INTERNATIONAL MARITIME ORGANIZATION

E

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

SLF 54/9/1
14 October 2011
Original: ENGLISH

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

Proposed Plan of Action

Submitted by Canada, France, Germany, Japan, the Marshall Islands, Norway, Panama and the United States

SUMMARY

Executive summary:	This document offers a proposed action plan for this new planned output for consideration by the Sub-Committee. Under this proposed plan, an intersessional correspondence group to be established at SLF 54, and a working group to be established at SLF 55, would be used to assist the Sub-Committee in developing and finalizing specific recommendations to the Committee
Strategic direction:	2
High-level action:	2.0.1
Planned output:	2.0.1.8
Action to be taken:	Paragraph 8
Related documents:	SLF 53/5; MSC 89/9, MSC 89/9/5, MSC 89/9/8, MSC 89/25 (sections 9 and 22); Assembly resolutions A.388(X), A.494(XII), A.758(18) and MSC.234(82); circulars MSC/Circ.254, TM.5/Circ.4 and TM.5/Circ.5

Background

1 The International Convention on Tonnage Measurement of Ships, 1969 (1969 TM) Convention established a uniform method for assigning gross and net tonnage to ships, using as its basis a ship's moulded volume, with the cargo space volume, moulded draft and depth and passenger capacity taken into consideration when calculating net tonnage. Although this method has proven a considerable improvement over previous methods in use at the time, it is not without its limitations, most of which were identified at the 1969 Tonnage Conference in London that drew up the present Convention. These limitations are primarily related to the measurement of semi-enclosed spaces that are open to the sea or weather, the exclusion of deck cargo from tonnage, and the overall influence of a volumetric parameter on ship design. The latter has, in some cases, encouraged the reduction of volumes of crew and other non-revenue earning spaces to avoid exceeding burdensome

tonnage breakpoints in various regulations and standards, and to minimize tonnage-based taxes or fees.

2 Due in part to the lack of tacit acceptance provisions for amendments to the TM Convention, these limitations have been addressed through various recommendations and interpretive guidance by the IMO Assembly and the Maritime Safety Committee, with the assistance of the SLF Sub-Committee and its predecessor, STAB Sub-Committee. The first unified interpretations of the TM Convention were adopted by the Committee in 1979, at its fortieth session (MSC/Circ.254). The interpretations have been updated five times, most recently in 1994, with the issuance of the Interpretations of the provisions of the International Convention on Tonnage Measurement of Ships, 1969 (TM.5/Circ.5). Further, to address impact of the measurement method of the TM Convention on certain non-revenue spaces, the Assembly adopted, at its tenth session, in 1977, the Recommendation concerning Tonnage Measurement of Ballast Spaces in Segregated Ballast Oil Tankers (resolution A.388(X)). Resolution A.388(X) led to the Reduced Gross Tonnage approach for segregated ballast water spaces in oil tankers, in which a third tonnage parameter omitting these spaces is calculated on an optional basis for use when assessing tonnage-based fees. A related approach for open-top containerships was adopted by the Committee in 1993 (TM.5/Circ.4), and amended in 2006 (resolution MSC.234(82)).

3 The work on measurement treatment of open-top containerships led to a broader re-examination of the principles of the TM Convention, and its potential impact on ship design and safety, which was authorized by the Committee in 2006 as a new planned output. At its fifty-third session, the Sub-Committee completed work on this item endorsing option A, "Ensure the Integrity and Uniform Implementation of the Existing Gross and Net Tonnage Parameters", as the best way to improve the effect of the TM Convention on ship design and safety, and invited the Committee to establish a new unplanned output to implement option A.

4 At its eighty-ninth session, the Committee agreed to include an output on "Development of provisions to ensure the integrity and uniform implementation of the TM Convention" in the agenda of the Sub-Committee, with a target completion year of 2014 (MSC 89/25, paragraph 22.34). Under this output, the following actions are required:

.1 conduct a comprehensive review of the rules and requirements of the TM Convention, as interpreted by TM.5/Circ.5, and identify areas for improvement;

.2 consider documents MSC 89/9/5 (Germany) and MSC 89/9/8 (ILO), which provide comments on the need to improve the effect on ship design and safety within the TM Convention with regard to working and living conditions on board ships;

.3 revise and update the interpretations contained in TM.5/Circ.5, taking into consideration changes to the format, as appropriate; and

.4 recommend to the Committee any amendments to the TM Convention to ensure the integrity and uniform implementation of the existing measurement system of the Convention, along with approaches to implementing such amendments.

Discussion

5 In the opinion of the co-sponsors of this document, completing the planned output by the 2014 target completion year will require a substantive effort on the part of the

Sub-Committee, due to its scope, complexity, multi-faceted nature, and the long history behind many of its elements. Specifically, it will require the establishment of an intersessional correspondence group between SLF 54 and SLF 55 to develop draft revised and updated interpretations to the TM Convention, along with any recommended amendments to the TM Convention and associated implementation approaches. In addition, the co-sponsors anticipate that the establishment of a working group will be necessary at SLF 55 to finalize interpretations and any recommended amendments to the TM Convention, so that they can be directed to the DE and STW Sub-Committees for consideration prior to finalization at SLF 56, with a view to submission to the Committee for approval.

6 As part of this work, this document's co-sponsors consider that the format used by TM.5/Circ.5 should be improved to better identify the text of the Convention being interpreted, consolidate any figures with the associated interpretative text, and allow for future revisions without the need to renumber all the interpretations. Because an early decision on the format could greatly facilitate development of the specific revisions and updates within the relatively compressed timeframe available, the co-sponsors undertook an examination of a number of other IMO interpretive documents, including consolidated interpretations of the SOLAS, MARPOL and Load Lines Conventions, with the view for adapting a format that would resolve the identified concerns. The co-sponsors consider that an adaptation of the format used for MARPOL Annex I would best serve this need, with a modified numbering scheme to distinguish between articles, regulations and novel craft determinations.

Proposed action plan and format

7 To accomplish the actions identified in paragraphs 4 to 6 above, the co-sponsors have developed, and offer for consideration by the Sub-Committee, the proposed action plan included as annex 1 to this document. This action plan is predicated on approval at SLF 54 of an improved format for the revised and updated interpretations of TM.5/Circ.5, which the co-sponsors offer to the Sub-Committee for consideration, as annex 2 to this document. Annex 2 was developed using the existing interpretations of TM.5/Circ.5, as amended by resolution MSC.234(82), with other changes limited to minor editorial amendments, where necessary, to conform with the new proposed format. To facilitate the work of the proposed correspondence group, the co-sponsors created annex 3, for use by the Sub-Committee in developing specific taskings for the group. This annex organizes into 11 functional areas the 27 issues requiring interpretation identified in annex 4 to document SLF 53/5, along with the tasking related to working and living conditions.

Action requested of the Sub-Committee

8 The Sub-Committee is invited to consider the information presented in this document and, in particular, to:

.1 agree to an action plan along the lines of annex 1, for use in completing all taskings under this planned output;

.2 agree to the proposed format for the revised/updated interpretations of the TM Convention, as presented in annex 2; and

.3 establish an intersessional correspondence group, under terms of reference consistent with the taskings of paragraph 8.1 above and annex 3.

***

ANNEX 1

PLAN OF ACTION FOR TONNAGE PLANNED OUTPUT

Overview

1 This document summarizes the Sub-Committee's actions and identifies specific work items to complete the planned output on "Development of provisions to ensure the integrity and uniform implementation of the TM Convention" under the Sub-Committee's biennial agenda, as approved by MSC 89 (MSC 89/25, paragraph 22.34). It also identifies guidelines for use in developing both updated and/or revised interpretations, as well as any recommended amendments to the TM Convention, under this planned output.

Scope of the planned output

2 Under this planned 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 existing gross and net tonnage parameters. In conjunction with this work, the Sub-Committee is to identify any changes to the TM Convention that are considered necessary to ensure the integrity and uniform implementation of the existing gross tonnage and net tonnage parameters, along with associated recommended approaches to amending the Convention.

Summary of the requested actions of the Sub-Committee

3 As discussed in paragraph 22.34 of document MSC 89/25, the taskings for the Sub-Committee under this planned output are as follows:

.1 **identify areas for improvement**: Conduct a comprehensive review of the rules and requirements of the TM Convention, associated interpretations of TM.5/Circ.5, and other interpretations or practice. Identify areas where the TM Convention, as interpreted by TM.5/Circ.5, does not ensure uniform application of the tonnage measurement rules and/or unnecessarily affects ship design or safety (including crew accommodation) when alternate approaches under the rules of the TM Convention could yield a better outcome. This includes treatment of semi-open spaces such as those within open-top containerships, and treatment of enclosed spaces that are associated with deck cargo;

.2 **address working and living condition impacts**: Take into consideration documents MSC 89/9/5 (Germany) and MSC 89/9/8 (ILO), which provide comments on the need to improve the effect on ship design and safety within the TM Convention with regard to working and living conditions on board ships;

.3 **update and revise interpretations**: Update, expand and strengthen the interpretations of TM.5/Circ.5 to address to the maximum extent possible those concerns identified in subparagraph .1 above. Consider and incorporate as appropriate changes to the TM.5/Circ.5 format and content, with the view toward replacing it with an updated/revised version; and

.4 **make recommendations on amendments**: Make recommendations, as appropriate, to the Committee on amendments to the TM Convention to ensure the integrity and uniform implementation of the existing measurement system of the Convention, and/or provide for improved safety or design (including crew accommodation) under this measurement system. Include recommendations on possible approaches to implementing such amendments (e.g. protocol vs. unanimous acceptance).

Specific Sub-Committee's work

4 The following lists the specific Sub-Committee's work to complete the actions described in paragraph 3 above:

.1 **SLF 54**: After discussion by the Sub-Committee and approval of the proposed unified interpretations format of annex 2, establish a correspondence group to review the rules and requirements of the TM Convention, and associated interpretations, and identify revised/updated interpretations and areas for improvement of the Convention, including alternate approaches, as described in paragraphs 3.1 and 3.2 above. Instruct the correspondence group to specifically address those issues and taskings identified in annex 3 of this document as part of this review, and to submit a report to SLF 55, which includes a draft MSC circular on Unified interpretations to supersede TM.5/Circ.5.

.2 **SLF 55**: After discussion by the Sub-Committee, establish a working group to further discuss and review the draft unified interpretations document, which would be expected to supersede TM.5/Circ.5, along with amendments to the TM Convention, as appropriate, and an approach for their implementation, as described in paragraphs 3.3 and 3.4 above. Review and update this Plan of Action as necessary. Provide the draft unified interpretations and any draft amendments to the DE and STW Sub-Committees for their consideration and/or comments, as appropriate.

.3 **SLF 56**: After discussion by the Sub-Committee, and incorporation of any changes resulting from the comments received from the STW and DE Sub-Committees, finalize the draft MSC circular on Unified interpretations of the TM Convention, which would be expected to supersede TM.5/Circ.5, and any proposed draft amendments to the TM Convention stemming from this work. Make recommendations to the Committee to complete this planned output, including the approval of the finalized draft MSC circular on Unified interpretations of the TM Convention.

Guidelines for developing/evaluating interpretations and amendments

5 When developing interpretations of and/or amendments to the TM Convention under this Plan of Action, the Sub-Committee should:

.1 seek to improve the integrity of the TM Convention by ensuring that the gross and net tonnage parameters reflect a ship's overall size and carrying capacity, respectively;

.2 facilitate the uniform implementation of the TM Convention through the elimination of ambiguity in existing interpretations and requirements, and the establishment of new interpretations or requirements that are comprehensive and easily understood;

.3 take into account historical information related to the establishment of the existing interpretations and requirements, including practical limitations or considerations that were a factor in previous decisions and which may no longer apply;

.4 address the implementation of new interpretations or requirements, with the view toward minimizing unnecessary impact on both current and future ships; and

.5 to the maximum extent practical, avoid unnecessary changes to the approach taken by existing interpretations or requirements, with the view toward minimizing confusion and helping to ensure more widespread acceptance.

***

ANNEX 2

PROPOSED FORMAT FOR THE UNIFIED INTERPRETATIONS OF THE 1969 TM CONVENTION

Articles

Art. 2 Definitions

Art. 2(8) Length

A.2(8)-1 When establishing the length of a rudderless flat top barge, the length should be calculated at 96% of the total length of a waterline at 85% of the least moulded depth measured from the top of the keel.

A.2(8)-2 Column-stabilized units such as semi-submersible drilling units should be considered novel types of craft. Because the length under article 2(8) or the moulded breadth under regulation 2(3) for such units is misleading, it would be appropriate for such units to use the overall length and breadth to the outside plating between fixed structures. The citation of the length (article 2(8)) and breadth (regulation 2(3)) in the respective boxes of the International Tonnage Certificate (1969) should be deleted, and a notation in the REMARKS column should be made to identify the ship as, inter alia, a "semi-submersible drilling unit", etc.

Art. 3 Application

Art. 3(2)(d) Tonnage applicability to "existing" ships

A.3(2)(d)-1 The term "alterations or modifications which affect its tonnage" in resolution A.758(18) means increase or decrease of more than 1% in either existing gross tonnage or gross tonnage calculated in accordance with the 1969 Tonnage Convention.

Art. 9 Form of certificate

Art. 9(2) Model in Annex II

A.9(2)-1 The "Date" shown on the front of the International Tonnage Certificate (1969) refers to the year when the keel was laid, or the ship was at a similar stage of construction (article 2(6)) or the ship underwent alterations or modifications as defined in article 3(2)(b) but, when the year of construction or alteration or modification is 1982 or 1994, the month and day should also be described.

A.9(2)-2 Information inserted in the "location" column on the reverse of the International Tonnage Certificate (1969) should not be detailed.

A.9(2)-3 The phrase "Date and place of original measurement" should refer to the issue of the original International Tonnage Certificate (1969) and should have no reference to measurement under pre-existing national systems.

A.9(2)-4 The phrase "Date and place of last previous remeasurement" should refer to the date and place of issue of the last International Tonnage Certificate (1969).

Art. 10 Cancellation of certificate

Art. 10(2) Cancellation upon flag transfer

A.10(2)-1 Ships holding an International Tonnage Certificate (1969), which do not comply with agreed interpretations of the provisions of the Convention, should be remeasured. The new characteristics should be determined and applied without delay.

Art. 12 Inspection

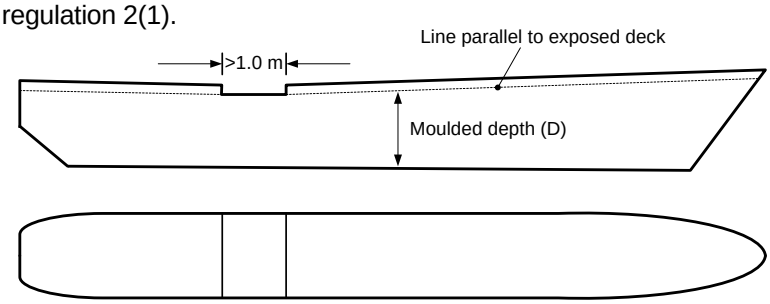
A.12-1 A copy of the tonnage calculations may be provided together with the International Tonnage Certificate (1969) to the ship's master. Although not a requirement, nothing in the Convention would prevent Administrations from providing these calculations to ships flying their flag.

Regulations

Reg. 2 Definition of terms used in the Annexes

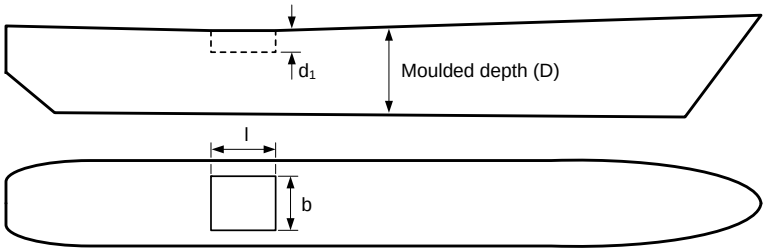
Reg. 2(1) Upper deck

R.2(1)-1 A discontinuity in the upper deck which extends over the full breadth of the ship and is in excess of 1 m in length should be treated as a step as defined in regulation 2(1).

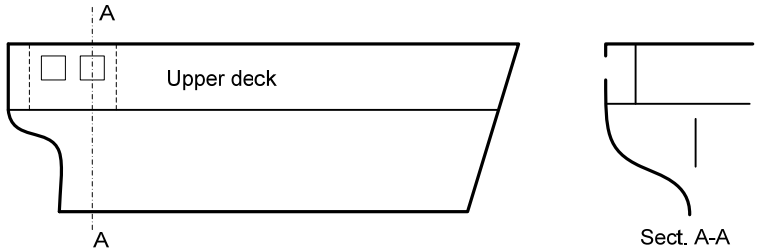


R.2(1)-2 Steps situated outside the "length" (article 2(8)) should not be considered.

R.2(1)-3 A discontinuity in the upper deck which does not extend to the side of the ship should be treated as a recess under the upper deck level.



R.2(1)-4 In a ship having openings in the side of the ship below the uppermost deck, which are not closed but limited inboard by weathertight bulkheads and decks, the deck below such openings should be considered as the upper deck.



R.2(1)-5 The Administration may decide on the term "watertight" as a special definition for tonnage purposes is not needed.

Reg. 2(3) Breadth

R.2(3)-1 The term "amidships" should be considered as the midpoint of the length, as defined in article 2(8), where the forward terminal of that length coincides with the foreside of the stem.

Reg. 2(4) Enclosed spaces

R.2(4)-1 In regulation 2(4) there is no contradiction between the definition of enclosed spaces as being "bounded by the ship's hull, by fixed or portable partitions ..." and "… nor the absence of a partition or bulkhead, shall preclude a space from being included in the enclosed space".

R.2(4)-2 Space located within the boundaries of "permanent or movable awnings" should be subject to treatment under regulation 2(5).

R.2(4)-3 Tanks, permanently located on the upper deck, provided with removable pipe connections to the cargo system or the vent (de-airing) lines of the ship, should be included in V_c.

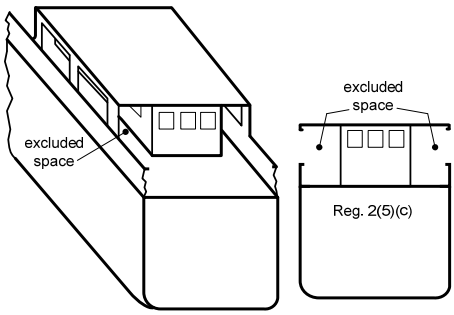
R.2(4)-4 The volume of weathertight steel pontoon covers on hatchway coamings should be included in the calculations of the total volume (V) of the ship. If such covers are open on the underside, their volume should also be included in V_c.

R.2(4)-5 Multipurpose ships which have the facility to trade with cargo hatches open or closed, should always be measured with the hatch covers considered to be closed.

R.2(4)-6 Masts, kingposts, cranes, crane and container support structures, which are completely inaccessible and above the upper deck, separated on all their sides from other enclosed spaces, should not be included in the total volume of all enclosed spaces. Air trunks having a cross-sectional area not exceeding 1 m^2 may also be excluded under the before-mentioned conditions. All mobile cranes should be exempted.

Reg. 2(5) Excluded spaces

R.2(5)-1 The space between the side longitudinal bulkhead of a deckhouse and the bulwark below a deck extending from side to side, supported by stanchions or vertical plates connected to the bulwarks, should be treated as an excluded space in accordance with regulation 2(5)(b) and (c).



R.2(5)-2 In the case of a ro-ro ship, for example, where the space at the end of an erection is fitted with means for securing cargo, the space should be included in V in accordance with the first condition of regulation 2(5).

Reg. 2(6) Passenger

R.2(6)-1 N_1 and N_2 should be obtained from the Administration's maritime safety authority.

Reg. 2(7) Cargo spaces

R.2(7)-1 The volumes of the segregated ballast tanks should not be included in V_c, provided they are not to be used for cargo.

R.2(7)-2 The volumes of clean ballast tanks in oil tankers should be included in V_c when the ship is fitted with a crude oil washing system which would permit dual purpose cargo/clean ballast tank use of these tanks.

R.2(7)-3 The volumes of dedicated clean ballast tanks should not be included in V_c, provided that:

.1 the tanks are not used for cargo;

.2 the ship carries a single IOPP Certificate which indicates it is operating with dedicated clean ballast tanks in accordance with regulation 13A, Annex I, MARPOL 73/78;

.3 the following notation is inserted in the REMARKS column on the International Tonnage Certificate (1969): "This ship carries an IOPP Certificate in conformity with regulation 13A, Annex I, MARPOL 73/78. The following tanks are dedicated solely to the carriage of clean ballast water: _____."

R.2(7)-4 The volumes of slop tanks for cargo residues should be included in V_c.

R.2(7)-5 In fishing vessels, the volumes of fish processing spaces for fishmeal, liver oil and canning, tanks for re-cooling fish, wet fish bunkers, stores for salt, spices, oil and tare should be included in V_c. Fishing gear stores should not be included in V_c.

R.2(7)-6 The volume of refrigerating machinery used for refrigerating cargoes and situated within the boundaries of the cargo spaces should be included in V_c.

R.2(7)-7 The volumes of mail rooms, baggage compartments separate from passenger accommodation, and bonded stores for passengers, should be included in V_c. The volume of provision rooms for crew or passengers and bonded stores for crew should not be included in V_c.

R.2(7)-8 On combination carriers, where the owners request to have the dual purpose oil/ballast tanks converted to ballast tanks and excluded from V_c, the ballast tanks should be required to be permanently disconnected from the oil cargo system and not used for the carriage of cargo. The ship should then be re-measured in accordance with regulation 5(3). Any ballast tanks not to be included in V_c should be solely allocated to ballast, connected to an independent ballast system, and not used to carry cargo.

R.2(7)-9 When determining the volumes of cargo spaces, no account should be taken of insulation, sparring or ceiling which is fitted within the boundaries of the space concerned. For ships which have permanent independent cargo tanks constructed within the ship, e.g. gas tankers, the volume to be included in V_c should be calculated to the structural boundary of such tanks, irrespective of insulation which may be fitted on the inside or outside of the tank boundary.

R.2(7)-10 The volumes of dual purpose spaces such as those used for both ballast and cargo, should be included in V_c.

R.2(7)-11 Spaces allocated to passenger automobiles should be included in V_c.

Reg. 3 Gross tonnage

R.3-1 The K_1 coefficient used in the gross tonnage calculation may be derived from either the table in appendix 2 of the Convention, or from the formula in regulation 3, at the discretion of the Administration.

R.3-2 The final tonnage figure determined in accordance with regulation 3 and stated in the Tonnage Certificate should be given in rounded down figures without decimals.

Reg. 4 Net tonnage

R.4-1 The K_2 coefficient used in the net tonnage calculation may be derived from either the table in appendix 2 of the Convention or from the formula in regulation 4, at the discretion of the Administration.

R.4-2 The final tonnage figure determined in accordance with regulation 4 and stated in the Tonnage Certificate should be given in rounded down figures without decimals.

Reg. 6 Calculation of volumes

R.6-1 Enclosed spaces above the upper deck, appendages and spaces open to the sea not exceeding 1 m^3, should not be measured.

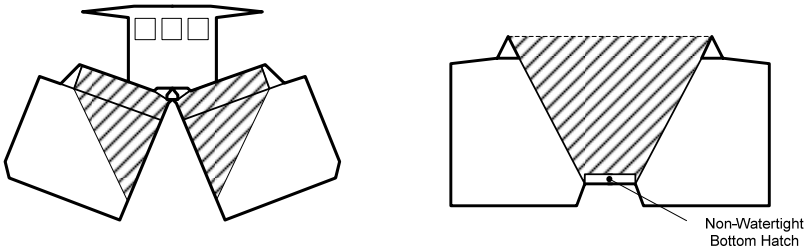
Reg. 6(2) Appendages

R.6(2)-1 Bulbs, fairwaters, propeller shaft bossings or other structures should be treated as appendages.

Reg. 6(3) Spaces open to the sea

R.6(3)-1 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.

R.6(3)-2 Volumes within the hulls of ships, such as split-hull barges and dredgers, should be retained in V and V_c notwithstanding that the space within the hull is temporarily opened to the sea when discharging cargo.



Reg. 7 Measurement and calculation

R.7-1 When a tonnage certificate and a copy of the calculations of the tonnages are transmitted to another Government in accordance with article 8(2) or 10(3) of the Convention, they should be accompanied by a form as shown in the annex, showing the main particulars of the tonnage calculations for easy reference. When listing underdeck volumes, the volumes may be combined (e.g. underdeck/extended forecastle, etc.) on the form.

Reg.7(2) Calculation methods and accuracy

R.7(2)-1 Administrations should decide on the degree of accuracy required for the tonnage calculations.

Novel Craft Interpretations (regulation 1(3))

NvlCr. 1 Livestock carriers

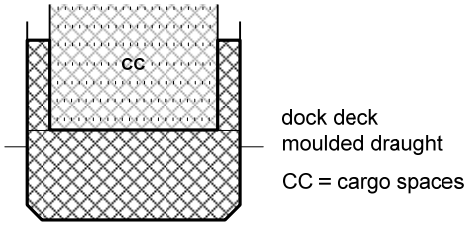
N.1-1 Livestock carriers are most often converted ships. Above the existing upper deck, one or more decks are constructed. Between these decks, the livestock corrals and their associated spaces are arranged, separated by, for example, railings, fences or gangways. The corrals are open to the air.

N.1-2 Stanchions, fences and railings to keep livestock in the corrals are "other means for securing cargo" according to regulation 2(5).

N.1-3 In applying the provisions of the 1969 Tonnage Convention, livestock structures should be included in the gross tonnage.

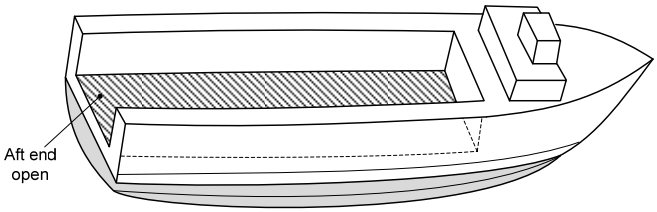
NvlCr. 2 Dockships

N.2-1 A dockship may include in its main structural characteristics the absence of hatch covers above the cargo space, but may have a dock deck above the moulded draught together with side erections.

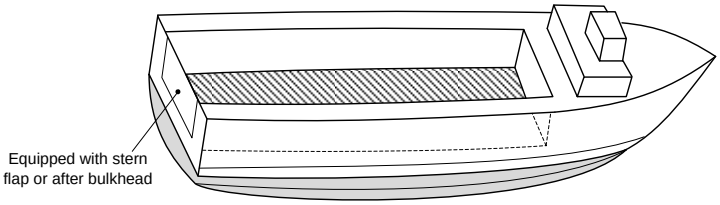


N.2-2 The dockships considered are described as:

.1 a dockship open-ended at the stern,



.2 a dockship fitted with a stern door or a grill stern door (see figure 8 in appendix 1).



N.2-3 The space above the dock deck, bounded on at least three sides by erections and intended for the carriage of cargo should be included.

N.2-4 In this context, an erection is defined as being an enclosed space bounded by bulkheads and a deck above.

NvlCr. 3 Open-Top Containerships

N.3-1 Refer to resolution MSC.234(82) for recommendations concerning tonnage measurement of open-top containerships.

Annex

FORM GIVING PARTICULARS OF UNIFORM TONNAGE CALCULATION

GROSS TONNAGE

Item No.	Name of Space	Location	Length	Moulded volume
	Underdeck Poop Bridge Forecastle Deckhouses Hatches, etc.			
		Total volume		
NET TONNAGE				
	No. 1 hold No. 2 hold, etc. No. 1 tween decks, etc. No. 2 tween decks, etc. Hatches, etc.			
		Total volume		

***

ANNEX 3

ISSUES AND RELATED TASKINGS FOR A CORRESPONDENCE GROUP REVIEW OF THE 1969 TM CONVENTION AND ITS INTERPRETATIONS

1 Length definition

Reference: SLF 53/5, annex 4, issue No. 1

Discussion: There are several areas where neither the TM Convention nor TM.5/Circ.5 provides sufficient information to permit assignment in a consistent manner of the length dimension, which is a determining factor for applicability of the TM Convention, and is widely used for applying design standards and, in some cases, fees. Further, with the increasing use of water-jet propulsion units and similar combination steering/propelling devices, many ships are no longer fitted with rudder stocks, which is a key input in the length determination.

Tasking: Consider whether the length definition should be clarified, or left to the decision of the flag Administration.

2 Novel craft

Reference: SLF 53/5, annex 4, issue No. 2

Discussion: Under novel craft provisions of regulation 1(3) of the TM Convention, determining tonnage is left to the flag Administration, if the ship has constructional features which render application of the regulations unreasonable or impractical. Some Administrations have construed regulation 1(3) as allowing a flag State to calculate gross tonnage based on economic and safety considerations, "exempting" fully enclosed spaces which would otherwise have been included in tonnage. Applying novel craft provisions in this manner can result in assignment of gross/net tonnages that have no relationship to a ship's overall size/useful capacity.

Tasking: Consider defining the term "novel craft", and specifying criteria for applying novel craft provisions.

3 Enclosed spaces

Reference: SLF 53/5, annex 4, issue Nos. 9, 10, 11, 12, 22, 23 and 24

Discussion: The definition in regulation 2(4) of the TM Convention of "enclosed spaces" does not explicitly address what constitutes a "space" that is subject to inclusion in tonnage. While treatment of most hull and superstructure spaces is reasonably straightforward under the existing definition, it is less clear whether certain other spaces should be reflected in the gross tonnage parameter (the measure of the overall size of a ship) and net tonnage parameter (the measure of the useful capacity of a ship). Satisfactory resolution of this issue is of critical importance in view of the use of tonnage as a basic criterion in applying maritime regulations.

Tasking: Consider the following questions when developing revised/updated interpretations or amendments to the TM Convention:

.1 Is a deck needed as a condition for bounding enclosed space?
.2 Are removable spaces (e.g. portable quarters units) included in tonnage?
.3 Are mobile and movable structures (e.g. large mobile crane cabs) included in tonnage?
.4 Should consideration be given for the influence of safety and protecting equipments required by other conventions in establishing what constitutes enclosed volume?
.5 How are "spaces" underneath overhangs treated?
.6 How are volumes of complex topside shapes determined?
.7 Are spaces associated with the null that are of a linear nature (such as cross-bracing) included in tonnage?
.8 How are masts, kingposts and support structures of various sizes and shapes treated?

4 Definition of deck, cover and partition

Reference: SLF 53/5, annex 4, issue Nos. 13 and 14

Discussion: Neither the TM Convention nor TM.5/Circ.5 defines the terms "deck", "awning" or "partition", which are used in the definition in regulation 2(4) of the TM Convention of "enclosed spaces". As a result, there have been differences in interpretations as to what constitutes an awning and whether, by extension, fabric covers and partitions, expanded metal bulkheads, and gratings are considered to bound space that would otherwise be treated as unenclosed.

Tasking: Consider the need to harmonize terminology and approaches for treatment of decks, covers and partitions that are of made of gratings, fabric or other alternate materials.

5 Excluded spaces

Reference: SLF 53/5, annex 4, issue Nos. 15, 16, 17, 18, 19 and 20

Discussion: There have been a number of differences of interpretation related to the qualification of certain semi-open spaces as "excluded spaces" under provisions of regulation 2(5) of the TM Convention, principally related to whether the space has provisions for securing cargo or stores and whether openings to the space are fully or partially obstructed and/or meet specified criteria. Some of the distinctions in treatment appear to have historical roots in earlier measurement system approaches, whose applicability may not readily translate to the measurement system of the TM Convention.

Tasking: Consider the following questions when developing revised/updated interpretations or amendments to the TM Convention:

.1 Can the expression "fitted with shelves or other means of securing cargo or stores" be clarified?
.2 What is meant by the term "stores" in this context?
.3 What criteria should be used for assessing whether an opening has been obstructed?
.4 To what extent should application of the regulation 2(5) criteria regarding opening characteristics and deck height invalidate an entire space from exclusion?
.5 How is a recess defined?

6 Spaces open to the sea

Reference: SLF 53/5, annex 4, issue Nos. 25, 26 and 27

Discussion: Regulation 6(3) of the TM Convention gives discretion for excluding spaces that are "open to the sea", leading to inconsistent treatment, by using the word "may". In addition, in cases where these spaces are excluded, there is the potential for manipulation of a ship's design to reduce its tonnage, through exclusion of spaces which may "flood" only occasionally, have restricted free communication with the sea, are used for carriage of cargo, or contribute to the ship's buoyancy.

Tasking: Address the inconsistency of treatment of spaces "open to the sea", including the possible establishment of criteria to ensure that such spaces, if excluded, are in free communication with the sea and do not contribute to the ship's buoyancy or cargo carrying capacity.

7 Re-certification for changes affecting tonnage

Reference: SLF 53/5, annex 4, issue Nos. 7 and 21

Discussion: Under article 10(1) of the TM Convention, tonnage re-certification is required only if a ship undergoes changes that increase the ship's gross tonnage (GT) and net tonnage (NT). However, regulation 5(3) of the TM Convention stipulates that a new certificate shall not be issued until 12 months have elapsed from the date on which the current certificate was issued in the case of decreasing NT (except in cases of alterations of a "major character"), which implies a need for re-certification following a tonnage decrease. Furthermore, the certificate form of Annex II of the TM Convention uses the expression "major character" in reference to a ship's alteration date.

Tasking: Address the inconsistency in tonnage recertification treatment under article 10(1) and regulation 5(3). Consider whether a definition of alterations of a "major character" is needed, and if so, what specific criteria should be used (if any), along with the need for possible harmonization of the "major character" terminology found in Annex II.

8 Criterion for use of "existing" tonnage

Reference: SLF 53/5, annex 4, issue No. 3

Discussion: Articles 3(2)(b) and (d) of the TM Convention grant "existing" ships privileges to certain older ships that have not undergone alterations "deemed by the Administration to be a substantial variation in their existing gross tonnage". This provision allows a qualifying ship's owner to use the pre-existing national gross tonnage (GRT) to apply older breakpoints in international conventions, including SOLAS and MARPOL. As described in document SLF 38/10/1, dated 16 December 1993, there appeared to be broad agreement that "substantial variation" meant a gross tonnage change on the order of 10%, and that a 1% change was effectively within the limit of calculation accuracy. Nonetheless, TM.5/Circ.5 established a 1% change as the breakpoint for loss of these grandfathering privileges, while not directly addressing whether this same criterion should apply to newer ships for which IMO had extended similar grandfathering (e.g. under resolution A.494(XII)).

Tasking: Review the 1% criterion on alterations of TM.5/Circ.5, taking into consideration experience with this criterion since its promulgation, and possible contradictions with issuance of an interpretation of this nature on a matter relegated to individual flag Administrations. Also address applicability of similar grandfathering criteria for ships not covered by article 3(2)(d).

9 Listing ship characteristics on the ITC (1969)

Reference: SLF 53/5, annex 4, issue Nos. 4, 5 and 6

Discussion: Under the TM Convention and TM.5/Circ.5, flag Administrations have considerable latitude in listing certain ship characteristics on the reverse of the International Tonnage Certificate (ITC) (1969), including the level of detail specified for both enclosed spaces and excluded spaces, and well as what is considered the "length" of each enclosed space. Further, there is no stated purpose for the listing of such characteristics, compounding the difficulty in ascertaining the level of detail that should be specified.

Tasking: Review existing requirements for listing ship characteristics on the reverse of the ITC (1969) with the view toward ascertaining the intended purpose of this information, as well as how it is currently being used. Take this information into consideration when developing related interpretations and/or any proposed amendments to the TM Convention.

10 Retroactively applying interpretations

Reference: SLF 53/5, annex 4, issue No. 8

Discussion: TM.5/Circ.5 does not directly address whether the interpretations contained therein should be applied retroactively, in which case a ship's re-measurement might be required. However, this retroactive application is implied for ships that change flag, leaving open the question of retroactive application to ships that do not change flag.

Tasking: Address the issue of retroactive application of interpretations and/or proposed amendments to the TM Convention. Consider whether grandfathering criteria should be specified, and if so, the criteria that should be used (e.g. keel laid date, ship contract date, etc.), taking into account experience with such criteria in other international instruments.

11 Impact on working and living conditions on board ships
Reference: MSC 89/9/5 and MSC 89/9/8
Discussion: The concept of calculating a "reduced gross tonnage" for optional use in assessing fees has been adopted with respect to oil tanker segregated ballast spaces and open-top containerships that meet certain criteria. Document MSC 89/9/5, as commented on by document MSC 89/9/8, proposed extending this concept to crew spaces, with the view toward improving working and living conditions on board ships.
Tasking: Review and further develop, as appropriate, the crew space reduced gross tonnage proposal of document MSC 89/9/5. Obtain input on the extent to which this new reduced gross tonnage parameter is expected to be used, and whether the parameter would have the intended effect on working and living conditions. Consider different approaches to calculating reduced gross tonnage on segregated oil tankers and open-top containerships, for which crew spaces would additionally be excluded (e.g. should the volumes be combined in a single parameter, or should they be listed separately, with separate reduced gross tonnages calculated?).