

REVISION OF MARPOL ANNEX VI, THE NO_x TECHNICAL CODE AND RELEVANT GUIDELINES

General Principles

Submitted by ICS

SUMMARY

Executive summary: This paper draws the attention of the Intersessional Meeting to principles raised in paper BLG 10/14/5 by shipping industry representative organisations and further develops these principles in support of the review of MARPOL Annex VI

Action to be taken: Paragraph 11

Related documents: BLG 10/14/5,

Background

1. This submission amplifies comments previously submitted as BLG 10/14/5 (ICS, BIMCO, Intercargo, ICCL and Intertanko).
2. ICS recognises and strongly supports the need to improve the global environment and to address local health and environmental concerns in port areas through reducing air emissions from ships engaged in international trade. Problems caused by the delay in the entry into force of MARPOL Annex VI, whilst the ratification criteria were met, have led to a growth in regional air emission controls that tend to inhibit rather than promote the efficiency of international trade. However it must also be recognised that Annex VI has only recently entered into force and the improvements generated have yet to be measured, particularly in the Baltic SECA.
3. ICS has always advocated a holistic approach to reducing air emissions from shipping and believes that it is important to undertake a scientific assessment of the critical emissions to be controlled and to create a situation where specified local environmental vulnerabilities can be noted and justified. This could be termed 'net environmental benefit', since it takes into account the need to reduce air emissions from all sources whether at sea or on land. The whole subject is characterised by complex inter-relationships of cause and effect involving the global and local environment and the full range of contributory factors such as fuel type and the component parts of the fuel, the global distribution and availability of bunker fuels, the mechanisms available for reducing emissions and their relative contribution to the optimum solution. The situation is so complex that it is most unlikely that a single solution can be found to address all of the vulnerabilities, the different sectoral needs of the shipping industry and, that would take proper account of the adequacy of fuel supplies.

Components of MARPOL Annex VI

4. SO_x. The current requirement under Annex VI recognises SO_x as a regional, rather than a global problem and takes account of this through the establishment of two sulphur emission control areas (SECAs) within the global sulphur cap of 4.5%. At present, only one SECA is in force with the second becoming effective in mid 2007. It is understood that in recognition of other similar regional vulnerabilities to sulphur deposition, applications for additional SECAs may be anticipated in the near future. ICS believes that, in the present situation, the SECA concept is a reasonable solution that not only addresses the local vulnerability but also recognises that the available supply of low sulphur fuel is ultimately limited by the sulphur content of the crude oil base stock and the cost-benefit of removing sulphur at the refinery. This is not only an issue of investment in refineries but also recognises that the energy required to remove sulphur produces increasing amounts of emissions (notably carbon dioxide) to the detriment of the global environment.

5. The operation of ships under a requirement to carry various types of fuel is not without its problems and leads to some identified safety concerns but in the view of ICS the SECA approach is a pragmatic one. Should it be determined that a lower global cap is appropriate then a careful evaluation will be required of the availability of low sulphur fuel to meet the demand and to take into account that further SECA applications are expected. ICS also recognises that there are calls for a lower SECA cap and wishes to establish two important principles. Firstly, all SECAs should have the same cap in order to minimise the number different fuels to be carried on board. Secondly for technical engineering reasons the lowest HFO sulphur content that some current engines can realistically accept for safe continuous operation is 1.0%.

6. NO_x. Proposals to reduce NO_x emissions have been debated in some detail in the previous discussions. ICS takes the view that the proposal for a first tranche of NO_x reductions through 'in engine' improvements at engine manufacture can be fully supported, with the single proviso that such enhancements should be required to have only a very limited impact on engine efficiency and not compromise safety in any way. Measures that reduce engine efficiency to any significant degree should be viewed with scepticism since this can only lead to an overall increase in fuel consumption and hence increased carbon dioxide emission. ICS believes that further discussion on a second tranche of reductions using abatement equipment must take full account of effects on engine efficiency and hence net environmental benefit.

7. Particulate Matter (PM). ICS welcomes the proposal to include PM provisions in the revised Annex VI and notes the need to define the range of PMs to be addressed and to consider the appropriate mechanisms for reducing PM emissions.

8. Volatile Organic Compounds (VOC). ICS also welcomes the intention to include a VOC management plan in the revised Annex VI and commends the Intertanko VOCON procedure as a model to be considered as a basis for further discussion. It should be recognised that the carriage of VOC equipment on board tankers is only half of the solution and implies that shore return facilities will be available in the terminals.

9. Fuel Quality. Fuel quality is directly related to the safe operation of ships and the preservation of quality must underpin all of the measures that may be considered in the revised Annex VI. The increased use of blended fuel raises its own particular problems. This is not confined to the recognised problem of compatibility but there is also an increased potential that recognised means for evaluating the ignition quality may not apply and that a fuel with an unacceptable ignition quality could be bunkered.

Options

10. ICS considers that the complexity involved in further reducing emissions from ships in the current review indicates that a range of options will emerge in order to provide a balanced and achievable package. It is likely that the options will include, but may not be limited to; low sulphur heavy fuel oil, alternative fuels, shore power standards, SO_x and PM emission abatement equipment and emission trading schemes. It is also likely that practical challenges will emerge as options are implemented over the coming years and ICS recommends that provision should be made now for a further review of air emission achievements five years after the entry into force of the revised Annex VI.

Action requested of the Air Emissions Working Group

11. The Intersessional Working Group is requested to take the above comments into account during its deliberations.