



MARITIME SAFETY COMMITTEE
81st session
Agenda item 23

MSC 81/23/7
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WORK PROGRAMME

Review of 1969 Tonnage Measurement Convention

Submitted by Australia

SUMMARY

Executive summary: A new work programme item is proposed, with the intention of minimizing the disincentive from the 1969 TM Convention to the design and construction of safe ships and facilitating updating of the Convention, particularly with regard to port State control issues

Action to be taken: Paragraph 3

Related documents: SLF 48/12, SLF 48/INF.4, SLF 48/21 and TM.5/Circ.4

1 At SLF 48, the Sub-Committee considered documents relating to the tonnage measurement of open-top containerships and agreed to amend the provisional formula of reduced gross tonnage (GT) for open-top containerships prescribed in TM.5/Circ.4. The Sub-Committee also discussed broader issues relating to tonnage measurement, raised by Australia in documents SLF 48/12 and SLF 48/INF.4, in particular the need to address the long-term effect of tonnage measurement upon ship design and safety. Since this aspect was not specifically covered by the terms of reference provided to the SLF Sub-Committee with regard to tonnage of open-top containerships, the delegation of Australia was invited to submit an appropriate proposal to the Committee in accordance with the Guidelines on the organization and method of work.

2 An appropriate work programme justification in accordance with the relevant provisions of Guidelines on the organization and method of work (MSC/Circ.1099 – MEPC/Circ.405), is attached at annex.

Action requested of the Committee

3 The Committee is invited to agree a new work programme item for the Sub-Committee on Stability and Load Lines and on Fishing Vessels Safety to address fundamental problems with the 1969 TM Convention.

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ANNEX

Background

1 In document SLF 48/12, Australia contends that problems with the 1969 Tonnage Measurement Convention are not limited to open-top containerships, in accordance with an existing work programme item allocated to the SLF Sub-Committee, but also affect other ship types due firstly to the use of total enclosed volume as the basis for gross tonnage and subsequently to the use of gross tonnage for commercial purposes in setting fees. As increased freeboard improves a ship's reserves of buoyancy and stability, the incentive to reduce freeboard for commercial reasons has the effect of reducing safety. Ship types affected are generally those assigned greater than minimum geometric freeboards and ships having large superstructures or deckhouses, which suffer the commercial penalty of increased gross tonnage values relative to ships without those features.

2 Other design features related to safety and seaworthiness, such as forecastles and sheer, may be sacrificed through efforts to reduce gross tonnage. The attention given to deletion of such features in minimising gross tonnage may be heightened in order to achieve a gross tonnage value below a certain breakpoint used in regulation, such as 500 gross tonnage for cargo ships in SOLAS Convention.

3 Without prejudice to other possible remedies to the tonnage impediment to improved safety, SLF 48/12 suggests as a possible solution that amendment of the 1969 TM Convention to introduce a third tonnage measurement based on the "maritime real estate" concept, particularly if a resolution was also adopted to urge adoption of this measure for tonnage-based fees. The feasibility of this concept is demonstrated in document SLF 48/INF.4 in terms of the distribution of change in tonnage-based fees using databases for the world fleet and some representative Australian ports.

4 Document SLF 48/12 further details problems with the 1969 TM Convention that have been identified in investigating possible remedies to the above-mentioned situation. These problems extend to the practical inability to amend the Convention, due to the absence of a tacit amendment procedure, together with difficulties with the Convention's uniform international implementation arising from outdated port State control provisions and limited scope for port States to question determinations made by the flag Administration.

Scope of the proposal

5 This submission proposes that the SLF Sub-Committee be tasked with investigation of measures to improve marine safety associated with the effect on ship design and construction of the provisions of the 1969 Tonnage Measurement Convention and developing a plan to give effect to appropriate measures. On the presumption that this task would involve amendments to the 1969 TM Convention since it involves examination of the principles of the Convention, Australia further proposes that the SLF Sub-Committee be tasked to examine the port State control provisions of the Convention with a view to improving the internationally uniform implementation of the Convention.

Need or compelling need

6 As outlined in Australian document SLF 48/12, the fact that total enclosed volume is used as the basis for gross tonnage under the 1969 Convention, together with the subsequent use of gross tonnage as a main parameter in determining fees for various commercial purposes in relation to individual ships, has resulted in great emphasis being placed at the design stage on the

minimization of total enclosed volume. Although it was intended at the time of adoption of the 1969 TM Convention that the Convention would curtail practices under which the shapes and configurations of ships were being determined by tonnage measurement rules, experience as outlined above has shown that this has not necessarily been achieved and that the trends have been against improvement of safety standards.

7 The heart of the problem lies with the principles of the 1969 TM Convention and affects a number of ship types, although through TM.5/Circ.4 IMO has to date addressed it solely in terms of being a direct impediment to the increased adoption of open-top containerships.

8 A compelling need therefore exists to re-examine safety-related aspects of the 1969 Tonnage Measurement Convention. Since addressing those issues will probably require some amendments to that Convention, the opportunity should also be taken to examine the small number of other problems that have emerged with adoption of the Convention.

9 This compelling need therefore relates directly to the purpose set out in article 1(a) of the IMO Convention *to encourage and facilitate the general adoption of the highest practicable standards in matters concerning the maritime safety ... of ships.*

Analysis of the issues involved

10 The main issue is the effect on safety of the use of total enclosed volume as the basis of determination of gross tonnage under the 1969 TM Convention.

11 Since the scope outlined above involves tasking the SLF Sub-Committee to investigate possible measures and develop a plan to give effect to those measures found to be appropriate, there is no cost to the maritime industry for the proposed work.

12 One of the possible measures expected to be examined as apart of the proposed work is the proposal in document SLF 48/12 to amend the 1969 TM Convention to include a third tonnage measure ('register tonnage') based on "maritime real estate" requirements for each ship. Since this tonnage would be based on the ship's indisputable physical dimensions, the cost of its application to all ships including existing ships would be negligible. While the use of this new measure for the setting of tonnage-based fees should be encouraged, it would be voluntary on the part of the relevant authorities and companies. However, document SLF 48/INF.4 demonstrates that replacement of gross tonnage with such a new tonnage for setting tonnage-based fees would not result in a substantial adverse effect (fees increased by over 30%) to more than about 12 % of the world fleet. This percentage may be further reduced by the use of a K factor similar to that used in the 1969 TM Convention.

13 Although it would be possible for another "tonnage" value to be defined independent of the 1969 TM Convention and used for the determination of "tonnage"-based fees, the existence of such an independent measure is unlikely to gather the international acceptance of a similar measure under the Convention and so would not have commensurate effect towards improvement of maritime safety.

14 Inclusion in this work programme item of examination of port State control provisions of the 1969 TM Convention is intended to promote improvement in the uniform international implementation of the Convention's technical provisions, which would seem to be in the interests of industry and Administrations alike.

15 Putting the technical issues to one side, action on this item will inevitably involve amendment of the 1969 TM Convention. Given the fact that the Convention does not have tacit amendment procedures, a Protocol may be necessary and this may take some time to bring to fruition. In these circumstances, the sooner the task is commenced the sooner IMO is likely to achieve a satisfactory outcome and thereby move towards the desired improvement of maritime safety.

Benefits which would accrue from the proposal

16 The proposal is submitted with the sole intention of improving maritime safety by providing a formula that can be used for tonnage-based fees which does not act as a disincentive to improved safety and by furthering the internationally uniform implementation of the 1969 TM Convention.

Priority and completion date

17 The proposal is in pursuit of “measures aimed at improving the safety and health of ship’s crews or personnel” and “measures to correct significant inadequacies identified in existing instruments”. It should therefore be accorded high priority within the terms of paragraph 2.11 of MSC/Circ.1099 – MEPC/Circ.405.

18 This item, to provide initial assessment and recommendations, should be referred to the Sub-Committee on Stability and Load Lines and on Fishing Vessels Safety, at its fiftieth session, for initial consideration and completion at SLF 51. Should the recommendations involve further work, at least further two sessions would be necessary.

Specific action required

19 The Committee is invited to allocate to the SLF Sub-Committee a new work programme item, perhaps titled “Development of options to improve effect on ship design and safety of 1969 Tonnage Measurement Convention” with initial target date of 2007 (two sessions) with instructions along the following lines:

- .1 examine the adverse impact of the 1969 Tonnage Measurement Convention upon the stability and reserve buoyancy of ships and develop options on possible measures in response to such impact, taking into account documents SLF 48/12 and SLF 48/INF.4 and comments made by MSC 81;
- .2 consider possible measures to improve the uniform international implementation of the Convention; and
- .3 make recommendations to MSC 84 on follow-up action.

Is the subject of the proposal within the scope of IMO’s objectives?

20 Yes – refer to paragraph 9 above.

Do adequate industry standards exist?

21 No – although the concepts outlined above have been used by some port authorities for the determination of port dues independent of the 1969 TM Convention, industry is for the most part reliant upon IMO providing a realistic and internationally agreed measure of ship's size through tonnages determined in accordance with the Convention.

Do the benefits justify the proposed action?

22 Yes – as an example of possible outcomes, the measures proposed in document SLF 48/12 would in time result in significant improvements to maritime safety at negligible direct cost.

Estimation of number of sessions needed to complete the work

23 Refer to paragraph 18.
