



SUB-COMMITTEE ON STABILITY AND LOAD LINES AND ON FISHING VESSELS SAFETY 51st session Agenda item 6 SLF 51/6 11 April 2008 Original: ENGLISH

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

## Report of the correspondence group

### Submitted by Australia

#### **SUMMARY**

**Executive summary:** This document provides the results of the work of the correspondence

group on this agenda item that was established by SLF 50

Strategic direction: 2

*High-level action:* 2.1.1

**Planned output:** 2.1.1.2

*Action to be taken:* Paragraph 15

**Related documents:** SLF 50/19, SLF 50/6/1 and SLF 48/12

### Introduction

- 1 At its fiftieth session, the SLF Sub-Committee agreed to establish a correspondence group, under the co-ordination of Australia, with the following terms of reference:
  - .1 to develop "maritime real estate" (SLF 50/6/1) and other options to improve the effect on ship design and safety of the 1969 TM Convention, both:
    - .1 involving amendments to the 1969 TM Convention; and
    - .2 not requiring such amendments;
  - .2 to identify pros and cons of the identified options, taking into account safety, the training and welfare of seafarers and also taking into account the anticipated effectiveness of those options in improving safety;



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.3 to consider the merits of amending the Convention to incorporate tacit amendment provisions or, alternatively, adopting a Protocol to the Convention, with a view to facilitating future amendments;

- .4 to make recommendations as appropriate on above items; and
- .5 to submit a report to SLF 51.
- 2 Delegations from the following Member States participated in the work of the correspondence group:

AUSTRALIA NETHERLANDS

DENMARK NORWAY

FRANCE REPUBLIC OF KOREA

IRAN (ISLAMIC REPUBLIC OF) SWEDEN

JAPAN UNITED STATES

MARSHALL ISLANDS

Participants in the group also included representatives of the following United Nations specialized agency:

INTERNATIONAL LABOUR ORGANIZATION (ILO)

and observers from the following non-governmental organizations:

INTERNATIONAL CHAMBER OF SHIPPING (ICS)
INTERNATIONAL TRANSPORT WORKERS FEDERATION (ITF)

### **Options considered by the group**

- Consideration was initially given to the main option mentioned at SLF 50, namely the proposal given in documents SLF 48/12 and SLF 50/6/1 for the introduction into the TM Convention of a third tonnage parameter based upon "maritime real estate" (MRE) principles (Option 1) together with a recommendation that this MRE tonnage be used for setting tonnage-based fees for cargo ships. This option has associated with it two sub-options:
  - .1 introducing the MRE tonnage outside of, and in parallel with, the TM Convention;
  - .2 initially introducing the MRE parameter outside of the TM Convention, with a view to incorporating it into the Convention at a later date.

In order to keep the available options simple at this stage, the sub-options have not been listed separately.

- A further option, available under the existing TM Convention, was considered to be the promotion of the use of net tonnage (Option 2).
- 5 In accordance with its instruction to consider non-MRE options, the group developed further options, all requiring amendment of the TM Convention, as follows:

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- .1 Amendments or interpretations to allow semi-open spaces to be excluded from total enclosed volume (V) (Option 3);
- .2 Revision of the Net Tonnage parameter to include a deck cargo allowance (Option 4); and
- .3 Establishment of a third tonnage parameter Gross Tonnage Maximum Capacity  $(GT_{MaxCap})$  that includes deck cargo volume (Option 5).
- 6 A "nil action" option was also added as Option 6.
- 7 The identified options, together with their pros and cons, are set out in the annex.
- A conclusive view expressed by the group was that any action by IMO that related to tonnage measurement, whether through or in parallel with the TM Convention, should be thoroughly evaluated as to its effects on ship design and the shipping industry. If actions on this matter are agreed, they would need to be progressed step-by-step in order to improve the safety of ship designs. Such improvement would need to be demonstrated convincingly by further research, bearing in mind the provisions of Recommendation 2 of the 1969 TM Conference.
- The ILO brought attention to the use of gross tonnage as a delimiter in the *Maritime Labour Convention*, 2006 and the *Work in Fishing Convention*, 2007, in relation to the application of the conventions and specific provisions for crew accommodation. The group noted that these applications, together with references to gross tonnage in IMO instruments such as SOLAS, would need to be borne in mind when considering the extent to which existing provisions of the TM Convention should be amended.
- One delegation emphasized the possible need, identified at SLF 50, to somehow exempt crew accommodation to facilitate a higher and more spacious standard without penalty and, whilst recognizing that current safety standards are safe, then there is no present incentive to provide additional reserve buoyancy which would facilitate an enhanced level of safety. The delegation suggested that if the "maritime real estate" principle is pursued, it could involve a K factor that varies according to ship type.

### Merits of amending the TM Convention (e.g., by adoption of a Protocol)

- The group noted that, whilst there has been no compelling need or attempt to amend the 1969 TM Convention since it entered force in 1982, and that any regular amendment of the Convention is undesirable, the current amendment provisions of the Convention make it virtually unamendable for similar reasons that have prevented the entry into force of amendments adopted by the Organization to the 1966 Load Line Convention.
- The group also noted that one of the significant provisions of the 1969 TM Convention is in Article 11, which states that "the certificate issued under the authority of a Contracting Government in accordance with the present Convention shall be accepted by the other Contracting Governments and regarded for all purposes covered by the present Convention as having the same validity as certificates issued by them".

The effect of this provision is that port States, when presented with Convention certificates that do not reflect the interpretations of the Convention adopted by IMO and would not be issued by them as flag Administration, have no power but to accept such certificates at face value. Given these circumstances, implementation of the IMO interpretations is essentially voluntary.

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Notwithstanding that regular amendment of the 1969 TM Convention should be avoided, the group was of the view that it would be advisable for that Convention to be amended at the earliest opportunity by insertion of tacit amendment procedures. However the earliest opportunity to make this amendment would need to be as part of a Protocol package that is sufficiently attractive to gather sufficient support for it to enter force internationally without undue delay.

#### Recommendations

- In light of the foregoing and in response to paragraph 1.4 above, the group recommends that:
  - .1 Any action resulting from the list of identified options, along with their pros and cons, should be thoroughly evaluated as to its effects on ship design and the shipping industry. Any such evaluation should take no less than two sessions.
  - .2 If the group's outcome is endorsed by the Sub-Committee, the Committee should be invited to approve an appropriate work programme item for the evaluation of the options and development of appropriate recommendations.
  - .3 Initial preparations should be made for a tacit amendment approval process for the TM Convention as outlined in paragraph 13.

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

- 15 The Sub-Committee is invited to:
  - .1 consider the pros and cons for each of the options identified in this report;
  - .2 consider the views expressed regarding future action on this item and the possible amendment of the TM Convention; and
  - .3 prepare documentation to present an appropriate work programme item for approval by the Committee.

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# **ANNEX**

ISSUE No.	PRO	CON
Option 1 –	"Maritime real estate" (MRE) c (under the 1969 TM Convention) with use of this value for tonnage-based fees	oncept as third tonnage value associated resolution recommending
1.	Calculation of third tonnage is readily done for most ships using length (article 2(8)), breadth (regulation 2(3)) and draught (regulation 4(2)) as defined in the Convention.	Third tonnage may create confusion and may not be used. Additional calculation is required. Retention of existing gross tonnage for statutory purposes (e.g., SOLAS) and for passenger ships fees may be considered contradictory.
2.		Unavoidably, some ship types are advantaged with regard to tonnage-based fees, while others are disadvantaged.
3.	Safety improved by excluding from the measurement on which tonnage-based fees are based all parts of the ship (freeboard, superstructures, deckhouses, hatches, sheer, etc.) above the summer waterline, thereby removing on-going operational costs for adding such spaces.	See 2 above. Improvement of safety not guaranteed by added spaces (e.g., spaces may be used for cargo, MRE encourages high block coefficients that may be detrimental to safety). 1969 TM Convention is considered by some to be an inappropriate instrument for improving safety.
4.	Implementation of the arrangements will be facilitated as port and other personnel responsible for levying tonnage-based fees will be able to refer to an official figure listed on the ship's Tonnage Certificate.	Use of the MRE tonnage for port fees cannot be mandated.
5.	Amendment of 1969 TM Convention, if necessary, will provide an opportunity to implement a package including insertion of tacit amendment procedures and strengthening port State powers for full implementation of interpretations.	Amendment of 1969 TM Convention required through a Protocol, with associated delays to finalization and implementation.
6.		All Tonnage Certificates require re-issue to include the third tonnage measure — benefits of the extra information may not justify costs.
7.	Where used, lessens the GT penalty for increasing the enclosed volume on a vessel, thereby largely levelling the playing field between open-top containerships, conventional containerships, and ro-ro's, potentially leading to larger crew spaces.	Encourages beamier, fuller ships which are less fuel efficient, and have degraded manoeuvrability, seakeeping and crew comfort/fatigue characteristics. Discourages some novel designs (e.g., multi-hull), and may favour others.

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8.	Attractive to port Authorities as a substitute to assessing fees on GT, thereby increasing the probability that the parameter will be used by these entities.	Selective use of MRE over GT where favourable to port authorities would nullify the "revenue neutral" aspects of MRE, and potentially discourage its widespread use.
9.	Readily calculated, simple to verify, and easily retrofitted for existing vessels.	May be opposed by industry segments for which MRE yields less favourable tonnages compared to GT (e.g., tank ship and bulk carrier owners/operators).
10.	Can be quickly adopted by IMO on a pilot basis, in parallel with amending the Convention.	Widespread voluntary adoption of the measure for fee-setting will be necessary to resolve the underlying design and safety concerns.
Option 2 -	Promote use of existing Net Tonnage for	tonnage-based fees
	9 9	8
1.	Promotes an existing parameter that, if widely used, would minimize competitive barriers between open-top and conventional containership designs.	Does not level the playing field between vessels that carry large above-deck cargo loads (e.g., containerships) and those that carry cargo internally (ro-ro's), nor does it address the crew space issue.
2.	Where used, encourages ship designs with higher freeboards and, in most cases, improved stability characteristics, effectively without penalty for larger crew spaces.	Will not resolve the underlying ship design and safety concerns if efforts to promote NT are not successful.
3.	Can be quickly implemented by administrative action at IMO, and avoids the need to amend the Convention.	
Option 3 –	Option 3 – Allow semi-open spaces to be excluded from total enclosed volume (V) under the TM Convention	
1.	Effectively eliminates the GT penalty for high sided semi-enclosed spaces on open-top containerships in favour of lower tonnages, thereby levelling the playing field between open-top and conventional containership designs through uniform interpretations that are applicable to all vessel types.	between vessels that carry large above- deck cargo loads (e.g., containerships) and those that carry cargo internally (ro-ro's).
2.	Precludes exploitation of safety-impairing tonnage loopholes that favour use of coamings to protect deck cargo instead of deck erections that themselves contain enclosed volume.	Does not address the crew space issue.

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3.	Reconciles various approaches used by flag States and under IMO interpretations on treatment of large uncovered spaces in favour of a middle ground approach that provides for including portions of uncovered semi-enclosed spaces in tonnage, thereby helping to prevent further erosion of the Convention.	grandfathering provisions to garner support from owners/operators of existing ships whose GTs would increase under the consolidated
4.	Should receive support from ship owners/operators in certain industry segments (e.g., containership owner/operators), as the interpretations yield GTs that are more favourable than provided for by existing IMO interpretations.	-
5.	Can be quickly adopted by IMO and will be widely used, even without amending the Convention.	<b>7</b> 1 1 1 ,
Option 4 –	Amend TM Convention to revise the I deck cargo allowance	Net Tonnage parameter to include a
1.	Where used, eliminates the NT penalty for increasing the cargo space volume on a vessel, thereby levelling the playing field between open-top containerships, closed containerships, and ro-ro's, and leading to larger crew spaces.	operators in limited industry segments for which NTs will increase to reflect the amount of deck cargo carried
2.	Strengthens the existing NT parameter, so that NT is more truly reflective of the "useful capacity" of the vessel. More widespread use of NT, in turn, encourages higher freeboards and, in most cases, improved stability characteristics, effectively without penalty for larger crew spaces.	1 1
3.	Ensures likelihood of moderately widespread use, as this option involves changing an existing parameter.	Is somewhat difficult to retrofit, as it would require reissuance of International Tonnage Certificates for all applicable vessels.
4.	May have broad appeal, as it would not impact most ships and does not involve changing the GT parameter, thereby avoiding increased regulatory burden on affected ships.	can only be implemented through amendment to the Convention, with

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5.		Will not resolve the underlying ship design and safety concerns if NT is not more widely used.	
6.		Similar measures have been unsuccessfully trialled by some port authorities.	
7.		Requires amendment of TM Convention.	
8.		Introduces a disconnection between GT and NT unless the deck cargo allowance is applied to GT as well as NT.	
Option 5 –	Option 5 - Amend TM Convention establish a third tonnage parameter Gross Tonnage Maximum Capacity (GT <sub>MaxCap</sub> ) that includes deck cargo volume		
1.	Where used, eliminates the GT penalty for increasing cargo space volumes so that deck cargo volumes and cargo volumes within the vessel are treated the same, thereby levelling the playing field between open-top containerships, conventional containerships and ro-ro's.	Does not address the crew space issue.	
2.	Provides regulatory bodies and other entities (especially port authorities) with a parameter reflective of the total ship volume, including deck cargo.	Requires complex interpretations for determining the maximum deck cargo allowance in some cases (e.g., where cargo is not containerized), and is subject to abuse (e.g., full container capacity may not be reported to tonnage certifying agencies).	
3.	May have broad appeal, as it would not impact most ships and could be implemented without changing the GT parameter, thereby avoiding increased regulatory burden on affected ships.	Is somewhat difficult to retrofit, as it would require reissuance of International Tonnage Certificates for all applicable ships.	
4.	Could be implemented on a trial basis, in parallel with amending the Convention.	May be opposed by ship owners / operators in limited industry segments for which $GT_{MaxCap}$ yields less favourable tonnages compared to $GT$ (e.g., conventional containership owners/operators).	
5.		Will not resolve the underlying design and safety concerns if $GT_{MaxCap}$ is not widely used.	
6.		Requires amendment of the TM Convention.	

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Option 6 -	Take no action	
1.	No ship types or individual ships advantaged or disadvantaged with regard to tonnage-based fees.	
2.	Unforeseen safety compromises associated with MRE avoided.	
3.	No legal or administrative action.	