

SUB-COMMITTEE ON STABILITY AND
LOAD LINES AND ON FISHING VESSELS
SAFETY
54th session
Agenda item 9

SLF 54/9/5
11 November 2011
Original: ENGLISH

**DEVELOPMENT OF PROVISIONS TO ENSURE THE INTEGRITY AND UNIFORM
IMPLEMENTATION OF THE 1969 TM CONVENTION**

Unified interpretation on calculating volumes of spaces open to the sea

Submitted by Japan and the Republic of Korea

SUMMARY

Executive summary: This document contains a proposal to include a new unified interpretation on the calculation of volumes of spaces open to sea in the interpretations of the TM Convention

Strategic direction: 2.0

High-level action: 2.0.1

Planned output: 2.0.1.8

Action to be taken: Paragraph 8

Related documents: SLF 53/5, SLF 53/19, SLF 53/19/Add.1; MSC 89/9, MSC 89/9/5, MSC 89/9/8, MSC 89/25 and SLF 54/9/1

Background

1 At its eighty-ninth session, the Committee agreed to include in the agenda of this Sub-Committee an output on "Development of provisions to ensure the integrity and uniform implementation of the 1969 TM Convention" with a target completion year of 2014. Under the new output, the Sub-Committee is tasked with updating, expanding and strengthening the interpretations contained in the Interpretations of the provisions of the International Convention on Tonnage Measurement of Ships, 1969 (TM.5/Circ.5) to ensure the integrity and uniform implementation of the gross tonnage and net tonnage parameters.

2 With regard to spaces open to the sea, regulation 6(3) of Annex I to the TM Convention stipulates that volumes of such spaces **may** be excluded from the total volume of the ship, while it is the basis for calculating the gross tonnage. The following interpretations of the regulation were set out in TM.5/Circ.5:

"Hawse pipes, sea-valve recesses, thruster tunnels, stern chutes in fishing vessels, dredging wells in dredgers and other similar spaces fitted in the ship's hull should be dealt with as spaces open to the sea"; and

"Volumes within the hulls of ships, such as split-hull barges and dredgers, should be retained in V and Vc notwithstanding that the space within the hull is temporarily opened to the sea when discharging cargo."

3 At SLF 53, recommending to proceed with the development of interpretations to the TM Convention, the Sub-Committee also identified 29 issues needed to be considered in order to ensure the integrity and uniform implementation of the existing gross tonnage (GT) and net tonnage (NT) parameters, and these are listed in annex 4 to document SLF 53/5. Issue 25 relates to the volumes of spaces open to the sea, and its text is reproduced below:

Issue 25 – Treatment of spaces inside the hull as open to the sea

Regulation 6(3) allows volumes of spaces open to the sea to be excluded from tonnage. The degree to which a normally flooded or free-flooding space inside the hull is considered "open" has required interpretation, in view of the criteria of regulation 2(5) that requires spaces above the upper deck to be reasonably "open" before they may be excluded. Further, designers have sought to reduce tonnage or principal dimensions through contrivances to treat otherwise enclosed spaces as spaces that are "open spaces to the sea". Examples include: 1) standpipes in underdeck voids and ballast spaces; 2) holes in bows and sterns of ships of all types; and 3) holes in cross-deck structures on multi-hull ships. Consideration should be given to developing guidance on how to treat such volumes in a consistent manner.

Ship designs containing large volume of spaces open to the sea

4 Some ship designs have been developed to obtain additional buoyancy or an additional cargo capacity with less gross tonnage, making use of regulation 6(3). Examples of such designs are:

- .1 ships with open bottom spaces between the inner skin and outer shell to hold air to gain additional buoyancy (see figure 1 in the annex); and
- .2 ships with cargo spaces between cross-deck structures with grating openings to the sea (see figure 2 in the annex).

5 The existing unified interpretations do not cover the situation. The volumes of spaces open to sea in the ship designs mentioned in the previous paragraph are dominant, compared against the total volume of the ships. Therefore, lack of unified interpretations and inconsistent treatment by Administrations are to lead to inconsistent implementation of the TM Convention, and allow some designers to attempt to gain certain tonnage reduction by treating spaces as "spaces open to the sea."

Proposed interpretation

6 The co-sponsors of this document are of the view that spaces open to the sea, which are used for holding cargo and/or are contributing to buoyancy, shall not be excluded from the total volume of the ship. In other words, "gross tonnage" and "net tonnage" must be reflective of the ship's overall size and useful capacity.

7 Taking into account the above, the co-sponsors propose to include the following new interpretation of regulation 6(3) to the unified interpretations being developed:

"Volumes open to the sea should not be excluded from the total volume if the spaces are appropriated for holding cargo and/or contributing to obtain buoyancy of the ship."

Action requested of the Sub-Committee

8 The Sub-Committee is invited to consider the proposed new interpretation in paragraph 7 and to take action as appropriate.

ANNEX

SHIP DESIGNS CONTAINING LARGE VOLUME OF "SPACES OPEN TO THE SEA"

Figure 1: A ship fitted with spaces between the inner skin and the outer shell to fill air for buoyancy

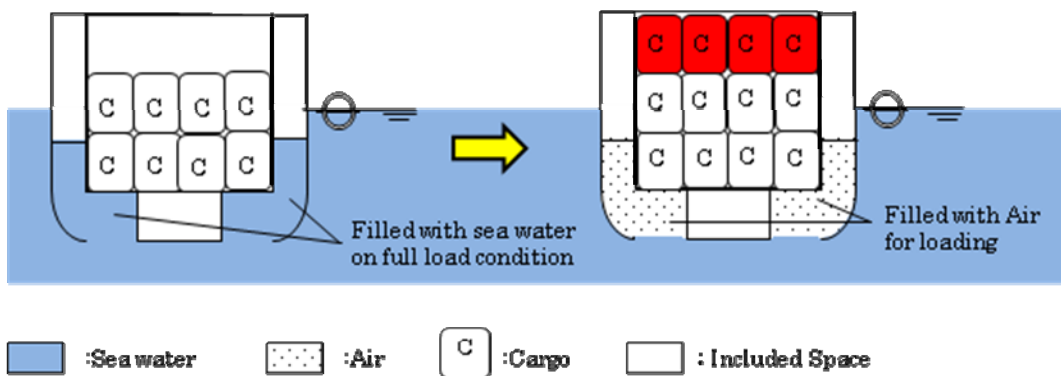


Figure 2: A ship fitted with grating cross-deck for securing cargo in multi-hull case

