



European Maritime Safety Agency

Workshop Report

Revision of MARPOL Annex VI

Lisbon, 15th & 16th February 2007

Report

EMSA Workshop on the revision of MARPOL annex VI Lisbon, 15-16 February 2007

Background

In accordance with the objectives and tasks as laid down in its founding Regulation (EC) 1406/2002 (as amended), as well as under a specific request agreed with DG ENV, EMSA has been providing technical assistance to the European Commission on the revision of MARPOL 73/78 annex VI on regulations for the prevention of air pollution from ships.

At its 53rd session in July 2005, the Marine Environment Protection Committee (MEPC) agreed on the need to undertake a review of Annex VI. Target date for the review is 2007, but 2008 seems to be a more realistic date. The main elements of the review are:

- to examine available and developing techniques for the reduction of emissions of air pollutants; to review the relevant technologies and the potential for a reduction of NO_x and SO_x emissions and recommend future limits for NO_x and SO_x emissions;
- to consider the need, justification and possibility of controlling volatile organic compounds emissions from cargoes;
- to study current emission levels of PM from marine engines, and recommend actions to be taken for the reduction of PM from ships;
- to consider reducing NO_x and PM emission limits for existing engines.

In view of recent developments at EU and global level, EMSA and the European Commission decided to convene an expert Workshop on air pollution from ships, in order to stimulate the exchange of views among Member State experts and relevant main stakeholders, and to identify converging tendencies in order to facilitate a common EU approach at the international level.

The discussion at the Workshop centred on the results of the inter-sessional working group on the revision of MARPOL air pollution from ships held in Oslo in November last year in the framework of the International Maritime Organisation.

Workshop Objectives

The Workshop was divided into two sessions:

1. The first session, held on the morning of the 15th February 2007, was an open session for representatives/experts from the EU Member States, EEA States, Acceding and Candidate Countries, the European Commission and representatives of the main industry sectors associated with proposals submitted to the IMO or directly affected by those proposals..

The objective of this session was to stimulate an exchange of views on air pollution from ships among the participants and to offer an opportunity to the main industry representatives to present their respective positions.

2. The second session, held on the afternoon of the 15th and in the morning of 16th February 2007, was restricted to representatives/experts from EU and EEA Member States, Acceding and Candidate Countries and the European Commission.

The objective of the second session was:

- to stimulate an exchange of views among EU experts and the Commission on the air emissions from ships and to improve the level of information on current practices at EU policy and obligations;
- to work towards a common understanding of some of the key issues identified in the inter sessional working group report, reproduced the workshop working paper before further discussion at IMO level, notably at the next Sub-Committee on Bulk Liquids and Gases (BLG) (April) and at the Marine Environment Protection Committee (July).

Workshop Programme

The first day of the workshop was chaired by Mr. Willem De Ruiter, EMSA's Executive Director and the second day by Panagiotis Petropoulos, Head of Unit Implementation of EU Maritime Legislation at EMSA.

Duncan Johnstone, representative of the European Commission, presented the Thematic Strategy on Air Pollution and gave an orientation speech.

The 2 days workshop covered all 3 issues on the agenda.

Workshop Conclusions

For each session a full set of conclusions was agreed among the participants.

1st session - 15th February 2007 (morning)

The industry representatives presented the respective views on the current discussion on the revision of MARPOL annex VI.

During the discussion, the following points were raised:

- The current discussion only concerns the revision of MARPOL annex VI;
- Nevertheless, the current political framework has to be taken into consideration –notably effect on emissions of Green House gases- when discussing further the potential emission reduction from ships;
- The discussions have to be driven with a “balance” approach;
- The same approach should be used for all the alternatives when looking at the global environment impact.

2nd session – 15th (afternoon) and 16th (morning) February 2007

On the basis of the questions identified in the working papers, the following tendencies were noted:

1 Conclusion of the discussions on the Sulphur Oxides (SO_x):

- a. Most participants welcomed the need to follow a goal-based standard approach;
- b. Most participants agreed to lower the current sulphur cap (4.5 %) as this had had no discernible affect on observed sulphur levels in marine fuels. No firm figures were agreed, but when discussed, the tendencies were in the range of 1.0 % to 1.5 % sulphur content.
- c. A significant number of delegations expressed the wish to further consider the proposal tabled by INTERTANKO to switch to distillate fuel. They are of the opinion this solution has to be kept on the discussion table and has to be seen as a long term solution.

Other or interim measures may comprise use of lower sulphur content residual fuel at global level, or use of abatement technologies and other proven system. Furthermore, the number of SECAs – with stricter requirements - may be expanded.

- d. A majority of the participants was in favour of global solution instead of regional approaches. Monitoring and control issues were put forward as justification. For a large number of delegations, lowering sulphur levels in SECAs is an interim or a short term solution. Some delegates prefer the concept of SECAs and argued the need for sulphur reductions outside these areas or even within these.

2. Conclusion of discussion on the Nitrogen Oxides (NOx)

- a. A small majority of delegations was not in favour of a general reduction of NOx emission to existing engines. A case by case solution was mentioned by numerous delegations. A number of delegations expressed the need to address the existing engines where possible, addressing special segment (e.g: the 2 strokes –slow speed engine).
- b. The two tier approach was approved by all the delegations. The tier II would be achievable through minor in-engine modification (20 % to 30% reduction was mentioned). For the tier III, engine modifications (like humid air motor) could lead to an additional 50% reduction. Furthermore, the Selective Catalytic Reduction (SCRs) constitutes a probable promising technology to even further reduce NOx emission. All delegations supported a global approach over the introduction of NECAs, NOx emission control areas.
- c. For a majority of delegations, the reduction of particulate matter emissions (PM) is linked to fuel quality. Several delegates mentioned such standards would need a constant quality low sulphur fuel. A large number of delegates mentioned that the PM limits or issues of certification should be addressed only in new engines.

3. Conclusion of the discussion regarding the development of fuel specification in MARPOL Annex VI

Referring to the previous point, fuel specification / standards would be developed to address particulate matters. If developed, all type of fuel used by ships -residual and distillate fuels – should be better specified.

The specification should be preferably developed at IMO level, with the assistance of the International Standard Organisation (ISO).

Annexes:

1. Workshop Agenda
2. List of Participants

Agenda

Workshop on the revision of MARPOL annex VI

15th and 16th February 2007

EMSA

Avenida Dom Joao II
Lote 1.06.2.5
1998-001 Lisboa

Day 1

- 9h00 - 9h30 Registration and welcome coffee
- 9h30 – 9h45: Welcome by EMSA
- 9h45 – 10h15: Presentation of the air quality strategy and introduction of the working paper and by European Commission
- 10h15 – 10h40: Using distillate fuel to reduce air pollution from ships, presentation by INTERTANKO
- 10h40 – 11h: 15: Questions and Answers
- 11h15 – 11h30: coffee break
- 11h30 – 11h50: Revision of MARPOL Annex VI: impact of the different scenarios on the oil sector, by EUROPIA
- 11h50 – 12h20: Possible evolution and technical solution for ship's engine by EUROMOT
- 12h20 – 12h40: Air Emissions – a response by the International Shipping Industry, by ICS
- 12h40-13h00: Questions and answers
- 13h00 – 14h30: Lunch
- 14h30 - 14h45: Orientation speech by the European Commission
- 14h45 – 16h00 : Discussion on the possible option to reduce sulphur emissions from ships
- 16h00 – 16h30: Coffee break
- 16h30– 17h45: Discussion on possible action to reduce NOx emission (new and exiting engines)
- 17.45 – 18h: Conclusion of the first day by EMSA

Day 2

- 9h00 - 9h30: Welcome coffee
- 9h30 – 10h15: Further discussion on sulphur / NOx
- 10h15-10h45: Discussion on Particulate Matters
- 11h15- 11h30: Coffee Break
- 11h15 –12h: Discussion on the possible need to develop a fuel quality standard
- 12h – 12h30: Conclusion of the Workshop by EMSA
- 12h30 – 14h: Lunch Break

List of Participants – EMSA Workshop on the revision of MARPOL annex VI – 15 & 16 February 2007, Lisbon

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