



## IMCO

INTERNATIONAL CONFERENCE ON  
MARINE POLLUTION, 1973  
Committee II  
Agenda item 2

CONSIDERATION OF THE DRAFT TEXT OF ANNEX I OF THE  
INTERNATIONAL CONVENTION FOR THE PREVENTION OF  
POLLUTION FROM SHIPS, 1973

Comments on the Proposals of the Working Group  
on Segregated Ballast (MP/CONF/C.2/WP.37)

Note by the French delegation

1. General Remarks

The Working Group assumed that a formula based on length (and, in its proposed draft Regulation 13, on trim) would be the formula which would exert least influence on the design of future ships.

It is clear, however, that the Regulation as proposed will tend, other things being equal, to produce:

- (a) a reduction in length
- (b) a displacement of weight forward.
- (a) An owner who orders a ship does so with the aim of meeting the requirements of a commercial programme which is in fact dictated, in technical terms, solely by the ship's carrying capacity, i.e. by the product of the volume of cargo spaces by speed (or alternatively, if carrying capacity is expressed not in terms of volume but in terms of weight, the product of real deadweight by speed).

If, for the sake of simplicity, we assume that the speed is given, we may say that the only factor which is of real interest to the owner is that of the volume of cargo spaces, a volume which is determined in an intangible way before any work on the ship's design is initiated.

On the contrary, the precise determination of length is not in itself of concern to the ship's basic programme: the choice of this value is dictated by a whole number of other very important considerations (behaviour at sea, structural resistance, propulsion power, etc. ...), considerations the sole object of which, in terms of a given commercial programme, is to optimise the vessel and, in particular, to minimise its cost.

If we add to these existing considerations a further regulation requiring a certain segregated ballast capacity, in other words a surcharge increasing with length, it is clear that an influence is being exerted which will tend to shift the optimum in the direction of reduced length (and, correlatively, in the direction of greater breadth: the effect on shipyards and on methods of construction or repair could be considerable).

The adoption of the proposed Regulation 13 would thus lead to the emergence of ships that are more thickset than existing ships. This factor is recognised in the first sentence of note 35 to Regulation 13 contained in the original draft text MP/CONF/4. What would be the results from the point of view that concerns us here namely pollution prevention - of a reduction in length of a vessel of a given carrying capacity? As has been shown in document MP/CONF/C.2/WP.9, such a reduction would result in a reduction in the ratio of the volume of ballast spaces to the volume of cargo spaces, or by a reduction in the ratio of displacement in ballast condition to displacement in loaded condition. It has been stated by the United States delegation, in its Report on Study I, that the reduction in pollution achieved by the adoption of segregated ballast, in other words the effectiveness of that solution, would be reduced if that ratio were reduced; protection against accidental pollution in particular is reduced if the ratio is reduced. It would therefore seem advisable to make specific mention of this ratio in the Convention.

- (b) The limitation of trim, for its part, will exert an influence tending to the displacement of weight forward. Although we do not argue that this will result in the appearance of ships with propellers placed forward, or ships the superstructures of which are placed forward or amidships as was the case with ships of the old type, we must emphasise that this encouragement of a lightening of the after-part of the vessel may not tend towards an improvement in safety.

In conclusion, the French delegation, while ready to accept the Working Group's proposals if this should prove to be the wish of the majority, wonders whether it might not, nevertheless, be preferable to adopt a Regulation which would use only that single parameter which is not subject to any adjustment on the part of the naval architect, namely the total volume of cargo spaces. Regulation 13 would then simply specify a minimum percentage of the total volume of segregated ballast spaces in relation to the total volume of cargo spaces.

2. Comments on Draft Regulation 13 annexed to the Report of the Working Group (MP/CONF/C.2/WP.37)

- (a) The first sentence of paragraph (2) could be deleted, since in fact the capacity resulting from the criteria laid down in sub-paragraphs (a), (b) and (c) of this paragraph has already been determined in order to ensure safe navigation in ballast condition.
- (b) The word "minimum" in the second sentence of paragraph (2) could be deleted for the same reasons. This would make the Regulation even clearer.
- (c) In the second sentence of paragraph (2), the phrase "in the ballast conditions at any part of the voyage" could be replaced by "in any ballast condition". Application of the criteria set out in sub-paragraphs (a), (b) and (c) would in fact be ensured by calculations made before the ship's entry into service, and not by actual measurement of the draught and trim of the vessel at different stages of its ballast voyages.

- (d) Sub-paragraph (a) of paragraph (2) should perhaps refer to average draught, which is less controversial than draught amidships.
  - (e) Sub-paragraph (b) of paragraph (2) could read "the trim does not exceed 0.015 L", which would be simpler and more direct.
  - (f) Sub-paragraph (c) of paragraph (2) could be simplified to read: "the propeller is (or propellers are) fully immersed".
  - (g) In paragraph (4) the phrase "and (3)" should perhaps be added after "paragraph (2)".
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