to the same constraints.

2.6 In order to obtain limits below 1.5% (such as 1% or 0.5%) for heavy fuel oils for vessels, it would be necessary to use much more costly methods of refining, which would have a much higher energy consumption and produce higher CO_2 emissions.

2.7 The 0.2% limit for vessels at berth and inland shipping is fully justified in ports in urban areas and in terminals far away from urban centres, where the consequences of pollution are just as serious for sailors, dockers and all the personnel and users in the port areas as well as neighbouring firms, passengers and residents living close by. The Committee therefore approves the general application of this ceiling, as proposed by the Commission. It also recommends with a view to facilitating its application that the Commission evaluates how vessels can best be adapted to this ceiling from the technical, safety and environmental point of view.

2.8 The cost-benefit analysis provides valuable economic indications about the incremental cost of the new maximum limits on sulphur content for maritime operators and hence for the final customers of the goods being transported. However, the general benefits in terms of human health and life expectancy and in terms of protecting fragile environments in northern Europe threatened by acid rain clearly outweigh, in the Committee's view, the extra cost of refining and vessels' running costs. Even though not all of these major benefits are easy to evaluate in money terms, the balance is firmly in favour of the proposed measures to reduce sulphur and particulate matter.

2.9 Environmental protection and the protection of human health are prominent among the main EU objectives and are of direct interest to the inhabitants of present and new member states. The Committee therefore gives its unreserved support to the Commission's proposals, which

in its eyes are realistic and proportionate. It is politically desirable to implement these proposals as soon as possible.

3. **Specific comments**

3.1 So that the proposed measures are more effective, the engines of new vessels should be designed or adapted to the new composition of the fuels so as to make them more energy-efficient and reduce CO_2 emissions, thereby eventually compensating for a possible increase in CO_2 emissions from refineries as a result of desulphurisation operations.

3.2 The Committee is not proposing, at this stage, limits lower than those proposed by the Commission, which represent a reduction of about one half compared with the average sulphur content of fuels at present (close to 3%). This is because the draft effectively supports the aim of having the 1.5% limit applied universally as soon as possible. This must not stop new drafts being planned subsequently, and the Committee encourages the Commission and the member countries to work in that direction, especially within the IMO framework.

Brussels, 14 May 2003.

The President of the European Economic and Social Committee	The Secretary-General of the European Economic and Social Committee
Roger Briesch	**Patrick Venturini**