

PREVENTION OF AIR POLLUTION FROM SHIPS

A Goal-based Approach to Air Emissions

Submitted by International Chamber of Shipping

SUMMARY

<i>Executive Summary:</i>	ICS provides further background to the ICS paper BLG 11/5/8.
<i>Action to be taken:</i>	Paragraph 10
<i>Related documents:</i>	MEPC 56/4/13, MEPC 56/10/1, BLG 11/5/8

Introduction

1. This document is submitted in accordance with the provisions of paragraph 4.10.5 of the Committee's Guidelines (MEPC/Circ.405) and comments on MEPC 56/4/13 by the secretariat.
2. ICS is committed to the development of a process to reduce emissions from international shipping in the shortest possible timescale and welcomes the initiative by the Secretary General in announcing his intention to establish a Scientific Group to provide background material for decisions to be taken by MEPC. In its submission to BLG 11 (BLG 11/5/8), ICS made some proposals on possible approaches to dealing with this complex problem. This paper invites the attention of the Sub-Committee to principles held to be important by the International Chamber of Shipping.

Goal-based Approach

3. IMO has taken a significant step in examining the application of a Goal-based Approach to requirements for the construction of tankers and bulk carriers. ICS believes that the same philosophy is applicable to the reduction of air emissions. Under this approach the legislation, whether in the current revision of MARPOL Annex VI or perhaps a wider, longer term, requirement, would set emission limits for each exhaust gas constituent (i.e. SO_x, NO_x, PM etc). In the spirit of the Goal-based Approach the mechanisms employed to achieve the limit should be left to the operator of the ship. The operator should have the choice of compliance mechanism best suited to any given commercial operation. Several compliance mechanisms are being discussed and these include but are not limited to; specified fuel type, exhaust gas abatement technology, market mechanisms. It is too early to be certain of the contribution that each of these will make to the final solution but it seems essential to allow the solution, that enables the desired level of emission to be achieved, to be found in the market place.

Holistic Approach

4. One of the features of reducing air emissions from any internal combustion engine is that measures taken to address one problem can lead to an *increase* in another gaseous emission. Further, any change made to the engine that absorbs energy will lead to reduced engine efficiency, greater fuel consumption and hence an increase in CO₂ emission. The same argument applies to any requirement placed on the ship that reduces the efficiency of its passage through the water or places a demand for increased energy consumption. For example it is unlikely that the need to treat ballast water under the Ballast Water Management Convention can be achieved without the consumption of additional energy, with a resultant increase in gaseous emissions. This highlights the need for an analysis of the overall environmental impact of future legislation especially that which may require the installation of additional equipment. However in the short term, ICS is merely seeking solutions that provide a reasonable balance between reduced air emissions of each type.

5. Since the consideration of CO₂ emissions is an integral part of the holistic approach, ICS believes that current MEPC work to address CO₂ emissions and CO₂ indexing should be brought together with work on the reduction of air pollutants covered by Annex VI. The consideration of these issues jointly and in a combined manner is most likely to yield the optimal balance.

Innovative Solutions

6. Mankind has proved throughout its history that the emergence or recognition of a problem is the very stimulus required for an innovator to create a new solution. A Goal-based Approach to air emission reduction poses a challenge for science and technology to solve. Knowledge of a need to achieve emission limits for international shipping should be all of the stimulus required by technicians to find new means to provide the power requirements for ships and to explore alternative fuel and abatement options.

Short and Long Term Reduction Mechanisms

7. As stated above, ICS is committed to the earliest possible reduction of air emissions, through a Goal-based Approach. It may be worthy of consideration that limits set now, in the knowledge of what can be delivered by current technology, could be exceeded in the future through innovation. If this is agreed, then it would be appropriate to agree achievable limits under the current revision of MARPOL Annex VI and to keep the agenda item open with a view to further reductions as technological solutions are developed. Such an approach would produce deliverable reductions from current generation ships and be the incentive for innovative developments.

8. Taking this approach further, some measures may require the assessment of transition arrangements and future studies are likely to be required in this area in particular. These should ensure that suitable transition arrangements are taken into account such that the active service life of ships is not inadvertently and artificially extended by inappropriate measures.

9. Furthermore, ICS believes that it would be feasible to reach consensus on the short term solutions for SO_x and NO_x and therefore MEPC is invited to consider applying such measures at the earliest opportunity. Additional long-term measures could then be discussed with a view to stimulating innovation, making the appropriate provisions for any transitional measures that may be required and be considered for adoption at an appropriate later date.

Action Requested of the Committee

10. The Committee is invited to consider these comments in its deliberations and to decide as appropriate.