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

## Report of the correspondence group

**Submitted by Japan and the United States**

**SUMMARY**

| | |
|---|---|
| *Executive summary:* | This document provides the results of the work of the correspondence group on this agenda item that was re-established by SLF 55 |
| *Strategic direction:* | 2 |
| *High-level action:* | 2.0.1 |
| *Planned output:* | 2.0.1.5 |
| *Action to be taken:* | Paragraph 9 |
| *Related documents:* | SDC 1/INF.4; SLF 53/3; SLF 54/9, SLF 54/9/2; SLF 55/9/3, SLF 55/17; MSC 92/26; TM.5/Circ.5; resolutions A.758(18), A.791(19); and MSC.234(82) |

## Introduction

1 The Sub-Committee on Stability and Load Lines and on Fishing Vessels Safety (SLF), at its fifty-fifth session, agreed to re-establish the Correspondence Group on the Development of Provisions to Ensure the Integrity and Uniform Implementation of the 1969 TM Convention, under the coordination of Japan and the United States and with terms of reference as described in paragraph 9.16 of document SLF 55/17.

2 Participants in the group included delegations from Member Governments (Argentina, Australia, Bahamas, Brazil, Canada, China, Finland, France, Germany, India, Islamic Republic of Iran, Italy, Japan, Liberia, Marshall Islands, Mexico, Panama, Republic of Korea, Russian Federation, Singapore, Spain, Sweden, Turkey, United Kingdom, United States and Vanuatu); a representative from the United Nations specialized agency (ILO); and observers from the non-governmental organizations (BIMCO, IACS, ICS, IFSMA, INTERTANKO, ITF and SYBAss).

3 This report describes the work done by the correspondence group, as required under its terms of reference (see paragraph 1).

**Method of work**

4 The group developed an action plan, issued on 5 April 2013 and subsequently revised on 20 August 2013, consistent with the document deadlines for the newly formed Sub-Committee on Ship Design and Construction (SDC), to which the group is now reporting. The work was divided into three broad areas, which align with the three areas of work identified in the group's terms of reference, as follows:

.1 interpretations circular: further develop draft unified interpretations to the 1969 TM Convention, to be included in a covering draft Unified Interpretations TM.5 circular to replace TM.5/Circ.5;

.2 alterations and modifications: further consider approaches to tonnage implications of alterations and modifications to existing ships which affect gross tonnage; and

.3 accommodations: further consider a reduced gross tonnage ($GT_r$) parameter for accommodation spaces.

5 The action plan provided for four rounds of participants input. The first round focused on obtaining additional information, the second on further developing interpretations and approaches, the third on evaluating the interpretations and approaches, and the final round on developing the group's report. To gather input, the group used a series of questionnaires dedicated to each of the broad areas of work. A more detailed description of the work conducted during each round is provided in document SDC 1/INF.4, which also provides specifics on participants input.

**Summary of results**

6 The subparagraphs that follow summarize the group's results (see document SDC 1/INF.4 for further details).

.1 Interpretations circular: The group developed the draft Unified Interpretations TM.5 circular to replace TM.5/Circ.5, set out in annex 1. This annex incorporates interpretations and figures developed and agreed to by the group (italicized text and strikethroughs in italics, with figures in dashed outlines), as well as the interpretations and figures agreed to at SLF 55 (grey highlighting and strikethroughs). Interpretations regarding alterations or modifications requiring further development are indicated in square brackets and discussed further in paragraph 6.2. A total of 15 participants representing 13 Member Governments and two non-governmental organizations provided input during the course of the group's work on these interpretations.

.2 Alterations and modifications: The group developed, but could not reach agreement on, a number of different approaches to address the many complex issues related to tonnage implications of alterations and modifications, including provisions to accept national tonnages for certain older qualifying ships under article 3(2)(d) of the 1969 TM Convention (the so-called "GRT tonnage grandfathering provisions"). Retaining the existing 1% substantial alteration criterion in applying these provisions was,

nonetheless, favoured by a majority of the group, so text to this effect appears in square brackets in annex 1. The square bracketed text includes changes to reflect the expected approval of the new Assembly resolution to replace the Application of recommendation 2 of the International Conference on Tonnage Measurement of Ships, 1969 (resolution A.758(18)) (see annex 22 to document MSC 92/26), and deletion of reference to national (GRT) tonnage (see paragraph 7 of document SLF 55/WP.5). Annex 2 summarizes the results of the group's evaluation of the specific proposals related to this criterion. A total of 15 participants representing 13 Member Governments and two non-governmental organizations provided input during the course of the group's work on matters related to alterations and modifications.

.3 Accommodations: The group developed, but could not reach agreement on, approaches and alternatives to implementing a $GT_r$ parameter for accommodation spaces. Annex 3 summarizes the principal outcomes of this work, which identifies eight different options developed by the group and evaluated in round 3, listing benefits, disadvantages and the degree of participant preference for each. A total of 18 participants representing 13 Member Governments and five non-governmental organizations provided input during the course of the group's work on matters related to accommodations.

**Discussion**

7 The group's work was conducted under the planned output requested by SLF 53 and approved by MSC 89, with a target completion year of 2014. The work commenced at SLF 54, and was carried forward by an intersessional correspondence group, that drew on earlier work to examine and evaluate 59 specific issues, which were then considered at SLF 55. Annex 4 provides a listing of these issues, the actions taken, and the current status for each, and identifies those issues for which interpretations are included in the draft Unified Interpretations TM circular (annex 1). Of the 34 issues that were carried over to this group, 17 were addressed in some fashion through new or revised interpretations and figures included in annex 1, with the remainder unresolved. The following is a brief discussion of these results:

.1 Interpretations circular: The interpretations and figures developed by the group for inclusion in annex 1 were selected using a consensus methodology, as reflected in table 3-2 of annex 1 to document SDC 1/INF.4. Under this methodology, no such item was included unless a substantive majority of the 14 respondents either favoured or strongly favoured the item in round 3. Also, in no case was an item included where more than two respondents disfavoured or strongly disfavoured the item. Those items that received sufficient support for evaluation during the round 3 work, but were not included in annex 1, are included in annex 1 to document SDC 1/INF.4 (see table 3-3), which also summarizes participant comments, among other input.

.2 Alterations and modifications: The group collected information on ship measurements by flag Administrations, along with criteria currently used in applying the 1969 TM Convention to ships with tonnage changes. The group focused on provisions for GRT grandfathering (articles 3(2)(b) and (d)), changes of a major character (regulation 5(3)(b)), and remeasurement following other changes (article 10(1) and regulation 5(1)), as well as

experience with using graduated scales. While results from the 10 flag Administrations who participated in this round 1 work show that most apply a 1% criterion in all cases, there were substantive differences in how changes involving non-structural spaces and the addition and removal of temporary deck equipment (e.g. portable quarters units) are treated. In general, while acknowledging these differences, most participants favoured retaining the current 1% substantial alteration criterion for applying GRT grandfathering privileges, and using this 1% criterion as well when assessing changes of a major character and the need for remeasurement following other changes.

.3 Accommodations: The options carried forward by the group for evaluation, as identified in annex 3, were arrived at after considerable development by the group, including many constructive contributions by participants who nonetheless expressed serious reservations about the appropriateness of a $GT_r$ parameter for accommodation spaces. There was some agreement on how to measure the volumes of accommodation spaces under various approaches (e.g. those involving the 2006 Maritime Labour Convention (MLC 2006)), but little agreement on the degree to which other instruments such as the MLC 2006 could serve as a foundation for such a parameter. Also, of the 14 participants who completed round 3 questionnaires on this matter, half expressed their preference to recommend the use of TM Convention's tonnage for fee assessment purposes instead of implementing a $GT_r$ parameter for accommodation spaces, along similar lines to a proposal that was not implemented following discussions at SLF 53 under a previous planned output. In the end, most did not support going forward with efforts to implement such a $GT_r$ parameter, for a variety of reasons (see annex 3 to this document, and annex 3 to document SDC 1/INF.4).

**Need for further development**

8 In planning its work, the group initially assumed that a working group on tonnage would be utilized to assist in further development, per the arrangements agreed to at SLF 55 (SLF 55/17, paragraph 14.3). In light of the actions taken by MSC 92 with respect to Sub-Committee restructuring, including the decision not to establish a working group on tonnage at SDC 1, and with prior notification, the group's round 3 questionnaires were developed with the view toward bringing the detailed work to a close, to the extent possible, at SDC 1 without the need for further development by a working group. Although there were no objections to this approach prior to the distribution of the round 3 questionnaires, one participant subsequently expressed the view that the interpretations for the draft Unified Interpretations TM.5 circular should not be finalized without further development and discussions within such a group.

**Action requested of the Sub-Committee**

9 The Sub-Committee is invited to consider the information presented in this document, approve the report in general, and in particular to:

.1 agree to the Unified interpretations of the International Convention on Tonnage Measurement of Ships, 1969 (the 1969 Tonnage Convention), and the associated draft TM.5 circular, for submission to MSC 93 for approval, subject to the Sub-Committee's decision on the square bracketed text described in subparagraph .2 below (annex 1);

.2 consider and decide, as appropriate, whether the 1% criterion of TM.5/Circ.5 related to article 3(2)(d) of the 1969 TM Convention, should be retained as reflected in the square bracketed text of Interpretation A.3(2)(d)-1 of annex 1, or should otherwise be modified or deleted; and

.3 consider and decide, as appropriate, whether a reduced gross tonnage ($GT_r$) parameter for accommodation spaces should be further developed.

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# ANNEX 1

## DRAFT TM.5 CIRCULAR

## UNIFIED INTERPRETATIONS OF THE INTERNATIONAL CONVENTION ON TONNAGE MEASUREMENT OF SHIPS, 1969

1 The Maritime Safety Committee, at its sixty-third session (16 to 25 May 1994), agreed to a consolidated set of interpretations of the provisions of the International Convention on Tonnage Measurement of Ships, 1969 (TM.5/Circ.5).

2 The Maritime Safety Committee, at its [ninety-third session (14 to 23 May 2014)], having considered a proposal by the Sub-Committee on Ship Design and Construction, at its first session, approved the Unified interpretations of the International Convention on Tonnage Measurement of Ships, 1969 (the 1969 Tonnage Convention), as set out in the annex.

3 Member Governments are invited to use these Unified interpretations when applying the provisions of the 1969 Tonnage Convention.

4 This circular supersedes TM.5/Circ.5.

ANNEX

**UNIFIED INTERPRETATIONS OF THE INTERNATIONAL CONVENTION ON TONNAGE MEASUREMENT OF SHIPS, 1969**

**Articles**

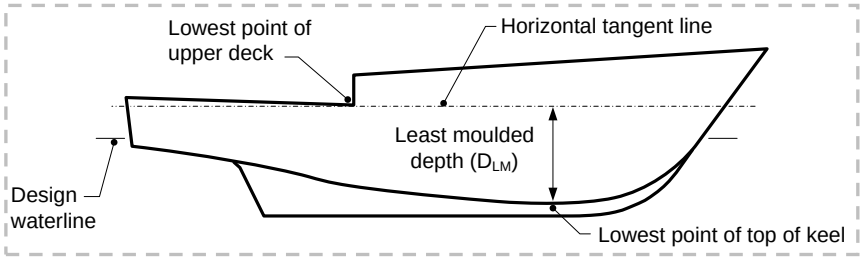
**Art. 2 Definitions**

**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.~~ When a ship does not have a rudder stock, the length should be taken as 96% of the total length on a waterline at 85% of the least moulded depth measured as defined in regulation 2(2).

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.~~ *The 96% overall length should be used for ships that do not have a clearly defined stem or stern, such as column-stabilized units, submersibles, floating docks, and similar ships.*

A.2(8)-3 In the definition of "length" in article 2(8), the term "least moulded depth" is the vertical distance measured from the top of the flat plate keel (or equivalent lower terminus as described in regulation 2(2)) at the lowest point along the keel's length to the horizontal line that is tangent to the underside of the upper deck at the ship's side (or equivalent upper terminus as described in regulation 2(2)) at the lowest point along the upper deck's length. For the purposes of this definition, the ship is considered to be trimmed on a waterline parallel to the design waterline.




*A.2(8)-4 Where more than one rudder is fitted, then the rudder stock which is to be considered when determining the length should be taken as the aftermost rudder stock.*

**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.*~~ ["The term "alterations or modifications which the Administration deems to be a substantial variation in their existing tonnage" means "an increase or decrease of more than 1% in the 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" columns 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

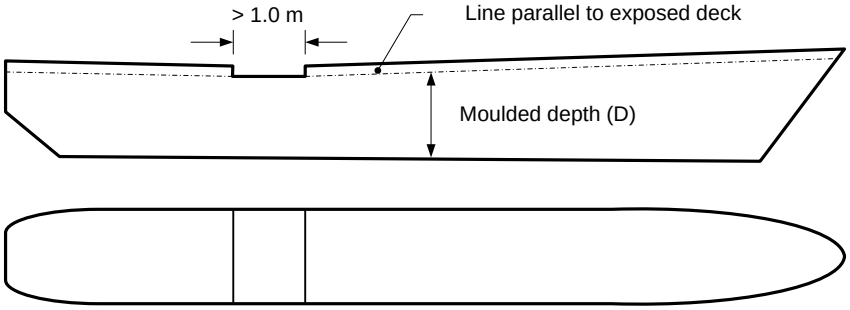
### Reg. 1(3) General

R.1(3)-1 The right of the Administration to determine tonnage of novel types of craft by application of methods other than those provided in the regulations should not be construed to allow exempting from measurement of those enclosed spaces which would otherwise have been included in tonnage. In applying these novel craft provisions, the resulting gross and net tonnages should be reflective of the ship's overall size and useful capacity, respectively. As such, the phrase "render the application of the provisions of these regulations unreasonable or impractical" cannot be construed as permitting deviations from these regulations for reasons unrelated to the determination of the ship's overall size or useful capacity (e.g. to accommodate constructional features that increase a ship's enclosed volume without a corresponding increase in its tonnage for the purpose of avoiding adverse economic impacts). A novel type of craft should be understood as one which is novel in its design and should not include existing traditional types of ships of usual shape or those types already covered by the Unified Interpretations.

### Reg. 2 Definition of terms used in the annexes

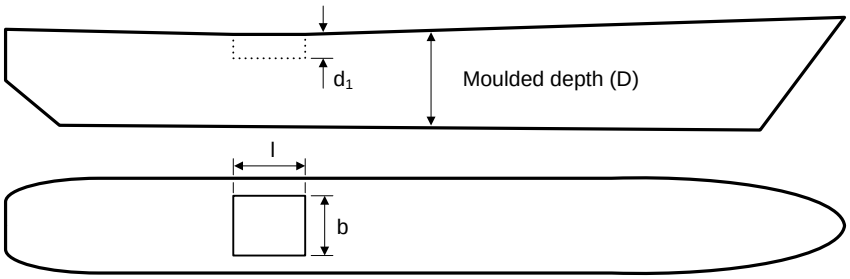
#### Reg. 2(1) Upper deck

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).

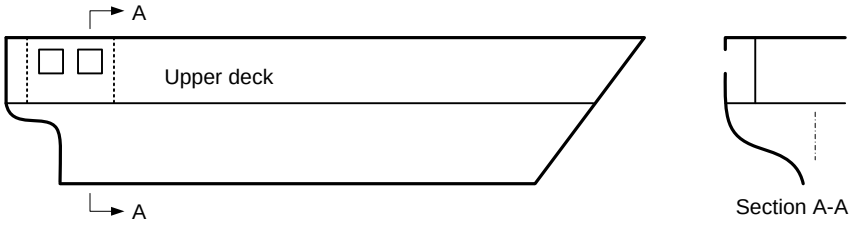



R.2(1)-2 Steps situated outside the "length" (article 2(8)) should not be considered.

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 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 fore side 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*~~.

R.2(4)-7 If enclosed spaces comply with the conditions for exclusion specified in regulation 2(5), then they should be excluded from the total volume of all

enclosed spaces (V). Such spaces should be treated as "enclosed but excluded spaces" to differentiate from "enclosed and included spaces" (those "enclosed spaces" which do not comply with the conditions for exclusion specified in regulation 2(5)).

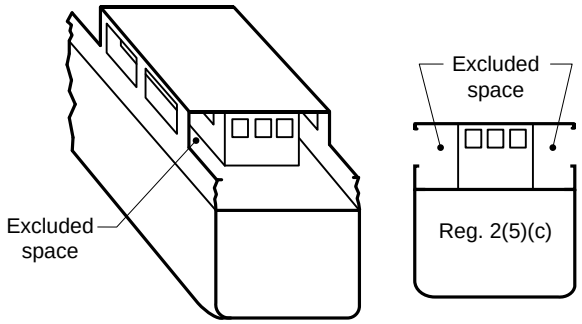
*R.2(4)-8 Open gratings that are part of the ship's hull, or of any deck, covering, partition or bulkhead, are not considered to bound enclosed space, and are ignored when applying this regulation.*

*R.2(4)-9 Machinery such as mooring and towing equipment, winches, revolving cranes, cranes with truss structures, and other similar items should not be included in the total volume of all enclosed spaces (V).*

*R.2(4)-10 All mobile cranes should not be included in the total volume of all enclosed spaces (V). "Mobile" means that the main structure (support) of the crane moves either longitudinally or transversely relative to the ship.*

**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). *Similarly, open spaces directly below a bridge wing structure should not be treated as enclosed spaces.*




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).

R.2(5)-3 In applying this regulation:

.1 spaces excluded from the total volume of all enclosed spaces (V) are those spaces which are treated as enclosed ones under regulation 2(4) but also comply with the conditions for exclusion under regulation 2(5);

.2 the volume of those enclosed spaces referred to in regulation 2(5)(a) to (e) shall be excluded from the total volume of all enclosed spaces (V), unless at least one of the following three conditions takes place:

- the space is fitted with any means for securing cargo or stores;

- the openings are fitted with any means of closure;

- the construction provides any possibility of such openings being closed.

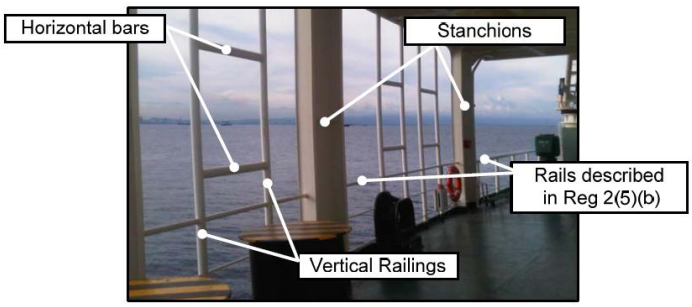
R.2(5)-4 In Appendix 1 to the Convention, labeling in the figures shall be interpreted as follows:

.1 "O = excluded space" refers to an enclosed space or part of an enclosed space which corresponds to one of the situations described in regulation 2(5)(a) to (e) and which satisfies the conditions for exclusion from the total volume of all enclosed spaces (V) specified in this regulation;

.2 "C = enclosed space" refers to an enclosed space or part of an enclosed space which does not correspond to any of the situations described in Regulation 2(5)(a) to (e) and consequently can never be excluded from the total volume of all enclosed spaces (V);

.3 "I = space to be considered as an enclosed space" refers to an enclosed space or part of an enclosed space which corresponds to one of the situations described in regulation 2(5)(a) to (e) but does not satisfy the conditions for exclusion from the total volume of all enclosed spaces (V) specified in this regulation.

R.2(5)-5 In applying regulation 2(5)(b) and (c), stanchions necessary to support an overhead deck and vertical railings are not considered to close or reduce the size of a side opening. Horizontal bars connecting vertical railings should not be treated as rails as described in regulation 2(5)(b).

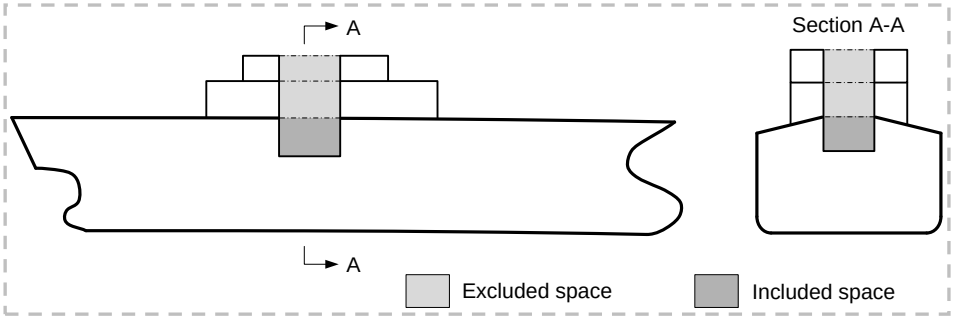



R.2(5)-6 When applying the provisions of regulation 2(5), the phrase "breadth of the deck" means the breadth of the deckhouse structure at the line of the opening of the space, regardless of whether or not the structure extends from side to side. In addition to erections extending from side to side, the requirements for excluded spaces under regulation 2(5) are also applicable to structures that do not extend from side to side of the ship. In such structures B means breadth of a structure that does not extend from side to side, measured in way of the opening (see Appendix 1 to the Convention).

*R.2(5)-7 Grates covering side or end openings should not be considered as means of closure when applying this regulation.*

***Reg. 2(5)(d)*** ***Space immediately below an uncovered opening***

*R.2(5)(d)-1 The term "immediately below" means extending from the deck in which the opening occurs to the lower boundary of the opening being considered. Openings which penetrate the upper deck (as defined in* regulation *2(1)) are only excluded to the line of the upper deck.*




**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. 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 remeasured 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.

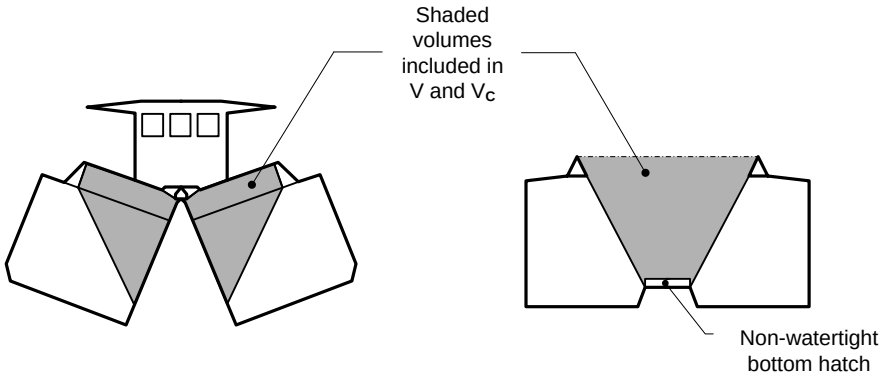
**Reg. 6(2)** **Appendages**

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.




R.6(3)-3 Spaces open to the sea should not be excluded from the total volume of all enclosed spaces (V) if they are used for cargo and/or buoyancy purposes.

**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

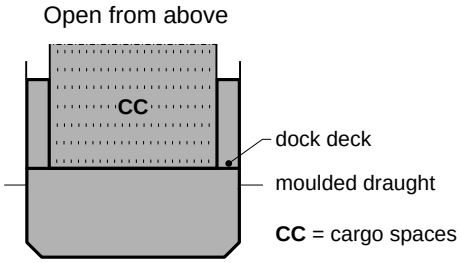
N.1-1 Livestock carriers are most often converted ships. Above the existing upper deck, one or more decks are constructed. Between these decks, the livestock corrals and their associated spaces are arranged, separated by, for example, railings, fences or gangways. The corrals are open to the air.

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.

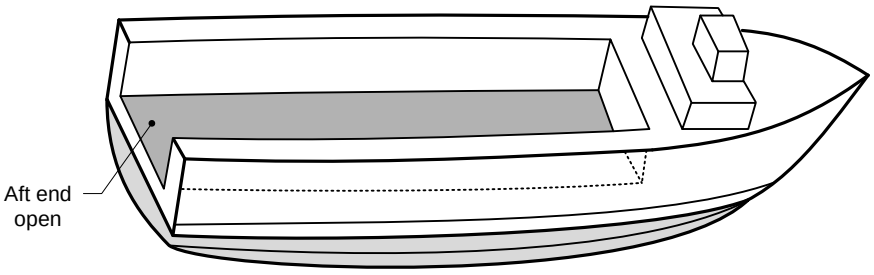
## NvlCr. 2 Dockships

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.

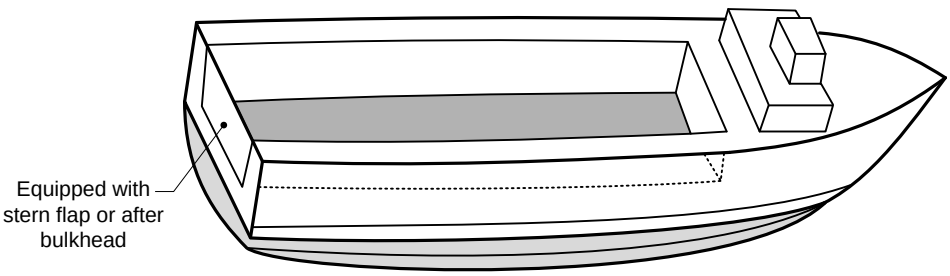



N.2-2 The dockships considered are described as:

.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<br>Poop<br>Bridge<br>Forecastle<br>Deckhouses<br>Hatches, etc. | | | |
| | | Total volume | | |
| NET TONNAGE | | | | |
| | No. 1 hold<br>No. 2 hold, etc.<br>No. 1 tween decks, etc.<br>No. 2 tween decks, etc.<br>Hatches, etc. | | | |
| | | Total volume | | |

***

# ANNEX 2

## EVALUATION SUMMARY FOR SUBSTANTIAL ALTERATIONS

**RESULTS FROM ROUND 3 WORK ON INTERPRETING ARTICLE 3(2)(d) OF THE TM CONVENTION**[1]

| Proposal Description | Number of participants expressing an opinion | | | | | |
|---|---|---|---|---|---|---|
| | Strongly favour | Somewhat favour | Neutral | Somewhat disfavour | Strongly disfavour | Most preferred[2] |
| 1 Apply 1% criterion. | 6 | 4 | 1 | 1 | 2 | 9 |
| 2 Apply 1% criterion unless IMO notified. | 1 | 0 | 2 | 4 | 7 | 0 |
| 3 Revoke the 1% criterion. | 1 | 2 | 1 | 2 | 8 | 1 |
| 4 Substantially altered if dimensions change. | 0 | 3 | 1 | 2 | 8 | 0 |
| 5 Substantially altered if major conversion. | 1 | 3 | 0 | 4 | 6 | 1 |
| 6 Apply graduated scale. | 1 | 0 | 0 | 4 | 8 | 1 |
| 7 None satisfactory. | - | - | - | - | - | 1 |

Notes:

1. Refer to annex 2 of document SDC 1/INF.XXX for detailed descriptions of proposals and other participant input, as well as the consensus analysis results.
2. This represents the total number of respondents who indicated the corresponding proposal was the one most preferred.

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# ANNEX 3

## ACCOMMODATIONS FOR CREW AND TRAINEES

## OPTIONS EVALUATION SUMMARY

<table>
<tr><td colspan="2">Option 1 – <u>SLF 55/9/3</u> Implement a $GT_r$ parameter that excludes accommodation spaces that would meet minimum MLC 2006 standards, using the framework of document SLF 55/9/3, with changes to establish detailed definitions in a new TM Circular. Applies to any ship, regardless of MLC 2006 applicability.</td><td>Preferred by<br>2</td></tr>
<tr><td>Principal Benefits<br>1 Facilitates the increase in the quantity and quality of accommodation spaces, including those for trainees, for ships meeting certain minimum accommodation standards.<br>2 Provides for some consistency of $GT_r$ assignments through requirements and recommendations. limited "stand alone"</td><td colspan="2">Principal Disadvantages<br>1 Relies on voluntary implementation of $GT_r$ as a basis for assessing fees, over which IMO has no control.<br>2 There may be inconsistent application due to MLC 2006 discretion to flag Administrations, including treatment of trainee spaces.<br>3 The measurement process to certify $GT_r$ is complex and potentially costly.<br>4 Use of excluded accommodation spaces for other purposes is more likely for those non-MLC 2006 ships that do not undergo a periodic compliance survey.<br>5 There is a risk of $GT_r$ being misinterpreted as the GT.</td></tr>
<tr><td colspan="2">Option 2 – <u>MLC 2006</u> Implement a $GT_r$ parameter that excludes accommodation spaces meeting MLC 2006 standards. Applies only to those ships with valid MLC 2006 Declarations.</td><td>Preferred by<br>1</td></tr>
<tr><td>Principal Benefits<br>1 Facilitates the increase in the quantity and quality of accommodation spaces for ships certified under the MLC 2006.<br>2 The use of MLC 2006 Declarations to identify spaces and volumes could largely shift measurement costs to owners, who will benefit from use of the $GT_r$ parameter.<br>3 Provides for initial and periodic surveys to enhance compliance with minimum accommodation standards.</td><td colspan="2">Principal Disadvantages<br>1 Relies on voluntary implementation of $GT_r$ as a basis for assessing fees, over which IMO has no control.<br>2 Provides no benefit for non-MLC 2006 ships (e.g. fishing vessels).<br>3 There may be inconsistent application due to MLC 2006 discretion to flag Administrations, including treatment of trainee spaces.<br>4 The measurement process to certify $GT_r$ is complex and potentially costly.<br>5 There may be objections to using MLC 2006 Declarations for this purpose, which could expose owners to port State interference.<br>6 There is a risk of $GT_r$ being misinterpreted as the GT.</td></tr>
</table>

| **Option 3 – <u>Modified SLF 55/9/3</u> Implement a $GT_r$ parameter using the framework of Option 1, but with references to MLC 2006 requirements removed, such that complete requirements for certifying $GT_r$ are contained within IMO documents.** | *Preferred by* 1 |
|---|---|
| *Principal Benefits*<br>1 Facilitates the increase in the quantity of accommodation spaces, including those for trainees, for all ships.<br>2 Helps ensure consistency of $GT_r$ assignments through complete "stand alone" requirements and definitions. | *Principal Disadvantages*<br>1 Relies on voluntary implementation of $GT_r$ as a basis for assessing fees, over which IMO has no control.<br>2 Provides no incentive for improving the quality of accommodation spaces.<br>3 Requires development and maintenance of IMO documents that promulgate the detailed requirements and definitions.<br>4 The measurement process to certify $GT_r$ is complex and potentially costly.<br>5 Use of excluded accommodation spaces for other purposes is more likely for those non-MLC 2006 ships that do not undergo a periodic compliance survey.<br>6 There is a risk of $GT_r$ being misinterpreted as the GT. |
| **Option 4 – <u>Suez Rules:</u> Implement a $GT_r$ parameter that excludes accommodation spaces using the framework of the Suez Canal Rules of Navigation to identify eligible spaces (e.g. Part IV, CH XII).** | *Preferred by* 1 |
| *Principal Benefits*<br>1 Facilitates the increase in the quantity of accommodation spaces, including those for trainees, for all ships.<br>2 Some ships are already measured under the Suez rules, making the $GT_r$ parameter potentially more viable.<br>3 Suez rules are familiar to many Administrations and Recognized Organizations. | *Principal Disadvantages*<br>1 Relies on voluntary implementation of $GT_r$ as a basis for assessing fees, over which IMO has no control.<br>2 Provides no incentive for improving the quality of accommodation spaces.<br>3 Obsolescence of Suez rules would require development and maintenance of detailed interpretations to ensure consistency of $GT_r$ assignments.<br>4 The measurement process to certify $GT_r$ is complex and costly, and adjustments to reflect moulded volumes may be required even for ships measured under the Suez rules.<br>5 There is no periodic compliance survey requirement to help ensure excluded accommodation spaces are not used for other purposes.<br>6 There is a risk of $GT_r$ being misinterpreted as the GT. |

| **Option 5 – <u>Exclude Deckhouse:</u> Implement a $GT_r$ parameter for accommodation spaces using the simplified approach of excluding the volume of the entire deckhouse structure, less the engine room casing and navigation bridge, or similar.** | *Preferred by* 0 |
|---|---|
| *Principal Benefits*<br>1 Facilitates the increase in the quantity of accommodation spaces for all ships.<br>2 The relatively simple calculational method could improve the chances of more widespread use. | *Principal Disadvantages*<br>1 Relies on voluntary implementation of $GT_r$ as a basis for assessing fees, over which IMO has no control.<br>2 Deckhouse spaces used for other purposes than accommodations would be excluded, without restriction.<br>3 Provides no incentive for improving the quality of accommodation spaces.<br>4 Identification of what constitutes an excludable deckhouse is problematic, and could adversely affect ship design (e.g. hull volume minimized and deckhouse volume maximized).<br>5 There is a risk of $GT_r$ being misinterpreted as the GT. |
| **Option 6 – <u>Apply 0.8 Factor:</u> Implement a $GT_r$ parameter for accommodation spaces using the simplified approach of applying a 0.8 factor to the gross tonnage (GT) for ships which are in full compliance with the requirements of certain International Labour Organization (ILO) instruments.** | *Preferred by* 0 |
| *Principal Benefits*<br>1 Facilitates the increase in the quantity and quality of accommodation spaces for all ships meeting certain minimum accommodation standards.<br>2 The extremely simple calculational method could substantively improve the chances of more widespread $GT_r$ use. | *Principal Disadvantages*<br>1 Relies on voluntary implementation of $GT_r$ as a basis for assessing fees, over which IMO has no control.<br>2 Provides no benefit for ships to which ILO requirements do not apply.<br>3 Provides little incentive for improving the quantity of accommodation spaces beyond minimum ILO requirements, which may result in a limited practical benefit for those serving on board.<br>4 There is a risk of $GT_r$ being misinterpreted as the GT. |
| **Option 7 –- <u>Recommend NT</u> Recommend the use of net tonnage (NT) when assessing fees, similar to an approach evaluated under an earlier SLF planned output (see document SLF 53/3, option B).** | *Preferred by* 7 |

| | |
|---|---|
| *Principal Benefits*<br>1 Facilitates the increase in the quantity of accommodation spaces for ships for which NT exceeds 0.3 GT (e.g. most solid and liquid bulk cargo carriers), including trainee spaces.<br>2 Encourages the design of ships of all kinds with greater freeboards (higher depth to draft ratios) that are, arguably, safer, due to favourable treatment under the NT formula.<br>3 NT parameter is currently assigned to all signatory Flag ships greater than 79 feet in length on international voyages, so there is effectively little cost to implement this option. | *Principal Disadvantages*<br>1 Relies on voluntary implementation of NT as a basis for assessing fees, over which IMO has no control.<br>2 Does not remove the incentive to minimize the size of accommodation spaces for some ship types (e.g. towing vessels) where NT is "capped" at 0.3 GT.<br>3 Could drive designs in the direction of excessively high freeboards, leading to ungainly ships with excessive wind profiles that are difficult to steer.<br>4 Recommending the use of NT as a basis for assessing fees is in conflict with current IMO recommendations on existing $GT_r$ parameters (i.e., for segregated ballast tankers and open-top containerships). |
| **Option 8 – <u>Obtain More Information</u> Obtain additional information to support the further development and possible implementation of a $GT_r$ parameter for accommodation spaces.** | *Preferred by*<br>0 |
| *Principal Benefits*<br>1 Could facilitate more informed decision-making on a matter of global impact on ships of all kinds, and those who serve aboard them. | *Principal Disadvantages*<br>1 May not yield meaningful information due to the subjectivity and multitude of factors involved.<br>2 Diverts attention from other issues while delaying a decision. |
| **<u>None Satisfactory</u> None of the options to address the accommodations matter evaluated by the group in Round 3 are considered satisfactory.** | *Preferred by*<br>2 |

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# ANNEX 4

## STATUS OF ISSUES IDENTIFIED IN ANNEX 1 TO DOCUMENT SLF 55/9

| Category and Issue | SLF 54-55 CG Assessment[1] | | | | Action taken and status of text and figures | | |
|---|---|---|---|---|---|---|---|
| | Important to Maintain Integrity | Importantto Uniformly Implement | Important for Ship Design / Safety | Revising Interpretations | SLF 55 | SLF 55 CG | Draft TM Circ Int. |
| **1. Length Definition** | | | | | | | |
| 1.a Treatment of Unusual Hull Configurations | Agree | Agree | Neither A/D | Needed | Developed | Finalized text | A.2(8)-2 |
| 1.b Determining Least Moulded Depth (LMD) | Agree | Agree | Neither A/D | Needed | Finalized text | Finalized fig | A.2(8)-3 & fig |
| 1.c Trainable Rudders and Rudderless Ships | Agree | Agree | Neither A/D | Needed | Developed | Finalized text[2] | A.2(8)-1&4 |
| **2. Novel Craft** | | | | | | | |
| 2.a. Applying Novel Craft Provisions | Agree | Agree | Agree | Needed | Finalized text | ---- | R.1(3)-1 |
| **3. Enclosed Spaces** | | | | | | | |
| 3.a Requirement for a Deck Above to Bound Enclosed Space | Agree | Agree | Neither A/D | Needed | Discussed | Discussed | ---- |
| 3.b Treatment of Temporary Deck Equipment | Agree | Agree | Agree | Needed | Discussed | Discussed | ---- |
| 3.c Treatment of Deck Cargo Bounded by Enclosing Structure | Agree | Agree | Neither A/D | Needed | ---- | ---- | ---- |
| 3.d Treatment of Spaces Underneath Overhangs | Agree | Agree | Neither A/D | Needed | Developed | Finalized text | R.2(5)-1 |
| 3.e Treatment of Topside Spaces of Complex Shape | Agree | Agree | Neither A/D | Needed | ---- | ---- | ---- |
| 3.f Treatment of Hull Spaces of Complex Shape | Agree | Agree | Neither A/D | Helpful/optional | Discussed | ---- | ---- |
| 3.g Evaluating Accessibility of Mast, Kingposts and Supports | Agree | Agree | Neither A/D | Needed | Discussed | Discussed | ---- |
| 3.h Vertical Truss Structures | Agree | Agree | Neither A/D | Needed | ---- | ---- | ---- |
| 3.i Movable Door Assembly Within a Covered Space | Agree | Agree | Neither A/D | Needed | ---- | ---- | ---- |
| 3.j Enclosed Space Versus Excluded Space | Agree | Agree | Neither A/D | Needed | Finalized text | ---- | R.2(4)-7; R.2(5)-3&4 |
| 3.k Mobile Cranes | Agree | Agree | Disagree | Needed | Discussed | Finalized text | R.2(4)-10 |
| 3.l Independent Ventilators and Air Trunks | Agree | Agree | Neither A/D | Needed | ---- | ---- | ---- |
| 3.m Spaces Fitted to Outer Structure Boundary | Neither A/D | Agree | Agree | Needed | Discussed | Discussed | ---- |
| 3.n Devices for Safety, Fire Protection and Pollution Prevention | Agree | Agree | Neither A/D | Needed | ---- | ---- | ---- |
| 3.o Width of End Openings | Agree | Agree | Neither A/D | Needed | Finalized text | Discussed fig | R.2(5)-6 |
| 3.p Machinery as Enclosed Space | Agree | Agree | Neither A/D | Needed | Discussed | Finalized text | R.2(4)-9 |
| 3.q Machinery Support Structures | Agree | Agree | Neither A/D | Needed | ---- | Discussed | ---- |
| **4. Definition of Deck, Cover and Partition** | | | | | | | |
| 4.a Definition of Awning | Agree | Agree | Neither A/D | Needed | Discussed | Discussed | ---- |
| 4.b Treatment of Exterior Spaces Bounded by Awnings | Agree | Agree | Neither A/D | Needed | Discussed | Discussed | ---- |
| 4.c Treatment of Interior Spaces Bounded by Awning-Like Materials | Agree | Agree | Neither A/D | Needed | Discussed | ---- | ---- |
| 4.d Fitting of Grates Over Side/End Openings | Agree | Agree | Agree | Needed | Developed | Finalized text | R.2(5)-7 |
| 4.e Fitting of Grates Over Deck Openings | Agree | Agree | Agree | Needed | Discussed | Finalized text | R.2(4)-8 |
| **5. Excluded Spaces** | | | | | | | |
| 5.a Shelves or Other Means for Securing Cargo or Stores | Agree | Agree | Agree | Needed | Discussed | Discussed | ---- |
| 5.b Impact of End Opening Obstructions | Agree | Agree | Neither A/D | Needed | Discussed | Discussed | ---- |
| 5.c Excluding Space Opposite an End Opening as a Recess | Agree | Agree | Neither A/D | Needed | ---- | ---- | ---- |
| 5.d Characteristics of End and Side Openings | Agree | Agree | Neither A/D | Needed | Discussed | Discussed | ---- |
| 5.e Deck Structure Height Requirements for Side Openings | Agree | Agree | Neither A/D | Needed | Developed | Discussed | ---- |
| 5.f Restrictions on Excluding Space Below Uncovered Openings | Agree | Agree | Neither A/D | Needed | Developed | Finalized text/fig | R.2(5)(d)-1 & fig |
| 5.g Structures Along the Line of an Opening | Agree | Agree | Neither A/D | Needed | ---- | ---- | ---- |
| 5.h Adjoining Deck Beams on End Openings | Agree | Agree | Neither A/D | Needed | Discussed | ---- | ---- |
| 5 i Rails and Fashion Plating for Side Openings | Agree | Agree | Agree | Needed | Finalized text | Finalized fig | R.2(5)-5 & fig |
| 5 j Height of Side Opening Railings | Agree | Agree | Neither A/D | Don't change | ---- | ---- | ---- |
| **6. Spaces Open to the Sea** | | | | | | | |
| 6.a Treatment of Spaces Inside the Hull as Open to the Sea | Agree | Agree | Neither A/D | Needed | Discussed | Discussed | ---- |
| 6.b Treatment of Spaces Outside the Hull as Open to the Sea | Agree | Agree | Neither A/D | Needed | ---- | ---- | ---- |
| 6.c Treatment of Moon Pools | Agree | Agree | Agree | Helpful/optional | Discussed | ---- | ---- |
| 6.d Large Volumes of Spaces Open to the Sea | Agree | Agree | Agree | Needed | Finalized text | Discussed fig | R.6(3)-3 |
| **7. Re-Certification for Changes Affecting Tonnage** | | | | | | | |
| 7.a Remeasurement Following Alterations | Agree | Agree | Neither A/D | Needed | Discussed | Discussed | ---- |
| 7.b Remeasurement Following Net Tonnage Change | Agree | Agree | Neither A/D | Needed | Discussed | Discussed | ---- |
| 7.c Alterations to Tonnage Following Remeasurement by Another Body | Neither A/D | Neither A/D | Neither A/D | Don't change | ---- | ---- | ---- |
| **8. National Tonnage** | | | | | | | |
| 8.a Criterion for Use of "Existing" Tonnage | Agree | Agree | Neither A/D | Needed | Discussed | Discussed | [A.3(2)(d)-1] |
| 8.b Use of Tonnage Under Interim Schemes | Agree | Agree | Agree | Needed | Finalized text | ---- | A 28 draft resolution |
| 8.c Loss of Tonnage Grandfathering Under Interim Schemes | Agree | Agree | Agree | Needed | Discussed | Discussed | [A.3(2)(d)-1] |
| **9. International Tonnage Certificate (1969)** | | | | | | | |
| 9.a Listing of Spaces on the Certificate | Agree | Agree | Neither A/D | Needed | ---- | ---- | ---- |
| 9.b Specifying Lengths of Spaces on the Certificate | Neither A/D | Agree | Neither A/D | Needed | Discussed | Discussed | ---- |
| 9.c Listing Excluded Spaces on the Certificate | Agree | Agree | Neither A/D | Needed | Discussed | ---- | ---- |
| 9.d Keel Laid or Alteration Date on the Certificate | Neither A/D | Neither A/D | Neither A/D | Helpful/optional | Discussed | ---- | ---- |
| 9.e Tonnage Certificate Attachments | Neither A/D | Neither A/D | Neither A/D | Helpful/optional | Discussed | ---- | ---- |
| 9.f Transmitting Copies of Calculations and Certificates Upon Flag Change | Agree | Agree | Disagree | Needed | ---- | ---- | ---- |
| **10. Applying Interpretations** | | | | | | | |
| 10.a Acceptance and Retroactive Application of Interpretations | Agree | Agree | Neither A/D | Needed | Discussed | ---- | ---- |
| **11. Impact on Working and Living Conditions** | | | | | | | |
| 11.a Extending Reduced Gross Tonnage to Crew Spaces | Disagree | Disagree | Agree | Don't change | Discussed | Discussed | ---- |
| 11.b Calculating a Reduced Gross Tonnage Parameter for Crew Spaces | Neither A/D | Disagree | Agree | Don't change | Discussed | Discussed | ---- |
| 11.c Use of Multiple Reduced Gross Tonnage Parameters | Disagree | Disagree | Agree | Needed | Discussed | Discussed | ---- |
| 11.d Treatment of Crew Accommodation Spaces | Agree | Disagree | Disagree | Don't change | Discussed | Discussed | ---- |
| **12. Certificate Exemptions** | | | | | | | |
| 12.a Single Voyage Exemption | Neither A/D | Neither A/D | Neither A/D | Don't change | ---- | ---- | ---- |
| **13. Cargo Spaces (Addendum)** | | | | | | | |
| 13.a Including Cargo Spaces in Tonnage | Agree | Disagree | Disagree | Don't change | Discussed | Discussed | ---- |

Notes: With Consensus | With Limited Consensus | Without Consensus

1. Consensus categorization methodology as reported in document SLF 55/9 per "Ranking Oridinal Scales Using the Consensus Measure", Issues in Information Systems, Volume V1, No. 2, 2005. The positions displayed reflect those receiving the most support, with "Agree" or "Needed" assumed to be the preferred response in all cases. The color coding scheme is based on the following Consensus Measures (Cns) values: Green (Cns >= 0.47); Yellow (0.3 <= Cns < 0.47); Red (Cns < 0.3).
2. Also discussed figured.