



SUB-COMMITTEE ON STABILITY AND  
LOAD LINES AND ON FISHING VESSELS  
SAFETY  
52nd session  
Agenda item 5

SLF 52/5/3  
4 December 2009  
Original: ENGLISH

## DEVELOPMENT OF OPTIONS TO IMPROVE EFFECT ON SHIP DESIGN AND SAFETY OF THE 1969 TM CONVENTION

### Comments on the report of the Correspondence Group

Submitted by China

#### SUMMARY

<i>Executive summary:</i>	This document provides China's comments on the report of the Correspondence Group
<i>Strategic direction:</i>	2
<i>High-level action:</i>	2.1.1
<i>Planned output:</i>	2.1.1.2
<i>Action to be taken:</i>	Paragraph 11
<i>Related documents:</i>	SLF 52/5/2; SLF 51/17, SLF 51/6 and SLF 51/6/1

#### Background

1 The Sub-Committee, at its fifty-first session, established a correspondence group on "Development of options to improve effect on ship design and safety of the 1969 TM Convention" (document SLF 51/17, paragraph 6.13), under the joint coordination of Australia and the Netherlands. The report of the Correspondence Group was jointly submitted by Australia and the Netherlands (SLF 52/5/2). This document provides China's comments on the report and is submitted to the Sub-Committee in accordance with the requirements of 4.10.5 of the Guidelines on the organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies.

#### Review

2 The 1969 TM Convention, at the time when it was developed, did not directly relate to ship safety level. The growing scantlings designed for current containerships allow an increase of stowage on deck which results in safety related accidents, e.g., containers fell down due to exceeding stack height and inefficient securing.

For reasons of economy, this document is printed in a limited number. Delegates are kindly asked to bring their copies to meetings and not to request additional copies.



3 China appreciates the Correspondence Group for their hard and detailed work pertaining to this agenda item on development of options to improve effect on ship design and safety of the 1969 TM Convention (document SLF 52/5/2). China has also realized the hardships in seeking the appropriate options.

### **Phenomenon and analysis**

4 We noted that the initial purpose for the containership type development and stack of containers on deck was to improve the efficiency of cargo handling at terminals. And accordingly, considerations and requirements have been given to containers on deck in terms of stability, freeboard and load lines (reserve buoyancy). It has also been noted that the optimization of scantlings of modern containerships has resulted in some safety-related accidents, of which we are concerned and to which we are working hard in seeking solutions.

5 We noted that the problem we are facing is what measures should be taken to improve effect on ship safety of containers stacked on deck. Due to the excessive stack height of containers, mal-operation or exceptional sea conditions during navigation will cause an increase in accelerations and inertia force in some positions on the ship, which will further impose excessive force on the securing arrangements and finally result in the falling and loss of containers. For very large containerships exceeding 10,000 TEU, if stack height of containers on deck reaches up to seven layers, difficulties may occur in fire extinguishing, etc.

6 We noted that, although analysis has been provided for individual options in the report of the Correspondence Group (document SLF 52/5/2), it is hard to make quantitative analysis of the practical effects of these options in addressing the problems presented in paragraph 5. We also noted that in some special waterways, e.g., the Panama Canal, containers stacked on deck are charged, which in reality could not restrict stack height. In China, tonnage of seagoing containerships is calculated in accordance with the 1969 TM Convention; while for containerships engaged in inland waterways, a different tonnage measurement approach is adopted, by which the containers on deck are included in the gross tonnage, but this still does not help to restrict the stack height of containers. It was observed that whether the container volumes are included in the gross tonnage does not necessarily correlate with the improvement in ship safety level. Therefore, more work needs to be done to find out to what extent OPTIONS 1 to 8 in document SLF 52/5/2 can solve these problems.

7 China is also of the view that it may cause some negative impact to calculate gross tonnage without consideration to the effect on ship safety of cargoes stacked in open deck in the 1969 TM Convention; but development and revision of other compulsory IMO technical requirements on safety may be a more effective way to address our problems, while there are no evaluations available on the practical effects of these options. For example, falling of containers stacked on deck may be avoided by means of improvement in securing, i.e. developing appropriate standards on the design, inspection and maintenance of securing arrangements.

### **Conclusion**

8 Taking into account the special role of the 1969 TM Convention, tonnage is the foundation based on which technical requirements for ships and equipment on ships are provided in many other conventions. Thus, revision to the TM Convention may cause change of the concrete requirements of many other applicable conventions. If the tacit acceptance procedure is followed in revising, it may lead to frequent revisions to the 1969 TM Convention, thus impairing the significant and fundamental role of the Convention. Now the SOLAS Convention and the MARPOL Convention are revised every year and even some technical requirements in

them are retrospective. If the TM Convention is frequently revised, great confusion and difficulties may be caused in the industry and Administrations. It is therefore important to keep the Convention less changed. To sum up, China prefers OPTION 7 or OPTION A.

### **Suggestions**

9 It is suggested that the Sub-Committee count and analyse safety-related accidents on containerhips, find out the relevant root cause and provide feasible solutions.

10 It is suggested that requirements for deck lashings and securing arrangements be revised, and requirements for operation and cargo handling on ships carrying containers on deck be developed.

### **Action requested of the Sub-Committee**

11 The Sub-Committee is invited to consider the information provided in paragraphs 9 and 10 and take action as deemed appropriate.

---