

Measure 41: Sulphur content of marine fuels

First page:

Policy package:

4D: Sea and inland waterway Safety, quality and environment

Measure 41:

Sulphur content of marine fuels: “*Reduction of environmental impacts of maritime transport*”

What is the problem being addressed ?

Reducing emissions of greenhouses gases and air pollutants is an objective of the White Paper and EU environmental policy in general. This proposal is part of a wider EU strategy to reduce air emissions from ships, and is related to the EU’s programme for the promotion of Short Sea Shipping.

As stated in Annex III to the recent Communication of the Commission on Short Sea Shipping of 2 July 2004, there are few shipping emission estimates. Nevertheless, in February 2000, the Italian branch of the Friends of the Earth International published a study on the environmental benefits of maritime transport (CONFITARMA, ECSA, Amici della Terra, 2000). The conclusions of that study concur with the Commission Communication from 1999 and show that shipping is environmentally sustainable. Furthermore, later sources (Lloyd’s Register of Shipping, Dutch Ministry of Transport, Public Works and Water Management, 2001) seem to confirm the low energy consumption and CO₂ emission levels in shipping. However, these later sources seem to indicate also that, with the introduction of cleaner engines and fuels as well as catalytic converters in heavy goods vehicles, road transport is closing the gap on certain fronts. For instance, as comes to particulates and nitrogen oxides (NO_x), the emissions from vehicles equipped with the newer EURO road emission standards are likely to fall below those of shipping. Nevertheless, when taking into account a broader scope of external costs, such as noise, accidents and congestion, Short Sea Shipping will maintain its better performance also in relation to future technological standards in road transport (COM/2004/453 final – Annex III). However, the most critical pollutant is SO₂: although sulphur dioxide emissions represent only a very small fraction of total sulphur emissions, maritime shipping emissions contribute considerably to the totals. Since there is a direct correlation between fuel sulphur-content and emissions, reduction of the latter can be obtained simply by burning low sulphur fuel.

Measure 41 aims therefore to reduce sulphur oxide (SO_x) emissions from ships by implementing the 1,5% sulphur limit for marine fuels in the “SO_x Emission Control Areas” established under Annex VI to MARPOL 73/78. Furthermore, the measure aims to apply the same sulphur limit to fuels for passenger vessels (i.e. ships certified to carry more than 12 passengers) on regular services to and from Community ports. So, this measure is part of a wider European strategy to ensure that maritime transport will be even less harmful to the environment than it is today, in accordance with the 6th Community Environment Action Programme (identifying and undertaking specific actions to reduce greenhouse gas emissions from marine shipping). The measure is closely linked to measure 32, dealing with water pollution caused by accidents or deliberate discharges.

Measure’s costs and/or benefits:

The main cost category are adaptation costs of industry (maritime shipping) to the new requirements (e.g. lower sulphur content of fuel). In a gradual phasing-in these costs will be low. There has been some discussion about the economic consequences of the height of these costs in discussions with the EP in 2003.

Legislative implementation at the EU level:

In November 2002 the Commission presented a proposal for a directive to reduce the sulphur content of marine fuels used in the European Union: COM (2002) 595: European Commission Strategy to reduce the impact of ship’s atmospheric emissions on the environment and human health, including a proposal to reduce the sulphur contents of marine fuels used in the European Union.

COM(2003) 155 (Programme for the Promotion of Short Sea Shipping) announces: “*Improving the environmental performance of Short Sea Shipping*” as an upcoming legislative action.

Negotiations are on-going, and a political agreement has been reached in Council in June 2004; final adoption is expected by May 2005 at latest.

<p><i>What are the objectives ?</i></p> <p>Maritime transport has an higher energy-efficiency than other modes of transport and is, in general, less harmful to the environment than other modes of transport per tonne or passenger carried. A modal shift to Short Sea Shipping could, for instance, constitute an important element in the Community strategy to fulfil the Kyoto obligations. The good environmental performance of shipping is, however, hampered, in particular, by sulphur dioxide (SO₂) emissions that are significantly higher than in other modes. Since the present discussed proposals concern regulation-type measure acceptance strongly depends on the economic consequences of the measure. The experience is that the industry usually complies. So objectives are achievable.</p>
<p><i>Interactions with other WP measures:</i></p> <p>As explained above measure 32 is a closely connected measure. There are positive interactions with measure no. 42 (Marco Polo) and measure no. 44 (revision of trans-European Network).</p>

Second page:

<p><i>Output indicators:</i></p> <ul style="list-style-type: none"> • Number of ships caught by coastal or port authorities because of environmental offences (inspection data).
<p><i>Outcome indicators: intermediate impacts on transport markets</i></p> <p>An obvious impact should be observed on the fuels market, by monitoring the following indicators:</p> <ul style="list-style-type: none"> • Level of availability and usage of marine fuels with a reduced amount of sulphur.
<p><i>Outcome indicators: final impacts on transport users and non users</i></p> <p>Key outcome indicators include:</p> <ul style="list-style-type: none"> • Reduced amount of emission of air pollutants from shipping. • Improved water and air quality (in particular in the port areas).