INTERNATIONAL MARITIME ORGANIZATION

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SUB-COMMITTEE ON SHIP DESIGN AND CONSTRUCTION
1st session
Agenda item 4

SDC 1/INF.4
18 October 2013
ENGLISH ONLY

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

Information collected by the correspondence group

Submitted by Japan and the United States

SUMMARY

Executive summary:	This document provides information collected by the correspondence group, established at SLF 55
Strategic direction:	2
High-level action:	2.0.1
Planned output:	2.0.1.5
Action to be taken:	Paragraph 5
Related documents:	SDC 1/4; SLF 55/9/3, SLF 55/WP.5, SLF 55/17; TM.5/Circ.5 and resolution A.758(18)

Introduction

1 The Sub-Committee on Stability and Load Lines and on Fishing Vessel Safety (SLF), at its fifty-fifth session (18 to 22 February 2013), re-established a correspondence group, 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. During the course of the group's work, the group used nine questionnaires to collect a considerable amount of information, which provided the foundation for the group's report to the Sub-Committee (SDC 1/4). This information document describes the conduct of the group's work, and includes important detailed information collected during the course of the group's work that was not included in document SDC 1/4. The group considers that this information could prove useful to the Sub-Committee during its work on this planned output, or if any of the matters addressed herein are revisited under future planned outputs.

Conduct of the group's work

2 The group's work was organized into four rounds: Round 1 (8 April to 17 May 2013), Round 2 (3 June to 12 July 2013), Round 3 (29 July to 6 September 2013) and Round 4 (18 September to 18 October 2013), with Round 4 dedicated solely to developing the group's report. Between rounds, the group's coordinators compiled and posted results summaries from the previous round's work, and finalized the questionnaires to be distributed in an upcoming round, taking into account participant comments on drafts that had been circulated previously. To facilitate the exchange of information, the group used the website (www.uscg.mil/imo/slf/tonnagecg) created by the correspondence group on tonnage established by SLF 54.

Information collected

3 The information included in this document is provided in annexes 1 to 3. A brief description of each annex follows:

.1 Annex 1 (Interpretations circular) – This annex describes the work done by the group to further develop the interpretations which carried over from SLF 55, excepting those related to tonnage changes (see paragraph 3.2). Detailed descriptions of the individual work items, summaries of the input received, and the outcomes are included in three tables (tables 1-1, 2-1 and 3-1), one for each of the first three rounds. A fourth table (table 3-2) summarizes the results of the consensus analysis approach used to identify those interpretations to be carried over for inclusion in the draft Unified Interpretations TM.5 circular. Those interpretations that did not receive sufficient support to be carried over are included in a fifth table (table 3-3), along with associated figures.

.2 Annex 2 (Alterations and modifications) – This annex describes the work to further consider matters related to tonnage implications of alterations and modifications to existing ships which affect gross tonnage. Descriptions of the work conducted in each round are included, along with tabulated information. Six tables (tables 1-1 to 1-6) provide information on current practice, with an associated figure appearing at the end of the annex. The remaining tables (table 2-1, 2-2, 3-1 and 3-2) summarize participant input and proposals related to such tonnage changes. Associated figures appear at the end of the annex.

.3 Annex 3 (Accommodations) – This annex describes the work to consider further matters related to the possible implementation of a reduced gross tonnage (GT_r) parameter for accommodation spaces. Work descriptions and proposals developed by the group, and other participant input are summarized using combinations of narrative descriptions and tables, with tables 2-1, 2-3, 2-5 and 3-1 including both the proposals being evaluated and the summarized participant input, and tables 2-2 and 2-4 summarizing the results of the consensus analysis used in evaluation of the various proposals. Associated figures appear at the end of the annex.

Terms and acronyms

4 Terms with associated acronyms that may not otherwise be defined within the annexes to this document are as follows:

.1 gross register tons (GRT);

.2 gross tonnage (GT);

.3 net tonnage (NT);

.4 reduced gross tonnage (GT_r);

.5 International Labour Organization (ILO);

.6 International Convention on Tonnage Measurement of Ships, 1969 (TM Convention or TM69);

.7 International Tonnage Certificate (1969) (ITC69); and

.8 Maritime Labour Convention, 2006 (MLC 2006).

Action requested of the Sub-Committee

5 The Sub-Committee is invited to consider the information provided in this document, and take action as appropriate.

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ANNEX 1

DEVELOPMENT OF INTERPRETATIONS FOR DRAFT TM.5 CIRCULAR

1 Information collection (Round 1)

1.1 This work focused on information gathering to support the further development of interpretations for inclusion in the draft Unified Interpretations TM.5 circular, excepting those related to tonnage changes. Participants from 10 countries and one non-governmental organization used a questionnaire to provide their input, offering recommended text, figures and comments on interpretations to the 1969 TM Convention carried forward from SLF 55.

1.2 A description of this work, including a summary of comments, is provided in table 1-1.

Table 1-1
Description of the Round 1 work

1. Article 2(8) - Length for unusual hull configurations The group further considered the draft interpretation regarding the length for unusual hull configurations, for which some agreement was reached at SLF 55 (see SLF 55/WP.5), and developed proposals, with eight participants offering input. Two participants commented that the interpretation is satisfactory without change. Two commented that "overall length" should be defined, with one proposing corresponding notations on the ITC69, and the other proposing use of the length from the Load Line certificate. One expressed the view that a detailed definition of "overall length" is not needed to avoid confusion over differences between terminology in the COLREGs and TM Convention, offering a clarifying figure and commenting that notation on the ITC69 was unnecessary. Two commented to the effect that the overall length should be that of the hull, with one stipulating that it should not include appendages. Another commented that the length for such unusual configurations should be the maximum dimension of the structure taken at any level. Based on the Round 1 results, the group carried forward seven proposed interpretations and one proposed figure.
2. Article 2(8) - Determining least moulded depth The group further considered including a figure for least moulded depth, using as a basis the draft figure for which some agreement was reached at SLF 55 (see SLF 55/WP.5), and developed proposals, with eight participants offering input. One participant commented that detailed figures showing different keel configurations should more appropriately be included in a new "moulded depth" interpretation under regulation 2(2), and another offered figures that could be used when interpreting "moulded depth". Another expressed support for the figures offered by this latter participant. One expressed support for the draft figure from SLF 55. Based on the Round 1 results, the group carried forward six proposed figures.
3. Article 2(8) - Length of ships with multiple rudders The group further considered the draft interpretation regarding multiple rudders, for which some agreement was reached at SLF 55 (see SLF 55/WP.5), and developed proposals, with eight participants offering input. Four participants expressed support for the above interpretation without change, two commented that an accompanying figure was not needed, and one offered a figure showing a tilted rudder stock. Also, in commenting on this item, two participants proposed text changes to explicitly address the matter of trainable steering devices, and one offered an associated proposed figure. Based on the Round 1 results, the group carried forward four proposed interpretations to Round 2, on the matter of ships with multiple rudders. The group similarly carried forward four proposed interpretations and one proposed figure on the matter of trainable steering devices.

Table 1-1 **Description of the Round 1 work**
4. Article 9(2) - Length measurements and excluded spaces The group further considered approaches for listing lengths of spaces on the ITC69, for which some agreement was reached at SLF 55 (see SLF 55/WP.5), and developed proposals, with eight participants offering input. One participant commented that only those spaces included in tonnage should be listed on the reverse of the ITC69. Another proposed that the date on the front of the ITC69 always includes the day and month, as well as the year. Based on the Round 1 results, the group carried forward six proposed interpretations and the draft figure from SLF 55 to Round 2, on the matter of establishing the termination points for the lengths of spaces. The group similarly carried forward one proposed interpretation on the matter of using an asterisk to identify excluded spaces on the ITC69, as well as another proposed interpretation on the matter of the date on the ITC69.
5. Regulation 2(4) - Enclosed space boundaries The group further considered interpretations or revisions to address boundaries of enclosed spaces, including the need for a deck above to bound space that is not within the ship's hull (see SLF 55/9, issue 3.a), and developed proposals, with nine participants offering input. One participant commented that discussions of partitions should reflect that "fixed or portable" partitions should be constructed of similar material to the ship's hull, with a possible linkage to treatment of awnings. Based on the Round 1 results, the group carried forward six proposed interpretations and one draft figure.
6. Regulation 2(4) - Treatment of awnings The group further considered interpretations or revisions to address definitions of awnings, and related matters (see SLF 55/9, issues 4.a and 4.b), and developed proposals, with nine participants offering input. Two participants questioned the validity of the existing interpretation, commenting to the effect that per regulation 2(4), an awning does not bound enclosed space. Based on the Round 1 results, the group carried forward three proposed interpretations, on the matter of treatment of spaces within awning boundaries. The group similarly carried forward four proposed interpretations on the matter of awning definitions and characteristics.
7. Regulation 2(4) - Temporary deck equipment The group further considered interpretations or revisions to address treatment of temporary deck equipment (see SLF 55/9, issue 3.b), and developed proposals, with ten participants offering input. One participant expressed the view that to avoid abuses and ensure legal compliance with the TM Convention, such enclosures should either be "in tonnage", with provisions for their installation/removal without remeasurement, or "out of tonnage", with an upper cap on their aggregate volume. Another commented that including such items in tonnage under the existing interpretation should require amending the TM Convention to include language addressing what constitutes "permanent", "temporary", and differences with cargo container treatment. Based on the Round 1 results, the group carried forward nine proposed interpretations.
8. Regulation 2(4) - Inaccessible topside spaces The group further considered interpretations or revisions to address treatment of inaccessible topside spaces (see SLF 55/9, issues 3.g and 3.m, and related issue 3.k), and developed proposals, with nine participants offering input. One participant referred to the related figure in document SLF 55/9/1, to provide clarifications on spaces separated on all their sides that are not included in tonnage. Another commented that accessibility should not be a criterion for evaluating enclosed space. Another commented that the existing interpretation on measurement of multipurpose ships with hatch covers closed should specify that two sets of tonnage be indicated on the ITC69, to reflect spaces in either an open or closed condition. Based on the Round 1 results, the group carried forward six proposed interpretations, on the matter of inaccessible topside spaces. The group similarly carried forward one proposed interpretation on the matter of hatch covers on multipurpose ships.

Table 1-1
Description of the Round 1 work

9. Regulation 2(4) - Grates over deck openings The group further considered interpretations to address treatment of grates over deck openings (see SLF 55/9, issue 4.e, and related issues 4.a and 4.b), and developed proposals, with six participants offering input. Two participants referred to the related matter of grates as closures to openings, with one expressing the view that deck opening grates should be addressed within this other context (i.e. Regulation 2(5)). Another expressed the view that a figure was not needed. Another commented that gratings do not close a space and should be considered in the larger context of safety, as they can be used to provide footing for crossing between structures. Based on the Round 1 results, the group carried forward four proposed interpretations and one proposed figure, and sought input from the group on whether the matter of deck opening grates should be addressed under Regulation 2(5) interpretations.

10. Regulation 2(4) - Machinery and mobile cranes The group further considered interpretations to address treatment of machinery and mobile cranes as enclosed space (see SLF 55/9, issues 3.k and 3.p), and developed proposals, with eight participants offering input. Two participants suggested that confusion has arisen over the term "mobile" (e.g. not fixed to ship's structure, moves both longitudinally and transversely, etc.). Another recommended that interpretations related to machinery and mobile cranes be handled comprehensively, along with interpretations on temporary deck equipment. Based on the Round 1 results, the group carried forward seven proposed interpretations, on the matter of treatment of machinery. The group similarly carried forward five interpretations on the matter of treatment of mobile cranes, and sought input on whether these matters should be treated comprehensively along with temporary deck equipment through a revision to an existing interpretation.

11. Regulation 2(5) - Spaces Below bridge wings The group further considered the draft interpretation regarding spaces below a wing structure, for which some agreement was reached at SLF 55, and the need to provide any figures (see SLF 55/WP.5), and developed proposals, with eight participants offering input. Five participants expressed support for the draft interpretation without change, while a sixth commented that the term "open space" should either be defined or deleted. Based on the Round 1 results, the group carried forward two proposed interpretations and one proposed revision to the existing figure.

12. Regulation 2(5) - Stanchions and railings The group further considered the draft figure for the interpretation on stanchions and railings, for which some agreement was reached at SLF 55 (see SLF 55/WP.5), and developed proposals, with three participants offering input. Two participants commented to the effect that the figure appears adequate, with one proposing the addition of labelling. Based on the Round 1 results, the group carried forward two proposed figures.

13. Regulation 2(5) - Deck breadth and end openings The group further considered a figure for the draft interpretation on deck breadth measurements at end openings, for which some agreement was reached at SLF 55 (see SLF 55/WP.5), and developed proposals, with six participants offering input. All supported either the interpretation itself, or the approach of including a figure, with one expressing preference for a technical illustration reflecting a simple end opening. Based on the Round 1 results, the group carried forward one proposed figure.

14. Regulation 2(5) - Grates as means of closure The group further considered the draft interpretation regarding grates as a means of closure, for which some agreement was reached at SLF 55 (see SLF 55/WP.5), and developed proposals, with eight participants offering input. Five participants expressed support for the interpretation without change. One commented to the effect that a figure was not needed. One participant expressed the view that only those grates providing a barrier against intrusion (e.g. piracy) should not be considered as a means of closure. The group carried forward four proposed interpretations.

Table 1-1
Description of the Round 1 work

15. Regulation 2(5)(a) - Cargo securing and opening characteristics The group further considered interpretations to address shelves or other means of securing cargo and stores, and characteristics of side and end openings (see SLF 55/9, issues 5.a and 5.d), and developed proposals, with seven participants offering input. One participant commented that boundary structures such as fixed or portable partitions or bulkheads of spaces appropriated for stowage of cargo or stores serve the purpose of cargo or stores containment. Three participants commented to the effect that any space used for carriage of cargo or stores cannot be excluded. One commented that "stores" should mean any type of material except safety and pollution prevention items. Another commented that, considering the word "provisions" from the French translation of the TM Convention, "stores" should mean consumable material for shipboard use, and not safety or security equipment, tools or topside gear stowed for heavy weather. Regarding issue 5.d, one participant expressed concern that the term "fashion plating" not be confused with plating for safety purposes (e.g. creating a path for launching life rafts). Based on the Round 1 results, the group carried forward six proposed interpretations, on the matter of treatment of means of securing cargo and stores. The group similarly carried forward one proposed figure on the matter of treatment of end openings.

16. Regulation 2(5)(a) - End opening obstructions The group further considered interpretations to address end opening obstructions (see SLF 55/9, issue 5.b), and developed proposals, with six participants offering input. One participant expressed preference for applying a 25% area criterion, and commented that a minimum distance criterion that ignores obstructions not included in tonnage may effectively create a "loophole" to effectively circumvent the closure criteria (e.g. installing a vertical plate). Another expressed the view that obstructions not included in tonnage (e.g. cargo or deck machinery) cannot obstruct an opening. Based on the Round 1 results, the group carried forward three proposed interpretations and one proposed figure.

17. Regulation 2(5)(c) - Deck structure heights and side openings The group further considered the draft interpretation and figure regarding deck structure heights and side openings, for which some agreement was reached at SLF 55 (see SLF 55/WP.5), and developed proposals, with six participants offering input. One participant expressed support for the draft interpretation without change. Another proposed clarifications to the text and the figure to emphasize that the stepped deck could extend across a majority of the opening width with the largest height still applied as the reference height, whereas for a step on either side of the opening, the reference height should be the smaller of the two. Based on the Round 1 results, the group carried forward six proposed interpretations and one proposed figure.

18. Regulation 2(5)(d) - Spaces below uncovered openings The group further considered the draft interpretation and figure regarding spaces below uncovered openings, for which some agreement was reached at SLF 55 (see SLF 55/WP.5), and developed proposals, with seven participants offering input. Five participants expressed support for the draft interpretation and figure without change. One questioned whether a hole in a steel plate is considered an opening in this context. Another offered an alternate figure intended to preserve the principal information from the figure carried forward from SLF 55, while applying it to the more plausible case of an industrial ship. Based on the Round 1 results, the group carried forward one proposed interpretation and two proposed figures.

Table 1-1 **Description of the Round 1 work**
19. Regulation 6(3) - Cargo and buoyant spaces open to the sea The group further considered the draft figure regarding cargo and buoyant spaces open to the sea, for which some agreement was reached at SLF 55 (see SLF 55/WP.5), and developed proposals, with nine participants offering input. Seven participants expressed support for the draft figure or associated text. One participant offered an additional technical illustration, for inclusion with the draft figure carried forward from SLF 55, showing a large space open to sea with entrapped air. Another recommended a change to clarify the interpretation agreed to at SLF 55. Based on the Round 1 results, the group carried forward one proposed interpretation and four proposed figures.
20. Regulation 6(3) - Free communication with the sea The group further considered interpretations to address treatment of spaces inside the hull as open to the sea (see SLF 55/9, issue 6.a), and developed proposals, with eight participants offering input. One participant commented that while free communication should be the determining factor, this should be without consideration to small flow restrictions. Another cited the difficulty of establishing specific qualitative criteria for free communication when offering a proposal citing a number of examples (e.g. hawse pipes, sea valve recesses, thruster tunnels). Another participant suggested including photos depicting such similar excluded spaces. Based on the Round 1 results, the group carried forward four proposed interpretations.
21. General Comments The group was given the opportunity to offer general comments, including any additional proposals, with four participants offering input. One participant proposed revising Interpretation R.7-1 to provide for attaching to the ITC69 the TM circular annex 2 form, which gives particulars of the tonnage calculations, for verification by port Authorities or for flag changes, and to clarify the issuing authority for the form. Another proposed a related new interpretation requiring that the ITC69 and associated calculations be an electronic spreadsheet, showing only two decimal places, thereby eliminating the need for the annex 2 form. Another questioned the exclusion of certain uncovered spaces on a ro-ro passenger ship fitted with D-rings for securing cars and trucks. A fourth participant proposed a change to the existing figure in Interpretation N.2-1, for consistency with the text of the interpretation, to reflect that the spaces inside the coamings are not treated as enclosed spaces. Based on these comments and the other Round 1 results, the group carried forward two proposed interpretations and two proposed figures.

2 Evaluation and further development (Round 2)

2.1 This round focused on evaluating and further developing text and associated figures carried forward from Round 1 for inclusion in the draft Unified Interpretations TM.5 circular. Participants from 10 countries and two non-governmental organizations used a questionnaire to evaluate the proposed text and figures, taking into account, especially, the Round 1 and SLF 55 outcomes.

2.2 A description of this work, including a summary of comments, is provided in table 2-1 below.

Table 2-1 **Description of the Round 2 work**
1. Article 2(8) - Trainable steering devices The group evaluated the interpretations and figure that carried forward from Round 1, with 12 participants offering input. Six participants preferred the draft interpretation agreed to at SLF 55 without change. Three preferred proposals to clarify that trainable steering devices are not taken into consideration when applying the length definition. Three preferred proposals to take such devices into consideration. Two preferred the figure, while eight indicated the figure was unsatisfactory. Based on the Round 2 results, the group carried forward the draft interpretation as agreed to at SLF 55 for inclusion in the draft circular without further evaluation, as proposed revised Interpretation A.2(8)-1. The group did not carry forward the figure.
2. Article 2(8) - Length of unusual hull configurations The group evaluated the interpretations and figure that carried forward from Round 1, with 12 participants offering input. Seven participants preferred the draft interpretation for which some agreement was reached at SLF 55, with an eighth preferring a variant of this proposal which added accompanying notations to the ITC69. Three preferred interpretations to base length on maximum dimensions of ship structure. One preferred an interpretation to use the length from the ship's load line certificate. Five preferred the figure, while four indicated that the figure was not satisfactory. Based on the Round 2 results, the group carried forward the interpretation for which some agreement was reached at SLF 55, as proposed revised Interpretation A.2(8)-2. The group also carried forward the figure.
3. Article 2(8) - Determining least moulded depth The group evaluated the figures that carried forward from Round 1, with 10 participants offering input. Three participants preferred a figure similar to that from SLF 55, but with the least moulded depth measurement shown, while two preferred a variant showing two hull forms, one with a raked keel and the other a curved keel. Two preferred a figure with explanatory notes addressing various hull shapes and keel configurations, and showing the least moulded depth to always be taken at a single longitudinal location along the hull. Two preferred figures showing the least moulded depth taken to a line of tangency drawn parallel to the keel line. One preferred the figure for which some agreement was reached at SLF 55. Based on the Round 2 results, the group carried forward the figure that received the most support, to accompany proposed Interpretation A.2(8)-3.
4. Article 2(8) - Length of ships with multiple rudders The group evaluated the interpretations that carried forward from Round 1, with 12 participants offering input. Six participants preferred the draft interpretation which received some agreement at SLF 55, while four preferred variants of this interpretation that would implement a similar approach. Two preferred a proposal that took into account trainable steering devices. Based on the Round 2 results, the group carried forward the interpretation that received the most support, as proposed Interpretation A.2(8)-4.
5. Article 9(2) - Date on the ITC69 The group evaluated the interpretation that carried forward from Round 1, with 10 participants offering input. Three participants preferred, and seven participants did not prefer, establishing the draft interpretation. Based on the Round 2 results, the group did not carry forward the interpretation.

Table 2-1 **Description of the Round 2 work**
6. Article 9(2) - Length termination points for ITC69 listing The group evaluated the interpretations and figure that carried forward from Round 1, with 10 participants offering input. Six participants preferred interpretations providing for measurement of overall length of the space, with two preferring interpretations providing for measurement on deck, and two preferring interpretations providing for taking average dimensions. There was little agreement on whether the presence of an excluded space should influence the length measurement, with two participants preferring the figure and six participants indicating the figure was not satisfactory. Based on the Round 2 results, the group developed and carried forward proposed Interpretation A.9(2)-5, providing for measurement of the overall length of the space, along with the figure, as revised to omit depiction of excluded spaces. The group also developed and carried forward proposed Interpretation A.9(2)-6, to address the matter of excluded space treatment when listing lengths on the ITC69.
7. Article 9(2) - Asterisk notation for ITC69 listing The group evaluated the interpretation that carried forward from Round 1, with 10 participants offering input. Three participants preferred, and six participants did not prefer, establishing the draft interpretation, with one participant offering alternate text. Based on the Round 2 results, the group did not carry forward the interpretation.
8. Regulation 2(4) - Enclosed space boundaries The group evaluated the interpretations and figure that carried forward from Round 1, with 12 participants offering input. Five participants preferred an interpretation that provided for including uncovered spaces above the upper deck in tonnage. Four preferred variants of this interpretation that provided for including such spaces only if used for cargo or stores. The remaining four participants who offered input preferred various other approaches. Two participants preferred the figure, while seven indicated that the figure was not satisfactory. Based on the Round 2 results, the group carried forward the interpretation that received the most support, as proposed revised Interpretation R.2(4)-1. The group did not carry forward the figure.
9. Regulation 2(4) - Spaces within awning boundaries The group evaluated the interpretations that carried forward from Round 1, with 12 participants offering input. Five participants preferred the interpretation that provided for disregarding the awning when used in combination with other boundary structures. Four participants preferred an interpretation along similar lines, but which explicitly addressed treatment of enclosed spaces underneath an awning. Two participants preferred a less detailed interpretation. Based on the Round 2 results, the group carried forward the interpretation that received the most support, as proposed revised Interpretation R.2(4)-2.
10. Regulation 2(4) - Temporary deck equipment The group evaluated the interpretations that carried forward from Round 1, with 12 participants offering input. Three participants preferred the interpretation that provided for including in tonnage all enclosed spaces of a temporary nature not carried as freight in tonnage, regardless of method of attachment. One preferred an interpretation along similar lines that defined "permanently located" as meaning secured to the hull and/or ship systems. Five preferred various other interpretations, all of which in some way stipulated conditions of permanency (e.g. welding) for such enclosures to be included in tonnage. Three participants indicated that none of the proposed interpretations was satisfactory. Based on the Round 2 results, the group carried forward the interpretation that received the most support, as proposed revised Interpretation R.2(4)-3.
11. Regulation 2(4) - Multipurpose ship hatch covers The group evaluated the interpretation that carried forward from Round 1, with 12 participants offering input. One participant preferred, and 11 participants did not prefer, establishing the interpretation. Based on the Round 2 results, the group did not carry forward the interpretation.

Table 2-1 **Description of the Round 2 work**
12. Regulation 2(4) - Inaccessible topside spaces The group evaluated the interpretations that carried forward from Round 1, with 12 participants offering input. Three participants preferred the interpretation to define "completely inaccessible" in terms of access for inspection and maintenance purposes only, and with bolted closures. Two preferred an interpretation along similar lines that defined "completely inaccessible" in terms of not readily accessible when the ship is undertaking normal duties. Three participants preferred interpretations to remove the accessibility restriction subject to certain conditions (e.g. that the space cannot have a function or object essential for the operation of the ship). Three participants indicated that none of the interpretations was satisfactory. Based on the Round 2 results, the group carried forward the interpretation receiving the most support that retained the inaccessibility requirement, as proposed revised Interpretation R.2(4)-6.
13. Regulation 2(4) - Characteristics of awnings The group evaluated the interpretations that carried forward from Round 1, with 12 participants offering input. Four participants preferred the interpretation to define "awning" in terms in of flexible material to protect the deck from sun and weather. Two participants preferred other interpretations along similar lines. Three participants preferred an interpretation to define "awning" in terms of an overhead structure to protect the deck from the sun only, not to include side boundaries. Based on the Round 2 results, the group carried forward the interpretation that received the most support, as proposed Interpretation R.2(4)-8.
14. Regulation 2(4) - Grates over deck openings The group evaluated the interpretations and figure that carried forward from Round 1, with 11 participants offering input. Four participants preferred the interpretation that provided for open grates to not be considered as bounding enclosed space and, as a consequence, ignored. One participant preferred another interpretation along similar lines. Three participants preferred an interpretation to construe deck grates as semi-permanent awnings. Four preferred the figure, and four indicated that the figure was not satisfactory. Based on the Round 2 results, the group carried forward the interpretation that received the most support, as proposed Interpretation R.2(4)-9. The group also carried forward the figure.
15. Regulation 2(4) - Machinery The group evaluated the interpretations that carried forward from Round 1, with 11 participants offering input. Although 11 participants collectively preferred nine different interpretations, no single interpretation was preferred by more than two participants. In general, most participants preferred interpretations that would exclude machinery from tonnage, with a divergence of opinions on how to treat machinery foundations. Based on the Round 2 results, the group developed and carried forward proposed Interpretation R.2(4)-10, drawing on elements of various proposals that received the most support.
16. Regulation 2(4) - Mobile cranes The group evaluated the interpretations that carried forward from Round 1, with 10 participants offering input. Three participants preferred the interpretation to define "mobile" in terms of movement either longitudinally or transversely. The remaining interpretations were supported by no more than one participant, with three participants indicating that none of the interpretations was satisfactory. Based on the Round 2 results, the group developed and carried forward proposed Interpretation A.2(4)-11, drawing on elements of various proposals that received the most support.

Table 2-1
Description of the Round 2 work

17. Regulation 2(5) - Spaces below bridge wings The group evaluated the interpretations and figure that carried forward from Round 1, with 12 participants offering input. Seven participants preferred including the word "open" in the interpretation for which some agreement was reached at SLF 55, and two preferred deleting this word, with three participants indicating none of the interpretations was satisfactory. Four preferred the figure, which would replace an existing figure and provides more detail on treatment of the related matter of space that is opposite side openings, while three preferred leaving the figure unchanged, with two indicating that neither approach was satisfactory. Based on the Round 2 results, the group carried forward the interpretation that included the word "open", as proposed revised Interpretation R.2(5)-1. The group also carried forward the revised figure.
18. Regulation 2(5) - Stanchions and railings The group evaluated the figures that carried forward from Round 1, with 10 participants offering input. Ten participants preferred including the figure with the addition of labelling. Based on the Round 2 results, the group carried forward the figure with labelling for inclusion with proposed Interpretation R.2(5)-5.
19. Regulation 2(5) - Deck breadth and end openings The group evaluated the figure that carried forward from Round 1, with 10 participants offering input. Eight participants preferred the figure, with two indicating the figure was not satisfactory. Based on the Round 2 results, the group carried forward the figure for inclusion with proposed Interpretation R.2(5)-6.
20. Regulation 2(5) - Grates as means of closure The group evaluated the interpretations that carried forward from Round 1, with 11 participants offering input. Five participants preferred the draft interpretation for which some agreement was reached at SLF 55, and three preferred variants of this interpretation that would implement a similar approach. Three participants preferred an interpretation that would allow only those grates provided as barriers against intrusion to not be considered as a means of closure. Based on the Round 2 results, the group carried forward the interpretation for which some agreement was reached as SLF 55, as proposed Interpretation R.2(5)-7.
21. Regulation 2(5) - Cargo securing The group evaluated the interpretations that carried forward from Round 1, with 12 participants offering input. Although nine participants collectively preferred five different interpretations, no single interpretation was preferred by more than two participants, and three participants indicated that none of the interpretations was satisfactory. In general, most participants preferred interpretations that would not allow spaces used for cargo and stores to be excluded from tonnage. Based on the Round 2 results, the group carried forward one of the interpretations containing elements supported by a majority of the group, as proposed Interpretation R.2(5)-8.
22. Regulation 2(5)(a) - End opening obstructions The group evaluated the interpretations and figure that carried forward from Round 1, with 11 participants offering input. Three participants preferred the interpretation which provided for considering an opening as closed if an obstruction that was included in tonnage was within half the breadth of the deck at the opening. Three preferred a variant that clarified the breadth as being that of the deckhouse. Five participants indicated that none of the interpretations was satisfactory. Five participants preferred the figure, and four indicated that it was unsatisfactory. Based on the Round 2 results, the group carried forward the interpretation that included the half the breadth restriction but without the clarification regarding the deckhouse breadth, as proposed Interpretation R.2(5)(a)-1. The group also carried forward the figure.

Table 2-1 **Description of the Round 2 work**
23. Regulation 2(5)(a) - End opening characteristics The group evaluated the figure that carried forward from Round 1, with 10 participants offering input. Four participants preferred, and six participants did not prefer, the figure. Based on the Round 2 results, the group did not carry forward the figure.
24. Regulation 2(5)(c) - Deck structure height and side openings The group evaluated the interpretations and figure that carried forward from Round 1, with 11 participants offering input. While none preferred the interpretation for which some agreement was reached at SLF 55, three participants preferred variants of this interpretation, with two preferring text that precluded excluding space above a false ceiling. Three preferred a simplified interpretation to evaluate the opening height against the height between continuous/complete decks in each tier, and two indicated that none of the interpretations was satisfactory. Six participants preferred, and two participants did not prefer, the figure. Based on the Round 2 results, the group developed and carried forward proposed Interpretation R.2(5)(c)-1, drawing on elements of various proposals that received the most support, and carried forward the figure, with modifications to reflect input from the group.
25. Regulation 2(5)(d) - Space below uncovered openings The group evaluated the interpretation and figures that carried forward from Round 1, with 11 participants offering input. Eleven participants preferred the interpretation. Five preferred the figure considered at SLF 55, and five preferred the alternate figure of an industrial ship. Based on the Round 2 results, the group carried forward the interpretation as proposed Interpretation R.2(5)(d)-1. The group also carried forward the figure considered at SLF 55, for inclusion with this interpretation.
26. Regulation 6(3) - Cargo and buoyant spaces open to the sea The group evaluated the interpretation and figures that carried forward from Round 1, with 12 participants offering input. Three participants preferred the interpretation which clarified the text agreed to at SLF 55, while nine preferred leaving the text unchanged. The two figures receiving the most support were preferred by 12 participants. Based on the Round 2 results, the group carried forward the draft interpretation as agreed to at SLF 55 for inclusion in the draft circular, without further evaluation, as Interpretation R.6(3)-3. The group also carried forward the two figures that received the most support, for inclusion with this interpretation.
27. Regulation 6(3) - Free communication for open to the sea The group evaluated the interpretations that carried forward from Round 1, with 12 participants offering input. Four participants preferred the interpretation which defined free communication in terms of water coming out of a space as quickly as it gets in solely under the force of gravity, with three preferring variants seeking to additionally establish a percent area criterion (e.g. 75%). Three participants preferred a more general interpretation that listed various examples, while two indicated that none of the interpretations was satisfactory. Based on the Round 2 results, the group carried forward the interpretation that received the most support, as proposed Interpretation R.6(3)-4.
28. Regulation 7(1) - Attaching annex 2 Form to the ITC69 The group evaluated the interpretation that carried forward from Round 1, with 10 participants offering input. Three participants preferred and six did not prefer the interpretation. Based on the Round 2 results, the group did not carry forward the interpretation.
29. Regulation 7(2) - Electronic format for ITC69 The group evaluated the interpretation and figure that carried forward from Round 1, with 10 participants offering input. Six participants preferred and four did not prefer the interpretation. Two participants preferred the figure, and six participants indicated the figure was not satisfactory. Based on the Round 2 results, the group carried forward the interpretation, as proposed Interpretation R.7(2)-2. The group did not carry forward the figure.

Table 2-1 **Description of the Round 2 work**
30. Novel craft interpretation - Correction to dockship figure The group evaluated the figure that carried forward from Round 1, with 10 participants offering input. Three participants preferred the revised figure, and five participants preferred retaining the existing figure without change, although two other participants indicated changes to the figure that would make the figure acceptable. Based on the Round 2 results, the group developed and carried forward a revised figure for Interpretation N.2-1.

3 Evaluate text and figures for draft TM 5 circular (Round 3)

3.1 This Round focused on evaluating the text and associated figures carried forward from Round 2, for inclusion in the draft Unified Interpretations TM.5 Circular. Participants from 12 countries and two non-governmental organizations used a questionnaire to evaluate the proposed text that had received the most Round 2 support, with modifications by the coordinators as appropriate (e.g. combining elements of different proposals in response to Round 2 comments, incorporating changes to ensure use of consistent terminology, etc.).

3.2 A description of this work, including summaries of participant comments, is provided in table 3-1, with a tabulation of the consensus analysis results provided in table 3-2. Table 3-3 lists the interpretations and figures evaluated in Round 3 that did not receive sufficient support for inclusion in the draft Unified Interpretations TM.5 circular.

Table 3-1 **Description of Round 3 work**
1. Article 2(8) - Length of unusual hull configurations The group evaluated replacing the existing interpretation with revised draft Interpretation A.2(8)-2, and including the associated draft figure, with 14 participants providing input. One participant proposed changing the interpretation to provide for an accompanying remark on the ITC69. Two commented to the effect that both the floating dock and submersible shown in the figure are conventional hull forms. One of these participants additionally noted that some existing submersible barges are issued load line certificates, with the well decks treated as freeboard decks, so the figure is not appropriate when applied to such ships. The revised interpretation received sufficient support, and the revisions were included in the draft circular. The figure did not receive sufficient support, and was not included.
2. Article 2(8) - Determining least moulded depth The group evaluated the proposed figure associated with draft Interpretation A.2(8)-3, with 14 participants providing input. One participant commented that the least moulded depth should be taken at the longitudinal location where the distance between the lines of the deck and the moulded keel is the least. The figure received sufficient support, and was included in the draft circular along with draft Interpretation A.2(8)-3.
3. Article 2(8) - Length of ships with multiple rudders The group evaluated proposed draft Interpretation A.2(8)-4, with 14 participants providing input. One participant proposed revising the interpretation to provide for use of axis of rotation of a trainable steering device in determining the length, and to place the text of Interpretation A.2(8)-4 immediately following proposed draft Interpretation R.2(4)-2. The interpretation received sufficient support, and was included in the draft circular, without change.

Table 3-1 **Description of Round 3 work**
4. Article 9(2) - Length termination points for ITC69 listing The group evaluated proposed draft Interpretation A.9(2)-5, and the associated draft figure, with 14 participants providing input. Three participants commented that the length should be measured on the deck below, with one highlighting difficulties in measuring yachts with complex shapes. Another commented that the figure should illustrate the length measurement of spaces that also include spaces which are excluded from tonnage, as had been originally proposed. Another referred to comments made in Round 2. Neither the interpretation, nor the figure, received sufficient support for inclusion in the draft circular.
5. Article 9(2) - Excluded space lengths for ITC69 listing The group evaluated proposed draft Interpretation A.9(2)-6, with 14 participants providing input. One participant commented that the interpretation lacked clarity. Two proposed changing the interpretation to clarify that the length includes portions of spaces that are excluded, with one proposing to illustrate the excluded spaces in the figure for draft Interpretation A.9(2)-5. Another similarly preferred illustrating the length measurement for spaces that also include spaces which are excluded from tonnage, but through the use of an accompanying figure for draft Interpretation A.9(2)-6. Another commented that areas within an enclosed space should be kept separate. The interpretation did not receive sufficient support for inclusion in the draft circular.
6. Regulation 2(4) - Enclosed space boundaries The group evaluated replacing the existing interpretation with revised draft Interpretation R.2(4)-1, with 14 participants providing input. One participant commented that the interpretation lacked clarity. Another expressed concern that applying the interpretation would result in large uncovered spaces on open Ro-Ro decks being included in tonnage because of the presence of bulwarks, with another citing similar concerns regarding treatment of bulwarks and similar low-sided structures. Two participants commented that the interpretation is incomplete, and offered changes providing for inclusion of only those uncovered spaces bounded on three sides that are used for the carriage of cargo. One of these participants also sought a change to provide for inclusion of such spaces only if the sides exceed 1.5 m in height. Another participant proposed revising the interpretation to permit spaces that are protected from weather for the comfort of passengers and crew to be excluded, and to include only those spaces bounded with structural boundaries. Another expressed preference for considerably condensing the proposed text. The revised interpretation did not receive sufficient support for inclusion in the draft circular.
7. Regulation 2(4) - Spaces within awning boundaries The group evaluated replacing the existing interpretation with revised draft Interpretation R.2(4)-2, with 14 participants providing input. One participant commented that the interpretation is acceptable, provided draft Interpretation R.2(4)-8, which defines the term "awning", is properly revised. Another proposed revising the interpretation to delete reference to an awning's orientation, and to place the text of Interpretation R.2(4)-8 immediately following proposed draft Interpretation R.2(4)-2, with revisions as described below in a comment associated with that interpretation. The revised interpretation did not receive sufficient support for inclusion in the draft circular.
8. Regulation 2(4) - Temporary deck equipment The group evaluated replacing the existing interpretation with revised draft Interpretation R.2(4)-3, with 14 participants providing input. One participant commented that the revised interpretation may require clarification (e.g. to specifically address similar spaces appropriated for freight), and expressed the view that the current interpretation not be changed unless the matter is considered comprehensively. Another cited the example of liquefied natural gas (LNG) tanks. Another identified possible unintended consequences of including portable spaces in tonnage, which could lead to circumvention using alternate arrangements (e.g. rest rooms or work spaces bounded by removable nylon sheets). Others expressed opinions on factors that should be considered in evaluating temporary deck equipment, including the method of attachment and whether the space is used to increase cargo capacity or number of passengers or crew. The revised interpretation did not receive sufficient support for inclusion in the draft circular.

Table 3-1 **Description of Round 3 work**
9. Regulation 2(4) - Inaccessible topside spaces The group evaluated replacing the existing interpretation with revised draft Interpretation R.2(4)-6, and including the associated draft figure, with 14 participants providing input. One participant disagreed with the conditions specified for inaccessibility, noting the absence of a 1 m^3 restriction. Another disagreed on the basis that all deck machinery, safety and emergency equipment should be excluded, while another disagreed on the basis that supporting structures should also be excluded, even if fitted with covers with quick release clips. Another expressed reservations with retaining the inaccessibility criterion, as it is not addressed in the TM Convention, but indicated that the revised interpretation would be acceptable if supported by the group, in the interest of uniformity. Another participant proposed revising the interpretation to include reference to cranes with truss structures, and to append the text of Interpretation R.2(4)-11 to revised draft Interpretation R.2(4)-2, to consolidate related text. Neither the revised interpretation, nor the figure, received sufficient support for inclusion in the draft circular.
10. Regulation 2(4) - Characteristics of awnings The group evaluated proposed draft Interpretation R.2(4)-8, with 14 participants providing input. Two participants proposed removing the language regarding folding or rolling up an awning for storage, with one commenting that the requirement is unsustainable. Another proposed revising the interpretation to limit awnings to overhead structures providing protection from the sun only. Another commented that an awning should be of any material which does not create a weathertight space, or alternatively should not contribute to its cargo carrying capacity, excluding passengers. The interpretation did not receive sufficient support for inclusion in the draft circular.
11. Regulation 2(4) - Gratings over deck openings The group evaluated proposed draft Interpretation R.2(4)-9 and the associated draft figure, with 13 participants providing input. One participant proposed including a reference to Regulation 2(5)(d). Another proposed adding a figure showing side/forward gratings, while another commented that the right hand illustration in the figure should be deleted. The interpretation received sufficient support, and was included in the draft circular as Interpretation R.2(4)-8. The figure did not receive sufficient support, and was not included.
12. Regulation 2(4) - Machinery The group evaluated proposed draft Interpretation R.2(4)-10, with 14 participants providing input. One participant proposed revisions to remove the term "revolving crane" to clarify that the volume of such a non-mobile crane should be included in tonnage, while another recommended the term be revised to limit it to machinery parts, and not the crane cabin. Another participant proposed revisions to relocate text regarding truss structures to Interpretation R.2(4)-6, and to consolidate various text related to cranes and machinery. Another commented that only spaces with structural boundaries should be included in tonnage. Another expressed the view that large enclosed structures associated with machinery should be included in tonnage, but noted that the draft interpretation does not rule out such treatment. The interpretation received sufficient support, and was included in the draft circular as Interpretation R.2(4)-9.
13. Regulation 2(4) - Mobile cranes The group evaluated proposed draft Interpretation R.2(4)-11, which would relocate, and expand upon, text from an existing interpretation, and replace the term "exempted" with the term "excluded from the total volume of all enclosed spaces (V)" for editorial consistency, with 14 participants providing input. One participant commented that a revision to the interpretation is needed to clarify that mobile cranes in this context must move both longitudinally and transversely relative to the ship. Another expressed the view that large enclosed structures associated with mobile cranes should be included in tonnage, but indicated that the revised interpretation would be acceptable, in the interest of uniformity, if supported by the group. Another commented to the effect that the text should be appended to draft Interpretation R-2(4)-6, to consolidate related text. Another commented that the change is unnecessary given the language in proposed draft Interpretation R.2(4)-10 that carried forward from Round 2. The interpretation received sufficient support, and the interpretation, including the revisions related to the term "exempted", were included in the draft circular as interpretation R.2(4)-10.

Table 3-1 **Description of Round 3 work**
14. Regulation 2(5) - Spaces below bridge wings The group evaluated replacing the existing interpretation with revised draft Interpretation R.2(5)-1, with 14 participants providing input. One participant expressed preference for including more detail on the term "open", but commented that the revised interpretation would be an improvement. The revised interpretation received sufficient support, and the revisions were included in the draft circular.
15. Regulation 2(5) - Spaces opposite side openings The group evaluated replacing the existing figure accompanying Interpretation R.2(5)-1 with a revised figure, with 14 participants providing input. Six participants questioned, requested changes to, or disagreed with the 0.6 m [1 frame] criterion indicated in a note accompanying one of the illustrations. In commenting on the related deck structure height requirement, one participant shared a related "common understanding" document with the group. Another expressed the view that passageways should be exempt in all cases where non-weathertight, and that the treatment under this regulation unfairly impacts yachts, where styling and shapes do not fit well with the regulation. The revised figure did not receive sufficient support for inclusion in the draft circular.
16. Regulation 2(5) - Stanchions and railings The group evaluated the draft figure to accompany Interpretation R.2(5)-5, with 14 participants providing input. One participant commented that the figure should also incorporate an example depicting more complex shapes or styling. The figure received sufficient support, and was included in the draft circular.
17. Regulation 2(5) - Deck breadth and end openings The group evaluated the draft figure to accompany Interpretation R.2(5)-6, with 14 participants providing input. One participant questioned the interpretation agreed to at SLF 55, for smaller structures such as those depicted in the figure, commenting that it would be better to apply this interpretation only when the structures are not side-to-side due to side passageways. Another suggested additionally applying height or area restrictions to this configuration (e.g. 0.75H or 0.9B X 0.75H). Another commented that the figure does not meet basic drafting requirements for consistency of views. The figure did not receive sufficient support for inclusion in the draft circular.
18. Regulation 2(5) - Grates as means of closure The group evaluated proposed draft Interpretation R.2(5)-7, with 14 participants providing input. One participant expressed the preference that only grates fitted as a barrier against intrusions should not be considered as a means of closure, but commented that a clear interpretation that any grates should not be considered as a means of closure would be acceptable. The interpretation received sufficient support, and was included in the draft circular.
19. Regulation 2(5) - Cargo securing The group evaluated proposed draft Interpretation R.2(5)-8, with 14 participants providing input. One participant commented along the lines that the only correct way to avoid contradicting language in the TM Convention regarding the availability of "means of securing cargo and stores" of a space would be to establish an interpretation that boundary structures of the space constitute such a means, and recommended corresponding revisions to the interpretation. Acknowledging the same concern, another participant supported this approach, on the basis that it was a better description of what was intended. Citing the lack of any information presented to the contrary in Round 2, another participant maintained that the proposed interpretation would have the effect of contradicting principles and clear language contained within the TM Convention, as provided in Regulations 2(5) and 2(7). Another suggested a revision to address intended use of such spaces (e.g. for ships under construction). Another commented that spaces below a certain volume (e.g. 1 m^3) should not be included, irrespective of means of securing. The interpretation did not receive sufficient support for inclusion in the draft circular.

Table 3-1 **Description of Round 3 work**
20. Regulation 2(5)(a) - End opening obstructions The group evaluated proposed draft Interpretation R.2(5)(a)-1 and the associated draft figure, with 13 participants providing input. One participant maintained that use of the term "obstruction", if left undefined, renders the interpretation meaningless. Another commented that the interpretation requires more development, as it could be subject to legal challenge in the case of small objects in front of large openings. Another commented that to close an opening, an erection should be within a distance of B/4 of the opening. Two participants recommended revisions to delete the area and volume criteria from the figure, such that it would show only hatches or erections that obstruct openings, with one suggesting that language be included to make it clear that these structures must be included in tonnage. Neither the interpretation, nor the figure, received sufficient support for inclusion in the draft circular.
21. Regulation 2(5)(c) - Deck structure heights and side openings The group evaluated proposed draft Interpretation R.2(5)(c)-1 and the associated draft figure, with 13 participants providing input. One participant expressed preference for a previously favoured, more generous, proposal. Neither the interpretation, nor the figure, received sufficient support for inclusion in the draft circular.
22. Regulation 2(5)(d) - Space below uncovered openings The group evaluated proposed draft Interpretation R.2(5)(d)-1 and the associated draft figure, with 13 participants providing input. One participant took issue with the language regarding openings that penetrate the upper deck, commenting that such language is unnecessary, as only spaces within erections may be excluded. Another commented that the upper deck should be shown in the figure. Both the interpretation, and the figure, received sufficient support, and were included in the draft circular.
23. Regulation 6(3) - Cargo and buoyant spaces open to the sea The group evaluated the draft figure to accompany Interpretation R.6(3)-3, with 13 participants providing input. Two participants commented that the illustrations should be clarified to indicate whether the shaded areas are included in tonnage. One participant commented that such spaces should be bounded on three or more sides. Another maintained that the use of the term "buoyancy" in the interpretation could lead to overextension. The figure did not receive sufficient support for inclusion in the draft circular.
24. Regulation 6(3) - Free communication for open to the sea The group evaluated proposed draft Interpretation R.6(3)-4, with 13 participants providing input. One participant expressed preference for more succinct language that captures the "free communication" concept without being overly prescriptive (e.g. avoids use of terms "permanently flooded", "trapped", etc.), which could be problematic from an application and enforcement perspective. Another expressed similar concern over the term "permanently flooded", citing consideration for maintenance cycle drydockings, and expressed preference for the language "normal at-sea condition of the ship" instead of "normal operation of the ship". Another commented that pipes and scuppers should be acceptable as qualifying for open to the sea, provided the space drains quickly. The interpretation did not receive sufficient support for inclusion in the draft circular.
25. Regulation 7(2) - Electronic format for ITC69 The group evaluated proposed draft Interpretation R.7(2)-2, with 14 participants providing input. Two participants expressed support for specifying dimensions and volumes to two decimal places, with one citing article 2(8) and the fact that three decimal places are shown on other documents. Two participants proposed revisions to specify that the measurement units are in meters and cubic meters as applicable, with a third proposing revisions to permit Administrations to document measurements and calculations without explicit reference to a spreadsheet. Another expressed preference for no more than single decimal place accuracy, commenting that tonnage assignments involve interpolated approximations. Another commented that the measurement entity should decide the tools for calculations and certificate generation. Another commented that the change is unnecessary, while another expressed concern that the term "spreadsheet" lacks clarity and could reduce flexibility in using alternate tools (e.g. an Adobe .pdf document linked to a database). The interpretation did not receive sufficient support for inclusion in the draft circular.

Table 3-1 **Description of Round 3 work**
26. Novel craft interpretations - Correction to dockship figure The group evaluated replacing the existing figure accompanying Interpretation N.2-1, with a revised figure, with 13 participants providing input. One participant commented that the revised figure more typically represents a dockship. In not supporting this change, another commented that the cross-hatched area in the illustration must be included in tonnage. The revised figure did not receive sufficient support for inclusion in the draft circular.

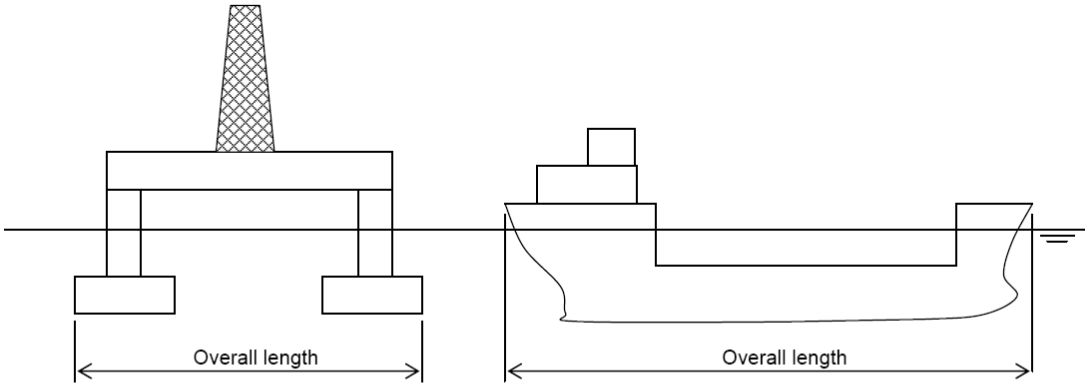
Table 3-2
Participant Views on Proposed Interpretations and Figures Evaluated in Round 3

Interp/Fig	Description	Number of Responses					*Consensus Categorization*
		StrgFav	*Fav*	*Neutral*	*DisFav*	*StrgDisFav*	
A.2(8)-2	Length of unusual hull configurations	4	9	0	1	0	Favour
A.2(8)-2 Fig	Length of unusual hull configurations	2	8	2	1	1	Favour
A.2(8)-3 Fig	Determining least moulded depth	2	10	1	0	1	Favour
A.2(8)-4	Length of ships with multiple rudders	6	6	1	1	0	Strongly Favour
A.9(2)-5	Length termination points for ITC69 listing	2	7	0	1	4	Favour
A.9(2)-5 Fig	Length termination points for ITC69 listing	1	6	3	1	3	Favour
A.9(2)-6	Excluded space lengths for ITC69 listing	2	5	2	1	4	Favour
R.2(4)-1	Enclosed space boundaries	1	2	5	4	2	Neutral
R.2(4)-2	Spaces within awning boundaries	3	8	1	1	1	Favour
R.2(4)-3	Temporary deck equipment	4	4	0	3	3	Strongly Favour
R.2(4)-6	Inaccessible topside spaces	2	5	2	2	3	Favour
R.2(4)-6 Fig	Inaccessible topside spaces	1	6	1	4	2	Favour
R.2(4)-8	Characteristics of awnings	3	7	1	1	2	Favour
R.2(4)-9	Grates over deck openings	4	8	0	1	0	Favour
R.2(4)-9 Fig	Grates over deck openings	4	5	1	2	1	Favour
R.2(4)-10	Machinery	4	8	1	1	0	Favour
R.2(4)-11	Mobile Cranes	3	9	1	0	1	Favour
R.2(5)-1	Spaces below bridge wings	5	8	0	1	0	Favour
R.2(5)-1 Fig	Spaces opposite side openings	1	6	4	1	2	Favour
R.2(5)-5 Fig	Stanchions and railings	3	8	1	2	0	Favour
R.2(5)-6 Fig	Deck breadth and end openings	3	6	2	2	1	Favour
R.2(5)-7	Grates as means of closure	2	9	2	1	0	Favour
R.2(5)-8	Cargo securing	4	4	0	2	4	Strongly Favour
R.2(5)(a)-1	End opening obstructions	3	6	0	2	2	Favour
R.2(5)(a)-1 Fig	End opening obstructions	2	7	1	3	0	Favour
R.2(5)(c)-1	Deck structure heights and side openings	2	7	2	2	0	Favour
R.2(5)(c)-1 Fig	Deck structure heights and side openings	2	7	2	2	0	Favour
R.2(5)(d)-1	Spaces below uncovered openings	2	8	1	2	0	Favour
R.2(5)(d)-1 Fig	Spaces below uncovered openings	1	9	1	2	0	Favour
R.6(3)-3 Fig	Cargo and buoyant spaces open to the sea	5	5	0	2	0	Strongly Favour
R.6(3)-4	Free communication for open to the sea	0	7	2	2	2	Favour
R.7(2)-2	Electronic Format for ITC69	1	4	2	4	2	Favour
N.2(1) Fig	Correction to dockship figure	2	5	3	2	0	Favour
Notes:		With Consensus		With Moderate Consensus		Without Consensus	

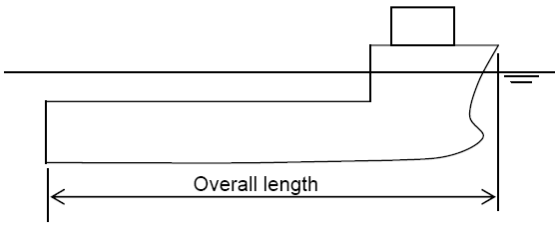
Consensus categorization methodology per "Ranking Ordinal Scales Using the Consensus Measure", Issues in Information Systems, Volume V1, No. 2, 2005. The positions displayed reflect those receiving the most support, with "Strongly Favour" ("StrgFav") assumed to be the preferred response in all cases. The color coding scheme is based on the following Consensus Measures (Cns) values: Green (Cns >= 0.7); Yellow (0.5 <= Cns < 0.7); Red (Cns < 0.5).

Table 3-3
Round 3 Proposals not included in the draft Unified Interpretations circular

1. Article 2(8) - Length for unusual hull forms (proposed figure)



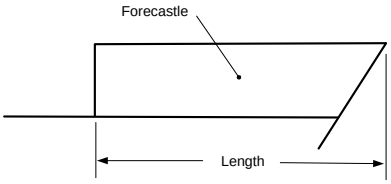
Column-stabilized units *Submersibles*



Floating docks

2. Article 9(2) - Length termination points for ITC69 listing (proposed interpretation and figure)

The length entered on the reverse of the International Tonnage Certificate (1969) should include the overall length of the measured space.



3. Article 9(2) - Excluded space lengths for ITC69 listing (proposed interpretation)

For a space which comprises both enclosed and excluded space, the length entered on the reverse of the International Tonnage Certificate (1969) should be without consideration for the portions of the space that are excluded.

Table 3-3
Round 3 Proposals not included in the draft Unified Interpretations circular

4. Regulation 2(4) - Enclosed space boundaries (proposed revised interpretation)

In applying this regulation:

.1 According to this regulation, enclosed spaces are all those spaces which are bounded by the following structures:

.1.1 the ship's hull;

.1.2 fixed or portable partitions or bulkheads;

.1.3 decks or coverings other than permanent or movable awnings; or

.1.4 the above structures in any combination.

.2 In this regulation there is no contradiction between the definition of enclosed spaces as being "bounded by . . . fixed or portable partitions or bulkheads . . ." and further clarification stating that the absence of a partition or bulkhead, shall not preclude a space from being included in the enclosed space. Following the definition of enclosed spaces in Regulation 2(4), a space shall be treated as an enclosed space even in case of absence of some bounding structures listed in the definition such as partition(s)/bulkhead(s) and/or a deck/covering: e.g. open boat designs; cargo holds having no overhanging decks/coverings; trapped air spaces in the ship's bottom contributing to buoyancy, etc.

5. Regulation 2(4) - Space within awning boundaries (proposed revised interpretation)

A space bounded only by an awning should not be treated as an enclosed space. If an awning is used in a combination with the other boundary structures, then the resulting space should be analysed disregarding the awning, overhead or side, taking into account only the other structures if fitted.

6. Regulation 2(4) - Temporary deck equipment (proposed revised interpretation)

Enclosed spaces of a temporary or semi-permanent nature that are not carried as freight are included in the total volume of all enclosed spaces (V), regardless of method of attachment or duration of carriage. Examples include: modular living quarters, housed portable machinery spaces, and deck tanks used in support of shipboard industrial processes.

Table 3-3
Round 3 Proposals not included in the draft Unified Interpretations circular

7. Regulation 2(4) - Inaccessible topside spaces (proposed revised interpretation; proposed figure)

Cranes, crane and container support structures, masts, kingposts and similar structures, which are completely inaccessible and situated 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. "Completely inaccessible" means that these structures have no openings other than those to provide access for inspection and maintenance purposes and that all such openings are fitted with covers held in position with a number of bolts which are always closed while the ship is undertaking her usual duties either at sea or in port. Covers fitted with quick release clips are not qualified for the purpose of rendering a structure inaccessible. Air trunks having a cross-sectional area not exceeding 1 m^2 may also be excluded under the before-mentioned conditions.

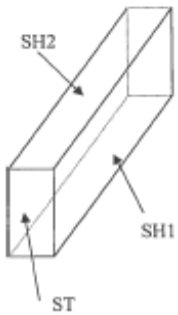
Volume $\leq 1\ m^3$

Not included in the Total Volume of all enclosed spaces (V)

SH1 = Surface area in contact with the deck (horizontal surface) $\leq 1\ m^2$

SH2 $\leq 1\ m^2$

Not included in the Total Volume of all enclosed spaces (V), regardless of its volume, accessibility and use



SH1 or SH2 > 1 m^2 and volume > $1m^3$

ST = Vertical Cross sectional Area

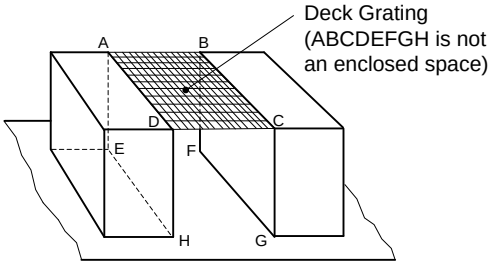
ST $\leq 1m^2$ Not included in the Total Volume of all Enclosed Spaces (V) if not accessible or utilized (e.g. for stores, passage of pipes or cable, ect.)

ST > $1m^2$ Included in the Total Volume of all Enclosed Spaces (V) regardless of its accessibility and use

8. Regulation 2(4) - Characteristics of awnings (proposed interpretation)

An awning is a completely flexible nonspecific material of an unspecific form such as canvas or tarpaulin or plastic sheeting, designed to protect the deck from the impact of sun, wind or water although not necessarily wind- or water-proof. An awning can be easily removed and folded or rolled up for storage.

9. Regulation 2(4) - Grates over deck openings (proposed figure)



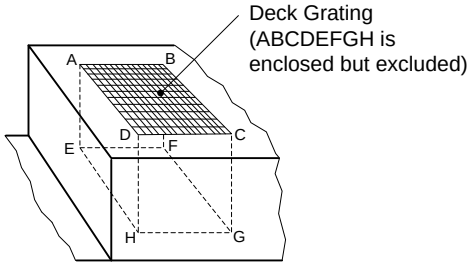
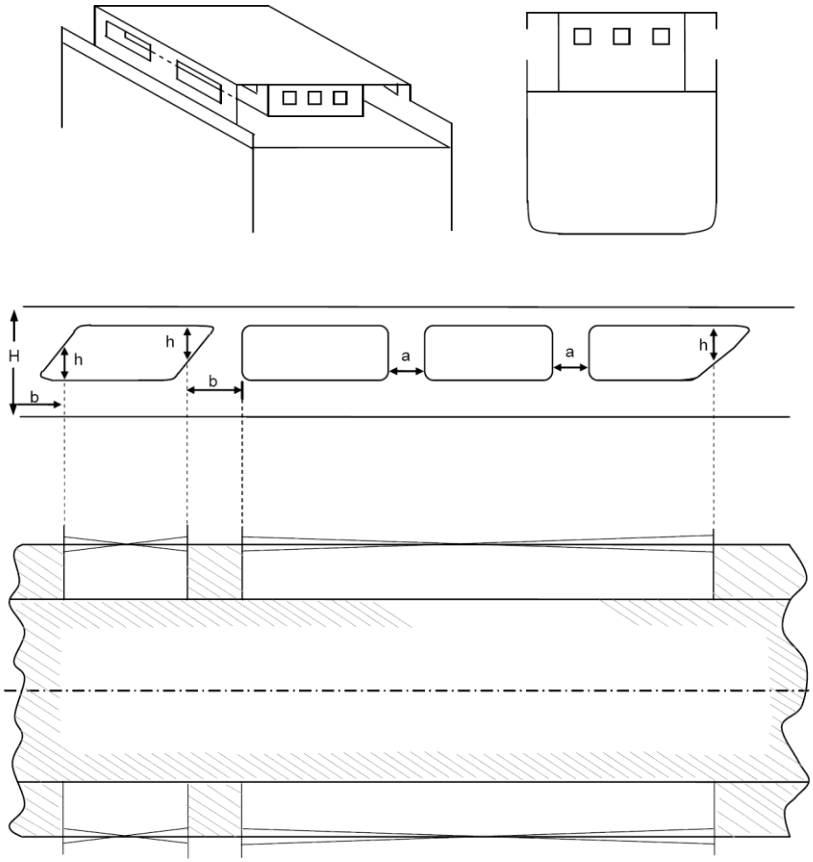


Table 3-3
Round 3 Proposals not included in the draft Unified Interpretations circular

10. Regulation 2(5) - Spaces opposite side openings (proposed figure)



= Spaces included in the total volume (V)

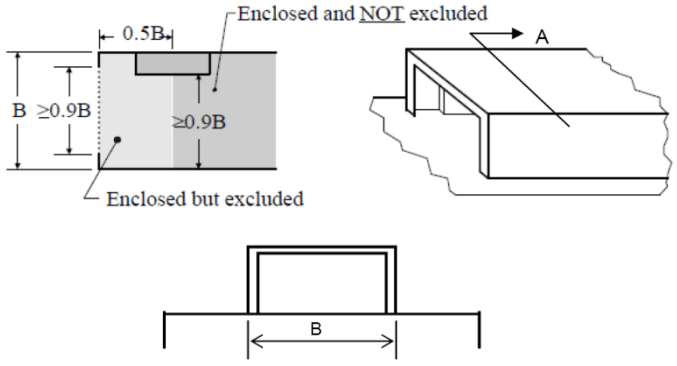
H = Height from deck to deck

h = 0.75 m or 1/3 H whichever is the greater

a = Supporting structures ≤ 0.60 m [/ 1 frame]

b = Supporting structures > 0.60 m [/ 1 frame]

11. Regulation 2(5) - Deck breadth and end openings (proposed figure)



A section

Table 3-3
Round 3 Proposals not included in the draft Unified Interpretations circular

12. Regulation 2(5) - Cargo securing (proposed interpretation)

Any enclosed space which is used for the carriage of cargo or stores should be included in the total volume of all enclosed spaces (V), whether a means of securing is provided or not.

13. Regulation 2(5)(a)-1 - End opening obstructions (proposed interpretation and figure)

When an obstruction external to an opening is not included in the total volume of all enclosed spaces (V), then it should be ignored. When an obstruction external to an opening is included in this total volume:

.1 it is considered to close the end opening when its distance to the opening is equal to or closer than half the local breadth on the deck;

.2 it is ignored if it is further away from the opening than half the local breadth on the deck.

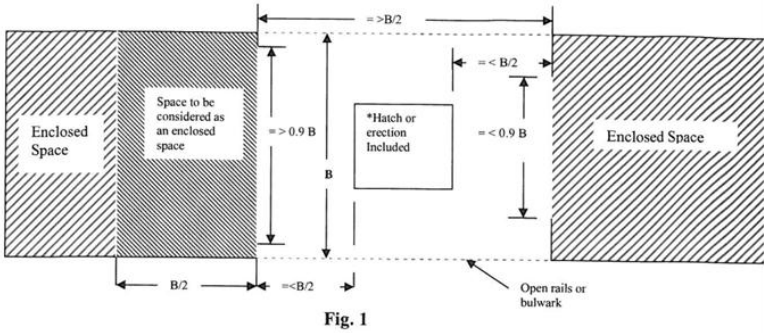


Fig. 1

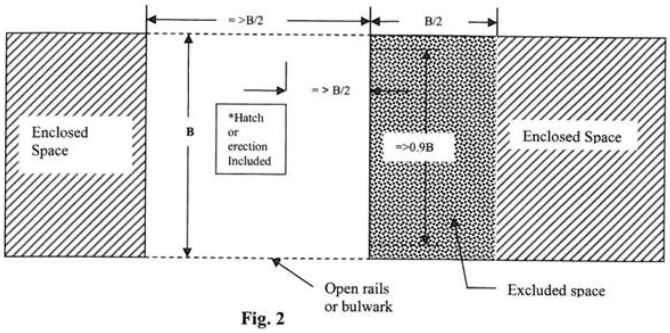


Fig. 2

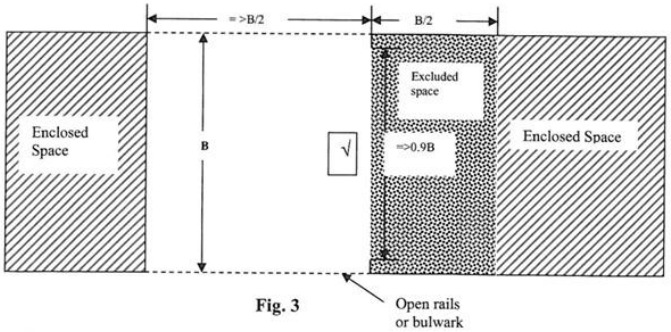


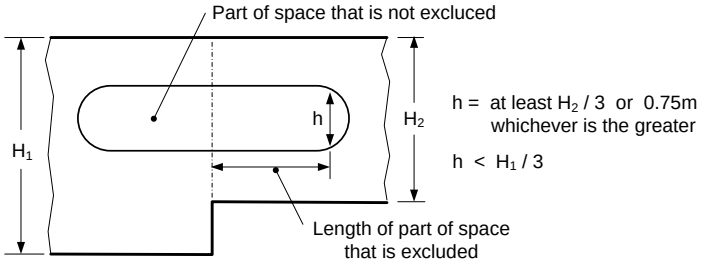
Fig. 3

B = Breadth of deck in way of the opening
*Hatch or erection, included. Area greater than 1m² and volume exceeding 1m³
√ Hatch or erection, not included.

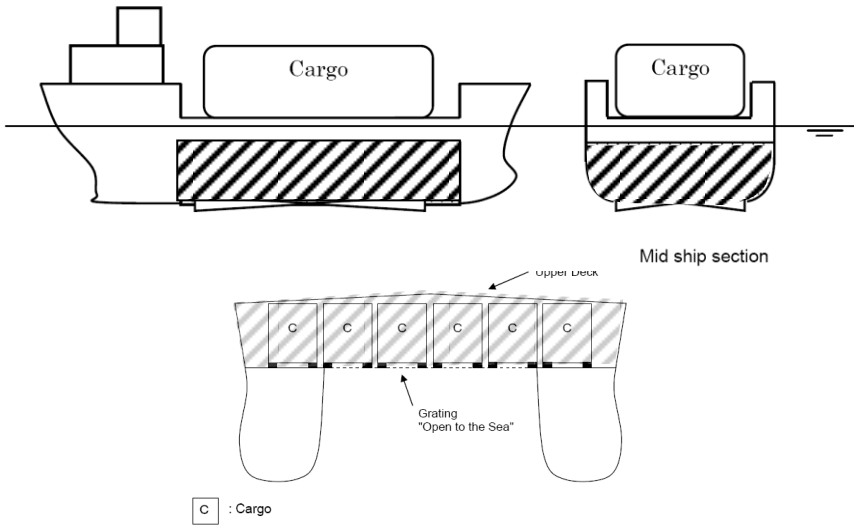
Table 3-3
Round 3 Proposals not included in the draft Unified Interpretations circular

14. Regulation 2(5)(c) - Deck structure heights and side openings (proposed interpretation and figure)

The height of the opening should be evaluated by the height between the continuous/complete decks in each tier. Stepped decks should be treated in separate parts with the height being used as appropriate for the part. With a sloping deck, the space can be excluded until the point at which the 1/3 height (H) or 0.75 m criterion applies.



15. Regulation 6(3) - Cargo and buoyant spaces open to the sea (proposed figure)



16. Regulation 6(3) - Free communication with the sea (proposed interpretation)

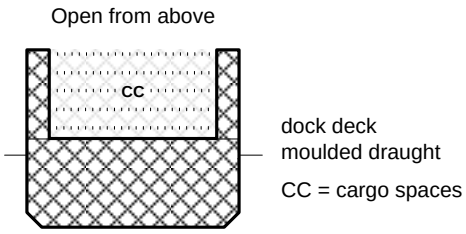
Spaces open to the sea are those spaces fitted in the ship's hull which are permanently flooded during normal operation of the ship or are open to the action of waves and/or allow free communication with the sea provided that in no circumstances they could contribute to the buoyancy of the ship at any time. Free communication with the sea means that sea water comes out of a space as quickly as it gets in solely under the force of gravity and no amount of water could be trapped in the space. Any holes or pipe openings are not sufficient to consider a space as being open to the sea.

17. Regulation 7(2) - Electronic format for ITC69 (proposed interpretation)

The calculations and the International Tonnage Certificate (1969) should be a spreadsheet, with only two decimal places shown for dimensions and volumes.

Table 3-3
Round 3 Proposals not included in the draft Unified Interpretations circular

18. Novel craft interpretation - Dockships (proposed revised figure)



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ANNEX 2

ALTERATIONS AND MODIFICATIONS AFFECTING TONNAGE

1 Information Collection (Round 1)

Ship measurement

1.1 Participants were invited to provide information on the number of ships measured or remeasured under participants' flag Administrations, or under the cognizance of participants' organizations. Tabulated results are provided in table 1-1 below. Six participants commented that some or all of the information provided was estimated in some fashion, with specifics indicated in the footnotes accompanying table 1-1. One questioned how this information might be used, citing possible duplications resulting from classification society reporting and flag changes, and expressed concern that a large number of flag Administrations may not be represented.

Table 1-1
Ship measurement by flag Administration[1]

Flag Administration	Number of ships measured under TM Convention	Number of ships with GRT grandfathering privileges	Number of ships remeasured each year
Canada	938		
Finland	(701)	(50)	(5)
Germany	(3500)[2]	315[3]	5
Japan	5340	6	70
Republic of Korea	1068	263	5
Russian Federation	(4000)	(300)	(50)
Sweden	(1800)	(150)	(5)
United States	6438	(1686)[4]	(31)[5]
Vanuatu	(697)	(120)	(30)

Notes:

1. Numbers in parentheses "( )" are estimates.
2. Estimated number is for those ships greater than 100 GT.
3. Statistics lacking for ship with both GT and GRT. Estimate represents only ships with GRT, most of which are less than 100 GRT.
4. Estimate characterized as "reasonably solid", based on extrapolations from an Administration database, and does not include 4664 eligible self-propelled ships that currently have GRT only.
5. Estimate derived by comparing tonnage changes captured in an Administration database over a 2-year period.

Criteria for GRT grandfathering

1.2 Participants were invited to provide information on criteria for GRT grandfathering as currently applied by participant flag Administrations or organizations under articles 3(2)(b) and (d), including whether the following are taken into consideration: non-structural changes (e.g. adding deck lockers), changes involving temporary deck equipment (e.g. adding portable quarters units), removals as well as additions of volumes, and cumulative changes for the original baseline (e.g. when first delivered). Tabulated results are provided in table 1-2 below.

Table 1-2
Criteria currently used to apply GRT grandfathering provisions (article 3(2)(b) and (d))

Flag Administration	TM69 gross tonnage (GT) change	Changes taken into account by flag Administration when applying GRT grandfathering criteria			
		Non-structural changes	Temporary deck equipment	Both added & removed volumes	Cumulative changes from delivery
Canada	1%	Yes[1]	Yes	Yes	Yes
Finland	Unity	Yes[2]	Yes	Yes	Yes
Germany	Unity	No	Yes	Yes	Yes
Italy[3]	1%	Yes	Yes	Yes	Yes
Japan	1%	Yes	Yes	Yes	Yes
Republic of Korea	1%	Yes	No	Yes	Yes
Russian Federation	1%	Yes	No	Yes	Yes
Sweden[4]	1%	No	No	Yes	Yes
United States	Other[5]	No[6]	No[6]	Yes	Yes
Vanuatu[7]	1%	-	-	-	-

Notes:

1. "Non-structural changes" include load line (moulded draft) changes, changes in the number of passengers, etc.
2. Changes are taken into account if volumes are greater than 1 m^3.
3. Ships covered by articles 3(2)(b)&(d) and Interim Schemes lose grandfathering privileges if a GT increase or decrease of more than 1% occurs.
4. Careful consideration is made to cumulative changes to determine if the volume change is greater than 1% compared to the original "baseline".
5. By policy, for ships covered by article 3(2)(b)&(d), a 1% criterion is applied, and for ships covered by Interim Schemes, a 5% criterion is applied.
6. In general, adding or removing volumes involving non-structural changes and temporary deck equipment are not considered "alterations" in this context, due to differences in language in article 3(2)(b)&(d) and article 10(1) regarding tonnage changes, which have been incorporated in United States law.
7. Also accepts interpretations of prior Administration (if any).

Criteria for changes of a major character

1.3 Participants were invited to provide information on criteria for changes of a major character (net tonnage) as applied by participant flag Administrations or organizations under Regulation 5(3)(b), including whether the following are taken into consideration: non-structural changes (e.g. adding deck lockers), changes involving temporary deck equipment (e.g. adding portable quarters units), removals as well as additions of volumes, and cumulative changes for the original baseline (e.g. when first delivered). Tabulated results are provided in table 1-3 below.

Table 1-3
Current application of major character provisions (regulation 5(3)(b))

Flag Administration	TM69 gross tonnage (GT) change	Changes taken into account by flag Administration when applying major character criteria			
		Non-structural changes	Temporary deck equipment	Both added & removed volumes	Cumulative changes from delivery
Canada	1%	Yes	Yes	Yes	Yes
Finland	Unity	Yes[1]	Yes	Yes	Yes
Germany	Unity	No	No	Yes	Yes
Italy[2]	-	-	-	-	-
Japan	Unity	Yes	Yes	Yes	Yes
Republic of Korea	1%	Yes	No	Yes	Yes
Russian Federation	1%	Yes	No	Yes	Yes
Sweden[3]	1%	No	No	Yes	Yes
United States[4]	5%	Yes	Yes	Yes	Yes
Vanuatu[5]	1%	-	-	-	-

Notes:

1. Changes are taken into account if volumes are greater than 1 m^3.
2. Not been in a position to have applied this regulation.
3. Careful consideration is made to cumulative changes in order to determine if the volume change is greater than 1% compared to the original "baseline".
4. Regulation is applied rarely, if at all.
5. Mostly structural, permanent alterations.

Criteria for remeasurement

1.4 Participants were invited to provide information on criteria for remeasurement as applied by participant flag Administrations or organizations under article 10(1) (and regulation 5(1)), including whether the following are taken into consideration: non-structural changes (e.g. adding deck lockers), changes involving temporary deck equipment (e.g. adding portable quarters units), removals as well as additions of volumes, and cumulative changes for the original baseline (e.g. when first delivered). Tabulated results are provided in table 1-4 below.

Table 1-4
Current application of remeasurement criteria (article 10(1) (and regulation 5(1)))

Flag Administration	TM69 gross / net tonnage (GT /NT) change	Changes taken into account by flag Administration when applying remeasurement criteria			
		Non-structural changes	Temporary deck equipment	Both added & removed volumes	Cumulative changes from delivery
Canada	1%	Yes	Yes	Yes	Yes
Finland[1]	Unity	Yes	Yes	Yes	Yes
Germany	Unity	No	No	Yes	Yes
Italy[2]	Other	Yes	Yes	Yes	Yes
Japan	Unity	Yes	Yes	Yes	Yes
Republic of Korea	1%	Yes	No	Yes	Yes
Russian Federation	1%	Yes	No	Yes	Yes
Sweden[1,3]	1%	No	No	Yes	Yes
United States	5%	Yes	Yes	Yes	Yes
Vanuatu	1%	-	-	-	-

Notes:

1. Also "non-structural" parameters such as load line changes (moulded draught) and passenger numbers are taken into consideration.
2. Remeasurement is carried out when any modification to the ship's characteristics leads to a change in GT or NT, such that the ITC69 always reflects the current ship's arrangement.
3. In general, if new recalculated tonnages following a tonnage change differ by more than 1%, the new recalculated tonnages appear on the reissued ITC69; otherwise, the ITC69 is reissued with the tonnages unchanged.

Reporting and monitoring of ship changes

1.5 Participants were invited to provide information on how ship changes affecting tonnage are reported or monitored. Eleven participants offered input, with tabulated results provided in table 1-5 below.

Table 1-5
Provisions for reporting or monitoring changes affecting tonnage

Flag Administration	Self-reporting by owner	Tonnage inspections			
		Random		Periodic	
		Flag Administration	Classification society / third party	Flag Administration	Classification society / third party
Canada	Yes	Yes			Yes
Finland	Yes	Yes			
Germany	Yes			Yes	Yes
IACS	Yes		Yes		Yes
Italy[1]	Yes		Yes		
Japan	Yes			Yes	
Republic of Korea	Yes				Yes
Russian Federation	Yes		Yes		Yes
Sweden	Yes[2]	Yes[3]			
United States	Yes	Yes	Yes[4]		
Vanuatu					Yes

Notes:

1. At flag change or change of classification society, modifications are occasionally noted during surveys.
2. For the most part, ship owners report changes in enclosed volumes due to conversions to surveyors, which are inspected by Administration surveyors.
3. Sometimes Administration officials discover ship changes (e.g. conversions, load line drafts, number of passengers), and owners are then prompted to obtain a remeasurement and ITC69 reissuance. Inaccuracies may also be discovered during a Port State control examination, which are bought to the Administration's attention.
4. Based on a survey of Classification Societies that perform measurement work on the Administration's behalf, roughly 75% of the notifications are coming directly from ship owners, with the remainder originating within the classification society (e.g. a surveyor).

Experience using graduated scales

1.6 Participants were invited to provide information on their Administration's or organization's experience using graduated scales to apply ship standards or similar (e.g. criteria based on tonnage, displacement, length, etc.). Tabulated results are provided in table 1-6 below.

Table 1-6
Experience with graduated scales

Flag Administration	Administration's experience
Canada	A tonnage change criterion of 5% is applied for ships under 24 m in length and a tonnage change criterion of 1% is applied for ships of 24 m and over.
Finland	Graduated scales are not used for tonnage changes.
Germany	None.
Italy	Graduated scales are not used.
Japan	Many graduated scales are used to apply maritime standards. An example is catching allowances in fisheries.
Republic of Korea	None.
Russian Federation	Graduated scales are not used.
Sweden	Graduated scales are not used for tonnage changes.
United States	A graduated scale is used to apply "foreign rebuilt" requirements, which are based on percentage of steel weight changes. Below 7.5% a ship is deemed as not rebuilt foreign, between 7.5% and 10% the changes are evaluated by the Administration on a case basis, and above 10% the ship is automatically deemed foreign rebuilt.
Vanuatu	None to date.

General comments

1.7 Participants were invited to provide comments of a general nature. These comments, along with similar comments that were offered under the individual items described in the preceding paragraphs, are summarized in the subparagraphs which follow.

.1 Four participants expressed opposition to the use of graduated scales in applying GRT grandfathering criteria. Of these, one commented that allowing changes of greater than 1% would permit significant alterations on substandard ships, while avoiding compliance with international

conventions. Another commented to the effect that the range of tonnage changes being considered (e.g. 5%, 10%), could result in large volumetric changes going unaccounted for (e.g. 150 cubic meters for ships of 500 GT), which is unacceptable, and increases the risk that cumulative changes would be neglected.

.2 One participant expressed support for the use of graduated scales in applying tonnage measurement criteria, citing the need for a graduated, scaled understanding for setting more rational criteria for required tonnage measurement.

.3 One participant commented that any change to the existing 1% grandfathering criterion would unfairly treat owners formerly required to comply with international conventions based on GT, rather than GRT.

.4 One participant suggested consideration be given to apply the major conversion term used in other international instruments for GRT grandfathering assessments. As long as a ship has not been subject to a major conversion (e.g. lengthened or heighted), GRT grandfathering could be retained.

.5 Three participants commented to the effect that the ITC69 should reflect the current configuration of the ship, regardless of whether or not a tonnage change is of sufficient magnitude to require the assigned gross or net tonnage shown on the front of the ITC69 to change.

.6 One participant expressed the view that within a 10 to 20-year period, most of the old ships subject to GRT grandfathering will no longer exist, so the GRT grandfathering issue will soon become a "non-issue".

1.8 The results of the Round 1 Questionnaires were compiled and summaries posted on the group's website, for use during the Round 2 work. This input was taken into consideration by the Coordinators, in finalizing the content of the Round 2 Questionnaires.

2 Development of approaches (Round 2)

Consideration of changes affecting tonnage

2.1 Participants were invited to express their views on whether, in order to facilitate the integrity and/or uniform implementation of the TM Convention, certain changes affecting tonnage should be taken into account when applying provisions of the TM Convention related to GRT grandfathering, changes of a major character, and remeasurement, irrespective of the current practice of their Administration or organization. The specific changes evaluated were structural changes (e.g. adding a forecastle extension), non-structural changes (e.g. adding deck lockers), and changes involving temporary deck equipment (e.g. adding portable quarters units). Participant comments are summarized in the subparagraphs which follow, with tabulated results provided in table 2-1 below.

.1 **GRT grandfathering (articles 3(2)(b) and (d))** One participant commented that article 3(2)(b) has not been used since 1994, while another contended that the article still applies. In reference to the "alterations or modifications" language in article 3(2)(b), three participants commented to the effect that non-structural changes and those involving addition and removal of temporary deck equipment should not affect GRT

grandfathering, while two others expressed the view that any change to a ship affecting tonnage should be taken into consideration for this purpose, and another commented that only structural alterations should be so considered. Another commented that alterations must be monitored closely to avoid unacceptably large tonnage increases or decreases due to accumulated alterations.

.2 **Changes of a major character (regulation 5(3)(b))** Two participants commented that the questionnaire should not have addressed tonnage increases in this context, since Regulation 5(3)(b) covers only tonnage decreases, with one additionally commenting that the 12 month delay for ITC69 reissuance should be strictly related to structural changes. Another commented that the term "change of a major character" should only apply to the extent that the parameters cited by this regulation (e.g. cargo space volume, passenger numbers, moulded draft) are altered by structural changes. In describing the Round 1 results, one participant noted the divergence of practice regarding whether or not certain changes are taken into account when evaluating changes of a major character, commenting that accounting for addition and removal of temporary deck equipment would become problematic were a 1% criterion to be applied, especially for certain industry segments (especially offshore support).

.3 **Remeasurement (article 10(1) (and regulation 5(1)))** Two participants highlighted the distinction between reissuing the ITC69 under article 10(1) to reflect certain updated ship information (e.g. number of passengers or moulded draught), and changing the tonnage values on the reissued certificate. Various approaches were offered, including reissuing the ITC69 when total passenger numbers or load line (moulded draft) information changes and for other alterations only if the magnitude of a tonnage change exceeds 1%, and reissuing the ITC69 following any change, regardless of magnitude, so that the ITC69 always reflects the current ship's configuration. One participant argued for approaches that are less "hard and fast", in view of the more general language used in article 10(1). Another commented that interpretations are needed to provide guidance on specific changes considered to result in tonnage changes. Another questioned the ability of the group to complete development of interpretations on this matter, given the divergence of approaches currently used based on the Round 1 results, noting especially the lack of consistency in treatment of temporary deck equipment, whose increasing use in some industry segments is leading to modular ship designs, with potential tonnage loopholes.

Table 2-1
Participant views of considerations related to tonnage changes

Provisions of TM Convention to be applied	Number of participants providing input[1]	Number of participants indicating changes should be taken into account		
		Structural changes	Non-structural changes	Temporary deck equipment
GRT grandfathering article 3(2)(b)&(d)	10	10	5	5
Changes of major character regulation 5(3)(b)	10	10	2	2
Remeasurement article 10(1) (and regulation 5(1))	11	11	8	7

Notes:

1. This column reflects the number of those participants who provided input tabulated for any of the columns to the right.

International compliance

2.2 Participants were invited to express their views on matters related to compliance with interpretations on changes in tonnage. Seven participants agreed that the likelihood of compliance should be taken into consideration in development of such interpretations, while four disagreed that this factor should be given such consideration. One commented that ease of compliance should not be a consideration with applying IMO recommendations of this nature, adding that the agreement at SLF 55 to consider only the TM Convention gross tonnage for GRT grandfathering should avoid problems arising from differences between various national measurement systems. Another participant commented that providing clear rules and interpretations, along with minimizing tonnage penalties for spaces not well adapted for carriage of goods, would encourage compliance. Another expressed the view that practical considerations such as likelihood for compliance must be taken into consideration during development of any voluntary measure of this nature.

2.3 Tabulated results of participant input regarding the likelihood of international compliance as a function of the types and magnitudes of tonnage changes are provided in table 2-2 below. Based on the input received, the questionnaire did not make clear that the term "international compliance" was intended to refer to owner compliance with the interpretations, rather than flag Administration compliance. Accordingly, some caution must be used in evaluating the results summarized above, and in table 2-2.

Table 2-2
Participant views of likelihood of international compliance[1]
with criteria for reissuing the ITC69

Likelihood of compliance with criterion	Number of participants who selected the corresponding combination of change type, criterion magnitude and compliance likelihood											
	Structural changes only				Structural plus non-structural changes				Structural plus non-structural changes plus temporary deck equipment			
	Unity	1%	5%	10%	Unity	1%	5%	10%	Unity	1%	5%	10%
Highly Likely	5	4	3	6	4	4	2	5	4	4	2	3
Likely	4	2	3	1	3	2	3	2	3	1	2	2
Neutral		1	1			1	2			1	3	2
Unlikely	2	3			3	2			1	3		
Highly Unlikely		1	3	3	1	2	3	3	3	2	3	3
No Opinion		1	1	1		1	1	1		1	1	1

Notes:

1. Based on the questionnaire responses, at least one participant may have construed "International Compliance", which was not defined, to refer to flag Administration acceptance and implementation of related interpretations, rather than owner compliance with such interpretations. The possible confusion on this matter should be taken into account when evaluating the results presented in this table.

Development of criteria for tonnage changes

2.4 Participants were invited to express their views on purposes for which the use of a criterion or criteria for changes which affect tonnage should be considered for further development. Of the eleven participants who responded, four supported such development for the purpose of applying GRT grandfathering provisions (article 3(2)(b)&(d)), six supported such development for applying major conversion provisions (regulation 5(3)(b)), five supported such development for applying remeasurement provisions (article 10(1) (and regulation 5(1))), and two did not support use of a criterion or criteria for these purposes. In commenting on this matter, one offered the view that clarifications on the use of the 1% criterion for purposes other than GRT grandfathering provisions would be helpful. Another commented that based on the Round 1 results, much more work was required to develop necessary criteria in a holistic fashion addressing all three situations, and could not be completed in the time available under this planned output. This participant expressed the view that it is not clear that continuing this work should be a high priority, as the flag Administrations represented in the Round 1 Alterations Questionnaire responses all had measures in place to reassign tonnages following ship changes.

Development of graduated scale approaches

2.5 Participants were invited to express their views on further development of a graduated scale approach (e.g. to apply a more relaxed criterion for changes to smaller ships as opposed to larger ships) for any of the three purposes described in the preceding paragraph. In responding, participants expressed the following views: six strongly disfavoured, three somewhat disfavoured, two strongly favoured and one offered no opinion on such further development. One participant commented that use of a percentage for calculating tonnage change already takes into consideration the size, arguing against providing criteria above 1% for the critical group of smaller ships starting at 500 GT. Another participant commented that all ships should be treated consistently, using a 1% criterion. Another argued that larger changes should be allowed for ships around the 500 GT range to avoid non-compliance with safety regulations despite having no fundamental change in ship size, complement or mission. Another offered an argument in favour of graduated scales by noting that for a 99 GT vessel whose tonnage had been rounded down from a calculated value of 99.99999, an infinitesimal change in volume would cause a 1% change in GT, which is referred to as a "substantial" change under current interpretations, in contrast with a 1% change on a 100,000 GT ship, which involves a significant change in volume. On the other hand, this participant noted that adoption of a graduated scale approach adds complexity, especially in view of the need to list a keel laid/substantially altered date on the front of the ITC69, which is applicable to all ships.

Proposals to establish/revise tonnage change criteria

2.6 Participants were invited to offer proposals to establish and/or revise criteria related to GRT grandfathering (articles 3(2)(b) and (d)), changes of a major character (regulation 5(3)(b)) and/or remeasurement (article 10(1) (and regulation 5(1))). In commenting on the need for criteria related to changes of a major character, one participant expressed the view that a quantitative criterion is not needed, as such changes correspond to major alterations, comparable to the removal of a superstructure affecting the assigned load line. While not supporting graduated scales, one participant offered flag Administration data on ships that are subject to GRT grandfathering provisions, in way of illustrating the grouping of older vessels around key regulatory breakpoints. This information is attached as figure 1 at the end of this annex.

General comments

2.7 Comments of a general nature offered in conjunction with this Round 2 work are summarized in the subparagraphs which follow.

.1 Participants expressed a variety of views concerning the types of ship changes that should be taken into account when evaluating tonnage changes, for the three purposes under discussion (i.e. provisions related to GRT grandfathering, changes of major character, and remeasurement). One participant commented to the effect that temporary deck equipment without permanent connections to the ship's structures should not be included in the initial measurement, and therefore should be effectively ignored when evaluating tonnage changes. One participant noted the different language used in the TM Convention for the various provisions, leading the Administration to conclude that loss of GRT grandfathering provisions should only apply to alterations of a structural nature. Another questioned whether any distinction between the terms "structural" and "non-structural" could be taken as authoritative, particularly when applying these terms to items like cosmetic plating or handrails. One participant

commented on the overlap with the separate questionnaires being used by the group to develop and evaluate interpretations.

.2 Participants expressed a variety of views on the relationship between changes affecting tonnage and reissuing the ITC69. One commented that reissuance is necessary whenever a ship change results in the invalidation of any information that appears on the ITC69, such that the ITC69 always reflects the ship's current configuration. Another commented that reissuance is necessary following any change affecting tonnage, but that the tonnage numbers on the ITC69 should be changed only if the tonnage change exceeds 1%, or would cause the ship to exceed tonnage thresholds in other IMO instruments. Two others suggested that the ITC69 not be reissued unless the tonnage change exceeds 1%. With specific reference to remeasurement criteria, one participant commented that the ITC69 should be reissued for changes involving number of passengers or moulded draft (as indicated on the reverse of the ITC69), and for all other alterations, only if the tonnage change exceeds 1%. Another expressed the view that, because the TM Convention does not specify a period of validity for the ITC69 (i.e. there is no expiry date), there was an assumption that volume changes attributable to routine repairs, machinery upgrades, and compliance with changing safety regulations would not imperil the validity of an issued ITC69, especially for smaller and work ships without the clearly identified passenger and cargo spaces on which there was earlier focus.

.3 One participant expressed concern over accounting for cumulative changes, especially with reference to applying GRT grandfathering provisions, citing this concern as a reason for not supporting further development of graduated scales, and stressing the importance of reissuing the ITC69 following tonnage changes of less than 1% to help ensure proper accounting for such changes. Another participant noted that the existing 1% criterion for GRT grandfathering does not take into consideration significant changes made simultaneously, for which the ship's GT remains unchanged (e.g. the length is increased substantially and simultaneously the beam is decreased substantially).

.4 One participant commented that all IMO recommendations are expected to be complied with by the international community, while two other participants emphasized the distinction between interpretations of a recommendatory nature, and mandatory requirements.

.5 One participant commented that any increase in the existing 1% GRT grandfathering criterion would result in higher risks to safety and the marine environment from sub-standard ships. Another participant commented that it is inappropriate to establish a low criterion as a means to restrict operations of older ships, whose owners have the legal right to make use of GRT grandfathering privileges.

.6 One participant suggested that that the concept of GRT grandfathering should be extended to sister vessels built within a previous 2-3 year period, such that identical tonnages could be assigned notwithstanding minor differences such as to deck arrangements. This participant cited investment costs for designs of production ships and tooling, and impacts that would result from follow-on ships exceeding key tonnage thresholds (e.g. 500 GT or 3000 GT).

2.8 A total of 15 proposals related to GRT grandfathering (article 3(2)(b) and (d)), changes of a major character (regulation 5(3)(b)) and remeasurement (article 10(1) (and regulation 5(1))) were carried over for evaluation in Round 3. These included three proposals on graduated scales, notwithstanding the lack of Round 1 support described in paragraph 2.4 above, in order to give participants the opportunity to modify their earlier positions, as appropriate, based on the new information shared during Round 2. Several proposals were not carried over for evaluation in Round 3 due principally to the lack of specifics, and/or disagreement within the group regarding how ship changes are evaluated for these purposes.

3 Evaluation of approaches (Round 3)

3.1 Participants were invited to evaluate the proposed approaches developed during Round 2. The specific proposals are included in table 3-1, which also reflects the number of participants who characterized the proposal as their most preferred.

3.2 A tabulation of the consensus analysis results of participant evaluations for each proposal is provided in table 3-2. Participant comments of a general nature that were offered in conjunction with this Round 3 work are summarized in the subparagraphs which follow, exclusive of comments made during the earlier work that are summarized elsewhere in this annex.

.1 Current inconsistencies between flag Administrations must be addressed concerning reissuance of the ITC69 following ship changes. Applying a fixed percentage (e.g. 1%) as opposed to a change of unity for this purpose could help avoid either frequent certificate reissuance, or manual editing that may be questioned during port State examinations. Conversely, a fixed percentage approach presents difficulties in tracking and managing small cumulative changes over the life of the vessel, and is especially problematic for ships changing flags.

.2 A 1% criterion has been used successfully for multiple purposes over a number of years, and is a simple approach to comprehensively addressing tonnage changes. Adopting a criterion of unity for vessel remeasurement could, in effect, encourage owners not to report small tonnage changes.

.3 Applying the major conversion approach for GRT grandfathering under the TM Convention fully embodies similar grandfathering approaches applied by other international instruments to avoid retroactive application of requirements, unless a ship has undergone major changes.

.4 Implementing graduated scales could lead to inconsistencies in treatment of ships at or near step boundaries, and it is unclear why any advantage should be given to ships near the selected tonnage limit.

.5 Due to differences in requirements related to tonnage changes which apply to gross tonnage, as opposed to net tonnage, interpretations in this regard should be kept separate, and be as clear and concise as possible.

Table 3-1
Proposals evaluated in Round 3[1]

A. **Substantial alterations (articles 3(2)(b) and (d))**

1 **Apply 1% criterion (9 preferred):** This proposal retains the 1% substantial alteration criterion of TM.5/Circ.5, with changes to reflect the expected approval of the new Assembly resolution to replace A.758(18) and the WG's conclusion to delete reference to national (GRT) tonnage per paragraph 7 of document SLF 55/WP.5. Under this proposal:

- Interpretation A.3(2)(d)-1 is deleted.
- New Interpretation A.3(2)(b)-1 is established, which reads: "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".

2 **Apply 1% criterion unless IMO notified (0 preferred):** This proposal retains the 1% substantial alteration criterion of TM.5/Circ.5, as amended per Proposal 1 above to delete reference to GRT tonnage, but provides for IMO notification by a flag State that chooses to apply a different criterion. Under this proposal:

- Interpretation A.3(2)(d)-1 is deleted.
- New Interpretation A.3(2)(b)-1 is established, which reads: "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, or as otherwise deemed by the Administration and communicated to the Organization under the provisions of article 15(b)."

3 **Revoke the 1% criterion (1 preferred):** This proposal revokes the 1% substantial alteration criterion of TM.5/Circ.5.

4 **Substantially altered if dimensions change (0 preferred):** This proposal revokes the 1% substantial alteration criterion of TM.5/Circ.5, replacing it with criteria related to length, breadth, or interior height increases, and changes in tonnage. Under this proposal:

- Interpretation A.3(2)(d)-1 is deleted.
- A new Interpretation A.3(2)(b)-1 is established, with the details as yet unspecified, to the effect that the term "alterations or modifications which the Administration deems to be a substantial variation in their existing tonnage" means a structural change that results in an increase in the ship's length, breadth, or interior height as well as a [XXX] percent change in the gross tonnage calculated in accordance with the 1969 Tonnage Convention.
- The [XXX] percentage tonnage change in the new interpretation should be established such that a ship that is close to the 500 GT or 3000 GT limits can undergo a limited refit without causing the ship to become non-compliant.
- In this context, "interior height" refers to the hull depth or superstructure height.
- The Sub-Committee would continue development of this proposal following completion of the correspondence group's work.

Table 3-1
Proposals evaluated in Round 3[1]

5 **Substantially altered if major conversion (1 preferred):** This proposal revokes the 1% substantial alteration criterion of TM.5/Circ.5, replacing it with the criterion that only a ship which undergoes changes that constitute a major conversion under SOLAS or other regulations is considered substantially altered. Under this proposal:

- Interpretation A.3(2)(d)-1 is deleted.
- A new Interpretation A.3(2)(b)-1 is established, with the details as yet unspecified, to the effect that the term "alterations or modifications which the Administration deems to be a substantial variation in their existing tonnage" means a change in tonnage in association with alterations that constitute a major conversion under SOLAS or other regulations.
- Existing IMO regulations that use the term "major conversion" and related terms (e.g. "alterations of a major character", "substantially altered" etc.) will be taken into consideration when developing the detailed interpretations (e.g. SOLAS, chapter II-1, regulation 1.1.3; SOLAS, chapter II-2, regulation 1.3.2; MARPOL Annex 1, chapter 1, regulation 1.9).
- The Sub-Committee would continue development of this proposal following completion of the Correspondence Group's work.

6 **Apply graduated scales (1 preferred):** This proposal revokes the 1% substantial alteration criterion of TM.5/Circ.5, replacing it with tonnage change criteria applied to the ship's gross tonnage calculated in accordance with the 1969 Tonnage Convention, using a graduated scale. Under this proposal:

- Interpretation A.3(2)(d)-1 is deleted.
- A new Interpretation A.3(2)(b)-1 is established, with the details as yet unspecified, to the effect that the term "alterations or modifications which the Administration deems to be a substantial variation in their existing tonnage" means a change in tonnage in accordance with a graduated scale.
- The Sub-Committee would continue development of this proposal following completion of the correspondence group's work.

7. **None satisfactory (1 preferred)**

B. **Changes of a major character (regulation 5(3)(b))**

1 **Do not establish a criterion (4 preferred):** This proposal maintains status quo, for the present, by not providing interpretations on what constitutes a change of a major character. Under this proposal:

- The draft Unified Interpretations TM.5 circular to replace TM.5/Circ.5 will not include an interpretation on this matter.

2 **Establish a criterion of unity (0 preferred):** This proposal establishes a new interpretation for alterations of a major character as constituting a change of unity or more (e.g. one "ton" or more) in the tonnage calculated in accordance with the 1969 Tonnage Convention. Under this proposal:

- A new Interpretation R.5(3)(b)-1 is established, which reads: "The term "alterations or modifications deemed by the Administration to be of a major character" means "a change of unity or more in the gross or net tonnage calculated in accordance with the 1969 Tonnage Convention."

Table 3-1
Proposals evaluated in Round 3[1]

3 **Establish a 1% criterion (7 preferred):** This proposal establishes a new interpretation for alterations of a major character as constituting a change of more than 1% in the gross tonnage calculated in accordance with the 1969 Tonnage Convention. Under this proposal:

- A new Interpretation R.5(3)(b)-1 is established, which reads: "The term "alterations or modifications deemed by the Administration to be of a major character" means "a change of more than 1% in the gross tonnage calculated in accordance with the 1969 Tonnage Convention."

4 **Apply graduated scales (2 preferred):** This proposal establishes tonnage change criteria applied to the ship's gross tonnage calculated in accordance with the 1969 Tonnage Convention, using a graduated scale. Under this proposal:

- A new Interpretation R.5(3)(b)-1 is established, with the details as yet unspecified, to the effect that the term "alterations or modifications deemed by the Administration to be of a major character" means a change in tonnage in accordance with a graduated scale.
- The Sub-Committee would continue development of this proposal following completion of the correspondence group's work.

C. **Remeasurement (article 10(1) (and regulation 5(1)))**

1 **Do not establish a criterion (2 preferred):** This proposal maintains status quo, for the present, by not providing interpretations on what constitutes a change necessitating recertification. Under this proposal:

- The draft Unified Interpretations TM.5 circular to replace TM.5/Circ.5 will not include an interpretation on this matter.

2 **Establish a 1% criterion for ITC69 reissuance (2 preferred):** This proposal establishes a 1% tonnage change criterion applied to the ship's 1969 Tonnage Convention gross and net tonnages for evaluating changes necessitating tonnage recertification. Under this proposal:

- A new Interpretation A.10(1)-1 is established, which reads: "The term "would necessitate" means that the resulting change in the gross or net tonnage would exceed 1%. In addition, decreases in gross or net tonnage of the same magnitude also necessitate the cancelling of the 1969 Tonnage Certificate."

3 **Reissue ITC69 after any change (5 preferred):** This proposal provides for reissuance of the International Tonnage Certificate (1969) following any change affecting information that appears on the Certificate, regardless of magnitude, so that this information always reflects the ship's current arrangement. However, the tonnage figures should not be changed unless the tonnage change exceeds 1%. Under this proposal:

- New interpretation A.10(1)-1 is established, which reads: "In addition to the alterations causing tonnage increases described in this article, any similar changes that affect information appearing on the International Tonnage Certificate (1969), including tonnage decreases, also necessitate the cancelling of the Certificate. However, the gross and net tonnage figures should not be changed unless the gross or net tonnage change exceeds 1%.

Table 3-1
Proposals evaluated in Round 3[1]

4 **Reissue ITC69 after any change (1% limit) (3 preferred):** This proposal provides for reissuance of the International Tonnage Certificate (1969) following any change affecting information that appears on the Certificate, regardless of magnitude, so that this information always reflects the ship's current arrangement. However, the tonnage figures should not be changed unless the tonnage change exceeds 1%. Under this proposal:

- New interpretation A.10(1)-1 is established, which reads: "In addition to the alterations causing tonnage increases described in this article, any similar changes that affect information appearing on the International Tonnage Certificate (1969), including tonnage decreases, also necessitate the cancelling of the Certificate. However, the gross and net tonnage figures should not be changed unless the gross or net tonnage change exceeds 1%.

5 **Apply graduated scales (1 preferred):** This proposal establishes tonnage recertification criteria applied to the ship's gross tonnage calculated in accordance with the 1969 Tonnage Convention, using a graduated scale. Under this proposal:

- New Interpretation A.10(1)-1 is established, with the details as yet unspecified, to the effect that the International Tonnage Certificate (1969) should not be cancelled unless the alterations result in a gross tonnage increase or decrease in accordance with a graduated scale.
- The Sub-Committee would continue development of this proposal following completion of the correspondence group's work.

Notes

1. The parenthetical reference for each proposal represents the number of participants who indicated that the proposal was the one they most preferred.

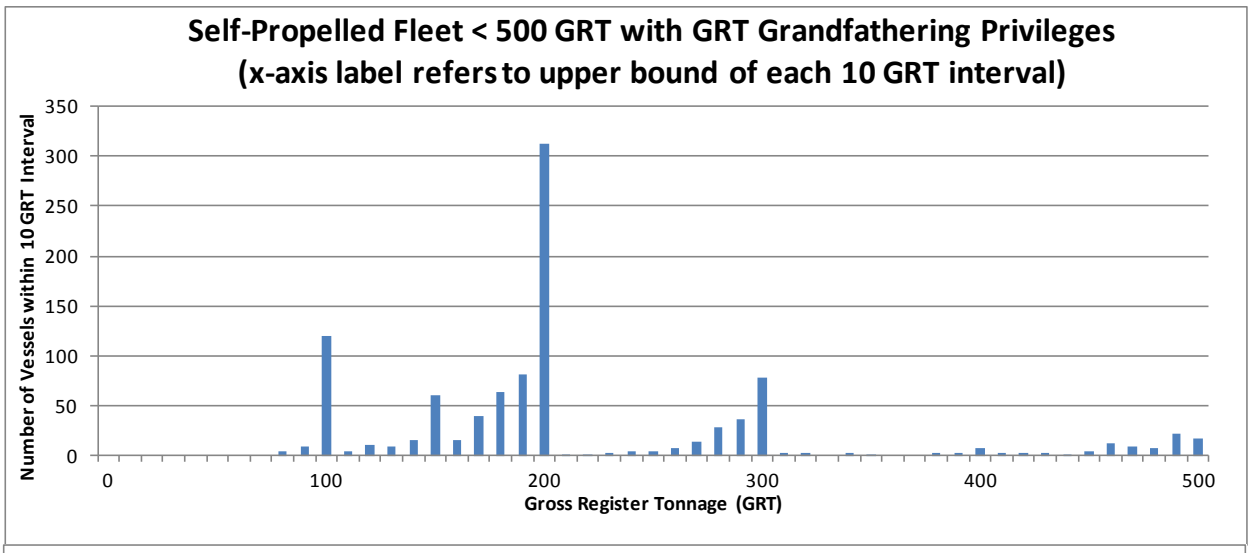
Table 3-2
Participant Views on Proposed Approaches

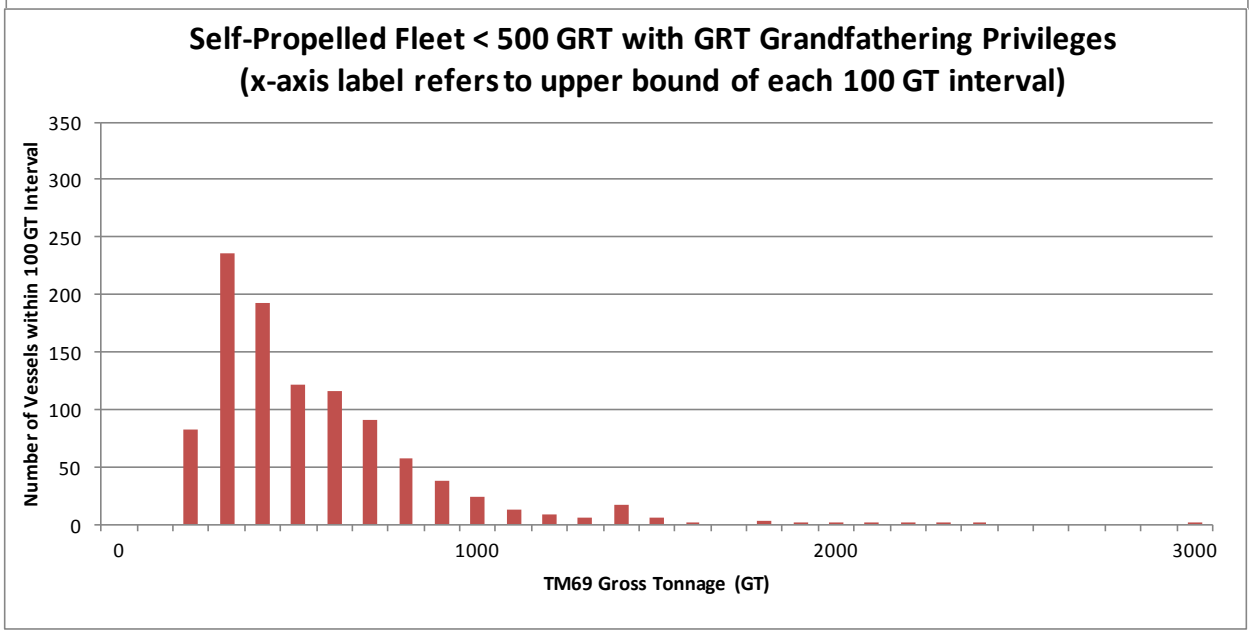
	Proposal	Number of Responses					*Consensus Categorization*
		StrgFav	*SomFav*	*Neutral*	*SomDisFav*	*StrgDisFav*	
A	**Substantial Alterations (Articles 3(2)(b) and (d))**						
1	Apply 1% criterion	6	4	1	1	2	**Strongly Favour**
2	Apply 1% criterion unless IMO notified	1	0	2	4	7	**Strongly Disfavour**
3	Revoke the 1% criterion	1	2	1	2	8	**Strongly Disfavour**
4	Substantially altered if dimensions change	0	3	1	2	8	**Strongly Disfavour**
5	Substantially altered if major conversion	1	3	0	4	6	**Strongly Disfavour**
6	Apply graduated scales	1	0	0	4	8	**Strongly Disfavour**
B	**Changes of a Major Character (Regulation 5(3)(b))**						
1	Do not establish a criterion	4	0	6	1	2	**Neutral**
2	Establish a criterion of unity	1	0	1	4	8	**Strongly Disfavour**
3	Establish a 1% criterion	2	6	1	0	5	**Somewhat Favour**
4	Apply graduated scales	1	0	0	5	8	**Strongly Disfavour**
C	**Remeasurement (Article 10(1))**						
1	Do not establish a criterion	2	2	5	1	4	**Neutral**
2	Establish a 1% criterion for ITC69 reissuance	2	3	1	2	6	**Strongly Disfavour**
3	Reissue ITC69 after any change	3	6	2	0	3	**Somewhat Favour**
4	Reissue ITC69 after any change (1% limit)	3	1	1	3	6	**Strongly Disfavour**
5	Apply graduated scales	1	0	0	4	9	**Strongly Disfavour**

Notes: **With Consensus** | **With Moderate Consensus** | **Without Consensus**

Consensus categorization methodology per "Ranking Ordinal Scales Using the Consensus Measure", Issues in Information Systems, Volume V1, No. 2, 2005. The positions displayed reflect those receiving the most support, with "Strongly Favour" ("StrgFav) assumed to be the preferred response in all cases. The color coding scheme is based on the following Consensus Measures (Cns) values: Green (Cns >= 0.7); Yellow (0.5 <= Cns < 0.7); Red (Cns < 0.5).

Figure 1


Self-Propelled Fleet < 500 GRT with GRT Grandfathering Privileges
(x-axis label refers to upper bound of each 10 GRT interval)
Number of Vessels within 10 GRT Interval
350
300
250
200
150
100
50
0
0
100
200
300
400
500
Gross Register Tonnage (GRT)


Self-Propelled Fleet < 500 GRT with GRT Grandfathering Privileges
(x-axis label refers to upper bound of each 100 GT interval)
Number of Vessels within 100 GT Interval
350
300
250
200
150
100
50
0
0
1000
2000
3000
TM69 Gross Tonnage (GT)

***

ANNEX 3

MATTERS RELATED TO ACCOMMODATION SPACES

1 Information collection (Round 1)

Approach of document SLF 55/9/3

1.1 Participants were invited to indicate their support for the approach to document SLF 55/9/3, which would implement a reduced gross tonnage (GT_r) parameter calculated by excluding volumes of certain living spaces that meet minimum MLC 2006 standards, regardless of whether the MLC 2006 applies to the ship. Five supported and eight did not support this approach.

1.2 Those participants indicating their support for this approach were invited to identify changes, if any, to improve it, which are summarized as follows:

.1 A clear definition is needed for rooms eligible for a GT_r exclusion for accommodation spaces, addressing not only living and sleeping rooms, but also passageways leading to them, as well as provisions rooms, gymnasiums, swimming pools, changing rooms, hospitals, lockers, galleys, pantries, laundries, etc.

.2 A detailed categorization of spaces is needed as to exclusivity of their use by the master, officers and ratings, with adequate measures to preclude utilization of such excluded accommodation spaces for other purposes.

.3 The measurement method used in calculating the GT_r exclusion should be specified in accordance with the rules of the TM Convention (i.e. moulded length, breadth and depth).

.4 Guidance is needed for treatment of ships that are currently measured (e.g. to address calculation and reissuance of the ITC69).

.5 Consideration should be given to delete the explicit linkage to MLC 2006 requirements, to allow some credit for improved accommodation spaces on non-MLC 2006 compliant ships and fishing vessels, and to allow flexibility in retaining the GT_r exclusion should minimum MLC 2006 standards be changed.

.6 It is important to quantify parameters, perhaps based on factors related to overall ship size or type, to best meet accommodation objectives, from which ships exceeding those objectives could be identified.

1.3 Those participants indicating they did not support this approach were invited to identify their concerns, which are summarized as follows:

.1 A tonnage assignment based on the exclusion of certain interior spaces according to their use is fundamentally problematic, as it provides incentive to use such a space for other purposes (e.g. storing provisions in a crew space). This was a defect of earlier measurement systems that was largely avoided by the TM Convention, and cannot be overcome even if more precise definitions are agreed to.

.2 The MLC 2006 is an ILO instrument, and can be changed independent of any IMO instrument. An IMO certificate, such as the ITC69, should not use, or depend on, an external framework in this manner.

.3 There is insufficient specificity regarding accommodation space definitions, including what is meant by the term "seafarer", and how dimensions would be taken. This could lead to complications for identical sister ships of different flags, and ships changing flag, and impact measurement costs for passenger ships, depending on whether the entire "crew" are considered to be "seafarers".

.4 Flag Administrations have different views on the use of the previously established GT_r parameters for segregated ballast tankers and open-top containerships, and it remains unclear how a GT_r parameter for accommodation spaces would apply in such cases.

.5 A GT_r parameter for accommodation spaces, which is applicable to all ship types, could be misinterpreted as the ship's GT parameter. It could also lead to pressure to extend the concept to other spaces, such as double hull void spaces, with undesirable results.

.6 It is not clear that the method used to calculate GT_r under this approach is optimal, as it appears to not be based on moulded volumes, and may result in a parameter that is not appropriately representative of the tonnage with the excluded accommodation spaces. If GT is to be used as a basis for reduction by a figure, this figure should be determined using the same method as used to determine GT.

.7 In view of the complexities associated with the calculation and application of this parameter, and its non-mandatory nature, a better alternative would be to recommend use of the net tonnage (NT) parameter for fee assessment.

Rules or instruments other than the MLC 2006

1.4 Participants were invited to identify rules or instruments other than the MLC 2006 that could be useful in developing an optional GT_r parameter for accommodation spaces. Tabulated results are provided in table 1-1 below.

Table 1-1 **Rules or instruments on accommodation spaces**	
Number of participants considering rule or instrument useful	Rule or instrument
5	Suez Canal Rules of Navigation (2007 Edition)
2	Convention for a Uniform System of Tonnage Measurement of Ships (1947) ("Oslo Rules")
1	Instructions as to the Survey of Master's and Crew Spaces, Board of Trade, United Kingdom (1937)
2	Accommodations of Crews Convention, 1946 (ILO)

1.5 Participants expressed a variety of views and offered related comments on the appropriateness of using other rules or instruments as the basis for implementing a GT_r parameter for accommodation spaces, and suggested alternate rules or instruments. These are summarized as follows.

.1 Chapter XII of the Suez Canal Rules of Navigation provides for a listing of crew accommodation rooms, which could be useful in calculating the GT_r parameter for accommodation spaces. For ships measured under the Suez Canal rules, the deducted accommodation rooms are listed on page 2 of the Suez Canal tonnage certificate.

.2 Because accommodation space measurements under Suez Canal and Oslo Rules are taken to the inside of the framing or lining, where fitted, additional calculations would be needed if a GT_r parameter for accommodation spaces is based on MLC 2006 standards.

.3 Many ships do not currently have either a Suez Canal tonnage certificate, or one issued under the Oslo Rules, and measurement under any such rules is necessarily complex, and will increase the length of time needed to calculate a ship's tonnage.

.4 In the view of one participant, the 1937 Board of Trade "Instructions as to the Survey of Master's and Crew Spaces" is considered to be no longer relevant to current shipping.

.5 The group should consider a GT_r parameter using the simple approach of calculating the volume of the complete deckhouse as listed on the reverse of the ITC69 (e.g. from the main deck to the bridge deck without engine casings and the navigation bridge, and subtracting it from tonnage). In the case of a 13,200 TEU containership of 142,295 GT, a 2,306 GT reduction would result, as compared to a 1,618 net ton reduction for crew spaces under Suez rules.

Definitions

1.6 Participants were invited to offer definitions of, and comments related to, accommodation spaces (e.g. as a supplement or alternative to those in document SLF 55/9/3) that would provide clarity in establishing eligible excludable spaces when calculating tonnage for a GT_r parameter. The definitions were consolidated for evaluation in Round 2 and are presented with the Round 2 results (see table 2-5). The Round 1 comments on definitions are summarized as follows:

.1 Any definitions related to persons who can occupy excluded accommodation spaces must be clear and unambiguous (e.g. definitions should address pilots, Suez crews, owner spaces on yachts, etc.). They should also cover all the different ship types (e.g. passenger ships, yachts, cable layers, offshore supply and construction ships, tugs, barges, research ships, etc.).

.2 The relevant definitions from the MLC 2006 should be used. This would ensure that documentation of various certifications performed by flag States or recognized organizations in issuing MLC 2006 certificates (e.g. identifying accommodation spaces, conducting surveys to confirm compliance with area and height requirements, etc.) can be used for calculating accommodation space tonnages, thereby saving time and cost.

.3 If the definitions from the MLC 2006 are not used, appropriate definitions could be established in a TM.5 circular, giving specifics on how to measure individual spaces, and including listings of spaces that are eligible or ineligible for exclusion.

.4 Dual-use spaces, such as messrooms, will create difficulties when creating listings of spaces that are eligible for exclusion. In addition, the group should consider the matter of storerooms for personal items while crewmembers are away for extended periods (e.g. vacations or holidays). These kinds of spaces might fall under MLC 2006 guidelines, rather than minimum standards.

.5 The safe manning certificate of a ship could also be used in identifying excludable accommodation spaces.

Round 1 – general comments

1.7 Participants shared a variety of concerns and opinions regarding the appropriateness and viability of different approaches, including concerns over the likelihood of widespread use of a non-mandatory GT_r parameter for accommodation spaces when assessing fees, and the costs and complexity of certifying such parameters. These will be identified in further detail under discussion of the Round 2 work, which focused more on evaluation. In addition, participants offered the following comments regarding the further development of a GT_r parameter for accommodation spaces:

.1 Based on an economic analysis performed by a participant addressing one flag Administration's ports, the estimated increase in GT-based port fees due to a 50% increase of accommodation space volume is relatively minor (on the order of 1%). A summary of the results of this work is included as figure 1 at the end of this annex.

.2 The correspondence group should develop statements providing evidence of disadvantageous economic treatment of ships fitted with larger accommodation spaces in comparison with otherwise identical sister ships not fitted with such spaces, stemming from the use of GT for assessing fees.

.3 There should be one standard which excludable accommodation spaces must meet. This would facilitate exclusion of accommodation spaces without the need to distinguish between the types of personnel who serve aboard ships in addition to the crew (e.g. trainees, instructors, etc.) which could change over time.

.4 The issue of periodic verification of accommodation spaces should be considered, in order to help preclude the inappropriate use of an accommodation space. In addition, the matter of recertification of a GT_r parameter for accommodation spaces following changes to the crew would need to be addressed.

.5 The issue of whether any additional tonnage parameter is optional or mandatory should be made clear in all cases. If mandatory, the question of who is responsible for payment for the certification of such a parameter must be addressed.

.6 Care must be taken in the development of any additional tonnage parameter, to ensure that tonnage calculations do not become as complex as was the case under measurement systems that preceded the TM Convention.

.7 There is a risk that the GT_r parameter could be misinterpreted as the ship's GT.

.8 Calculations for excludable volumes should be in accordance with the method of the TM Convention (i.e. moulded dimensions). If this method is agreed to, there are situations where it is difficult to determine what surface constitutes the actual boundary for the moulded volume. For example, in the case of a wall panel used to bound a portion of a crew cabin, it is unclear which side of the panel is regarded as the moulded space boundary.

Supplementary information offered

1.8 In addition to figure 1, participants offered tables and other supplementary information to assist with the group's work, which are included as figures 2 through 4 at the end of this annex. Figure 2 is a sample MLC 2006 declaration. Figure 3 provides excerpts from sample ITC69 and Suez Canal certificates and calculations, for the same ship. Figure 4 addresses the treatment of different kinds of accommodation spaces.

Round 1 outcome

1.9 Based on this input, the group carried forward eight proposed approaches and ten variants of these approaches for further development and evaluation in Round 2, along with associated definitions that could potentially apply under multiple approaches.

2 Development of approaches, variants and definitions (Round 2)

Approaches

2.1 Participants were invited to express their views on the specific proposed approaches identified in table 2-1, which carried forward from Round 1. The comments related to each are summarized in this table, with tabulated results provided in table 2-2. Participant comments of a general nature are summarized in the subparagraphs which follow.

.1 This work should proceed from an agreed set of definitions, accepting the MLC 2006 as a benchmark, and then use national requirements as the departure point for developing a GT_r parameter for accommodation spaces, so that designers can identify to tonnage certification entities those spaces eligible for exclusion.

.2 The facility with which accommodation spaces can be changed (e.g. to stores spaces and back to accommodation spaces, and/or their habitability characteristic altered) would make it difficult to monitor excludable spaces to ensure compliance.

.3 Any GT_r parameter should be kept as simple as possible. Clarity and transparency in rules and definitions should also be an objective.

.4 The GT_r parameter should take into account only those spaces occupied by the crew, appropriated exclusively for their use, and certified as such.

.5 Implementing a GT_r parameter that does not require minimum accommodation standards appears to be unnecessary and/or could lead to abuse (e.g. "gaming" the system to avoid desirable habitability features, such as noise reduction features, that often are not verifiable through drawing reviews).

.6 There is the risk that a GT_r parameter for accommodation spaces could be misconstrued as forcing port States and flag Administrations to accept its use.

Table 2-1
Proposed approaches considered in round 2

1 **SLF 55/9/3** Further develop a scheme for possible reduced gross tonnage implementation using the framework of document SLF 55/9/3. Under this approach:

- The GT_r parameter is calculated by excluding the volumes of certain living spaces that meet minimum MLC 2006 standards, regardless of whether the MLC 2006 applies to the ship.
- Definitions related to excludable accommodation spaces are provided in general terms within the appropriate IMO resolution.
- Periodic compliance surveys are completed in accordance with MLC 2006 requirements, as applicable.

Comments

- This approach involves costly additional calculations, based on inherently complex definitions of spaces and the occupying persons.
- It would be difficult to ensure against conversion to non-accommodation spaces, and/or failure to maintain standards.
- Mechanisms for enforcement and survey are left to flag Administrations, for non-MLC 2006 ships.
- See also comments for Proposed Approach 2 (MLC 2006).

Table 2-1
Proposed approaches considered in round 2

2 **MLC 2006** Develop a scheme for possible reduced gross tonnage implementation using the framework of the MLC 2006. Under this approach:

- The GT_r parameter is calculated by the ship's owner and declared on the "Declaration of Maritime Labour Compliance-Part II" document, whose submission by the ship's owner is required under the MLC 2006 (see the figure 5 sample at the end of this annex, offered as a possible example).
- The flag State/recognized organization receiving the "Declaration of Maritime Labour Compliance-Part II" authorizes the reduced gross tonnage, as appropriate.
- Definitions of "seafarer" and spaces are in accordance with their manner of treatment under the MLC 2006. Excludable accommodation spaces are all accommodation and recreational facilities which are required by MLC TITLE3.
- Periodic compliance surveys are completed in accordance with MLC 2006 requirements.

Comments

- This approach has the advantage of simplicity in application, and would shift some of the certification burden for this parameter to the owner, who would benefit from the GT_r assignment.
- ILO standards can be changed independently of IMO, which could present problems with GT_r assignments using this approach. On the other hand, because requirements are "set" at the time of build or modification, this may not prove to be an obstacle.
- Linkage between the TM Convention and the MLC 2006 is a laudable goal. However, there may be complications due to the different natures of information presentation and surveys conducted under these two instruments.
- A workable approach might be for a flag Administration or recognized organization to verify designer claims (e.g. during an MLC 2006 or noise survey), note on the designer's application those spaces meeting minimum MLC 2006 requirements, and then account for the associated volumes following MLC 2006 certification.
- The flexibility in interpreting and applying MLC 2006 standards may lead to GT_r differences between identical ships. It also could result in owners "shopping around" for the lowest GT_r assignments.
- MLC 2006 declarations may be inadequate for purposes of GT_r certification, and possibly subject to abuse, especially if owners are allowed to calculate volumes without independent verification.
- There may be objections to use of MLC 2006 declarations for this purpose, and such use could expose owners to port State interference. A separate verification letter from the flag Administration could, alternatively, provide sufficient evidence.
- The MLC 2006 declaration is not a sufficient basis for tonnage calculations, which will need to be recorded elsewhere.
- Surveys for MLC 2006 compliance differ from statutory surveys, and are more along the lines of an audit. Also, accommodations requirements under the MLC 2006 are generally dealt with at the time of design/construction, and not necessarily included in the periodic surveys.

3 **Modified SLF 55/9/3** Develop a scheme for possible reduced gross tonnage implementation using the framework of document SLF 55/9/3, but with references to MLC 2006 requirements removed. Under this approach:

- The GT_r parameter is calculated by excluding the volumes of certain living spaces, without regard to compliance with minimum MLC 2006 accommodation standards (or similar).
- Definitions related to excludable accommodation spaces are provided in general terms within the appropriate IMO resolution.
- There is no requirement to conduct periodic compliance surveys.

Comments

- For clarity and to ensure transparency, the requirements and definitions under this approach should be in as plain a language as possible.
- Drafting and maintaining minimum accommodation requirements within an IMO resolution is problematic. Referencing standards of other international conventions would simplify the approach, facilitate the use of appropriate definitions, and may improve consistent application.

Table 2-1
Proposed approaches considered in round 2

- See also comments for Proposed Approaches 1 (SLF 55/9/3) and 2 (MLC 2006).

4 **Suez Rules** Develop a scheme for possible reduced gross tonnage implementation using the framework of the Suez Canal Rules of Navigation (e.g. Part IV, CH XII) for identification of excludable spaces. Under this approach:

- The GT_r parameter is calculated by excluding moulded volumes of spaces for the exclusive use of the officers, engineers and crew as described in the Suez Canal Rules of Navigation, regardless of whether or not the spaces meet any minimum accommodation standards.
- Passageways, provision rooms, swimming pools, changing rooms, lockers, galleys and laundries are excluded, as well as sleeping rooms and similar accommodation spaces are measured to the moulded line of the boundary plating or surfaces (e.g. the space's moulded length, moulded breadth, and height between the moulded deck lines).
- Once excludable spaces are identified, reduced gross tonnage is calculated in a similar manner as identified in document SLF 55/9/3 (i.e. multiplying the volumes of these spaces by the K_1 factor and subtracting the product from the gross tonnage (GT)).
- There is no requirement to conduct periodic compliance surveys.

Comments

- A distinct advantage of this approach is that many ships are currently measured under these rules.
- While worthy of consideration, the use of Suez Canal rules as a basis for excluding spaces does not necessarily improve the quality of accommodations, as there is no linkage to minimum accommodation standards.
- Because not all ships are issued a Suez Canal certificate, an alternate approach would be needed. This may result in inconsistent results, more work on the part of tonnage certification entities, and additional costs to owners or builders.
- The Suez Canal rules are obsolete in some respects, and do not apply to modern ships (e.g. the rules specify spaces for apprentices, and make distinctions as to the many different types of cabins that are fitted). Further, there are other limitations to these rules due to their treatment of shared or ancillary spaces (e.g. portions of spaces for generator rooms could be excludable), the absence of certain definitions (e.g. regarding what constitutes a member of the crew), and a lack of compliance with survey requirements, which may jeopardize the viability of this approach.
- This approach is inconsistent with the SOLAS tonnage Interim Scheme (resolution A.492(XII)).

5 **Exclude deckhouses** Develop a scheme for possible reduced gross tonnage implementation using the simplified approach of excluding the volume of the entire deckhouse structure, less the engine room casing and navigation bridge or similar. Under this approach:

- The GT_r parameter is calculated by excluding the volumes of accommodation spaces without regard to whether or not they meet any minimum accommodation standards.
- The exclusion is limited to qualifying portions of the deckhouse spaces that are already listed on the reverse of the ITC69.
- There is no requirement to conduct periodic compliance surveys.

Comments:

- This approach has the advantage of simplicity of application.
- Implementation of a GT_r parameter calculated in this manner could negatively affect ship design, by encouraging the fitting of unnecessarily large deckhouses for purposes other than accommodations.
- Without linkage to any minimum standards, this approach would not ensure improved accommodation spaces. It is also unclear whether it would increase the quantity of accommodation spaces, including increased training berths.
- Difficulties in distinguishing between the hull and a deckhouse in some designs could lead to differences in application (e.g. in some fishing vessel designs, crewmembers are accommodated in the poop castle, where as in others, the same spaces are used for freezer rooms which are included in NT).

Table 2-1
Proposed approaches considered in round 2

- This approach could a yield lower assigned GT_r than is the case for other approaches for certain ship types by allowing exclusion of spaces that are not for the crew (e.g. certain passenger ships, Ro-Ro's, offshore supply ships).

6 **Apply 0.8 factor** Develop a scheme for possible reduced gross tonnage implementation 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. Under this approach:

- The GT_r parameter is calculated only if the ship is in full compliance with the following ILO Conventions/Recommendations: Accommodation of Crews Convention (Revised), 1949 (No. 92); Accommodation of Crews (Supplementary Provisions) Convention, 1970 (No. 133); Crew Accommodation (Air Conditioning) Recommendation, 1970 (No. 140); Crew Accommodation (Noise Control) Recommendation, 1970 (No. 141).
- Periodic compliance surveys are conducted as required by the associated ILO Convention or Recommendation.

Comments

- This approach offers the advantages of being simple, clear and realizable, and would provide an incentive for owners to improve accommodation spaces.
- Calculation methods other than 0.8 GT could be used for ship types to which GT_r parameters currently apply (e.g. 0.7 GT for open-top containerships and 0.8 (GT – segregated ballast tonnage) for oil tankers).
- While the approach could improve the quality of accommodation spaces, it would not necessarily increase the quantity of such spaces, including an increased number of training berths.
- Because no credit is given to an owner who provides larger/additional accommodation spaces than the minimum required, owners are effectively incentivized to provide the smallest accommodation spaces that meet minimum standards.
- Clarification would be needed for ships which do not fully meet ILO requirements, but which are deemed to be compliant under equivalent or alternative criteria (e.g. MCA LY3 interpretations), and a sliding scale should be considered to address the potentially greater benefit for larger ships, as opposed to smaller ships.
- It is unclear why standards that may be older than 40 years are invoked, and linkage to a variety of different instruments partially nullifies the simplicity of the calculational approach.
- Because of equivalencies under ILO Instruments, there is no single, binary "meets" or "does not meet" criterion that can be considered in isolation. Accordingly, "full compliance" may not be a rational standard.

7 **Recommend NT** Recommend the use of net tonnage (NT) when assessing fees. Under this approach:

- Use of the NT parameter for assessing fees would provide a mechanism to solve the accommodation space problem.
- Development and implementation of a GT_r parameter for accommodation spaces would not be further pursued.

Comments

- For ships for which GT = 0.3 NT (e.g. some passenger ships, towing vessels, offshore support vessels, yachts, etc.) this approach effectively penalizes owners who provide larger accommodation spaces. According to an analysis of 2012 Fairplay world fleet data, 29,373 out of a total of 87,783 in-service ships are assigned gross tonnages of 0.3 NT.
- Because it is unlikely that those entities that assess fees based on GT will use the NT parameter instead, this approach may not result in better crew living conditions.
- While this approach could improve the quantity of accommodation spaces, it does not address the quality issue.
- Net tonnage assignments on ships with one or more continuous decks above the freeboard deck, such as Ro-Ro ships are lower than for ships having reduced freeboard, which could be problematic.

Table 2-1
Proposed approaches considered in round 2

- It is unclear whether pursuing this approach is appropriate, in view of the discussion in document SLF 55/3, and the subsequent decision by MSC 89 to not further pursue a similar approach, and the absence of any relevant new information since that time.

8 **Obtain more information** Obtain additional information to support the further development and possible implementation of reduced gross tonnage for accommodation spaces. Under this approach:

- The correspondence group would develop statements providing evidence of negative impacts on accommodations stemming from the widespread use of the gross tonnage (GT), as opposed to the net tonnage (NT), when assessing fees.
- The correspondence group would assess the possible role that providing both the gross tonnage (GT) and net tonnage (NT) parameters on the front of the ITC69 form may be contributing to the use of gross tonnage (GT) when assessing fees.

Comments

- This approach would move the group further from the tasking under the group's terms of reference, and serve only to delay an outcome.
- It is doubtful whether this work would yield any useful findings.

Table 2-2
Participant views on proposed approaches

Proposed Approach	Positions of respondents					
	Strongly favour	Somewhat favour	Neutral	Somewhat disfavour	Strongly disfavour	Consensus rating
1 SLF 55/9/3	4	1	2	6	3	**Somewhat disfavour**
2 MLC 2006	1	4	2	6	3	Somewhat disfavour
3 Modified SLF 55/9/3	0	5	4	4	3	Somewhat favour
4 Suez Rules	1	3	1	5	6	**Strongly disfavour**
5 Exclude Deckhouses	1	0	1	9	5	Somewhat disfavor
6 Apply 0.8 Factor	2	4	2	2	6	**Strongly disfavor**
7 Recommend NT	3	6	3	0	4	**Somewhat favor**
8 Obtain More Information	1	1	6	5	3	Neutral
Notes	With Consensus		With Limited Consensus		**Without Consensus**	

Consensus categorization per "Ranking Ordinal Scales Using the Consensus Measure", Issues in Information Systems, Volume V1, No. 2, 2005. The positions displayed reflect those receiving the most support, with "Strongly favour" assumed to be the preferred response in all cases. The color coding scheme is based on the following Consensus Measures (Cns) values: Green (Cns >= 0.7); Yellow (0.7 <= Cns < 0.5); Red (Cns < 0.5).

Variants

2.2 Participants were invited to express their views on specific variants identified in table 2-3, which carried forward from Round 1 and apply to multiple approaches as identified in table 2-4. The comments related to each are summarized in this table, with tabulated results provided in table 2-4.

Table 2-3
Proposed variants considered in Round 2

A. **Definitions in IMO resolution** Include more detailed definitions related to accommodation spaces within the IMO resolution.

B. **Definitions in TM circular** Include more detailed definitions related to accommodation spaces within a new TM circular.

Comments

- This variant could facilitate more frequent updates, through a document approved at the Maritime Safety Committee level, as opposed to the assembly level. Examples of the kind of detailed information that could be provided in such a circular were offered by a participant, and are included as figures 6 and 7 at the end of this annex.

C. **Exclude passageways** Extend the exclusion to passageways and similar ancillary spaces that could be construed as accommodation spaces in this context.

D. **Exclude personal storerooms** Extend the exclusion to storerooms for personal possessions and similar unoccupied ancillary spaces that could be construed as accommodation spaces in this context.

E. **Attach listing to ITC69** Attach a listing to the ITC69 that identifies the excluded accommodation spaces and their volumes, as an addendum along the lines of Appendix 2 to the TM.5/Circ.5 Annex.

F. **Optional MLC declarations** Provide for optional certification of volumes through MLC 2006 declarations. These are documents required by MLC 2006 through which owners certify compliance with MLC 2006 requirements, and which could include volumes and other information related to volumes of accommodation spaces.

Comments

- MLC 2006 declarations provide a mechanism to help ensure compliance, which could shift some of the certification responsibility to the owners who would benefit from the parameter. An example of an MLC declaration along these lines was offered by a participant (see figure 5).

G. **Apply factors for crew comfort** Apply factors when calculating reduced gross tonnage that take into account different levels of crew comfort and habitability, providing a larger exclusion for those spaces that meet the highest crew accommodation or habitability standards (e.g. noise and vibration codes and recommendations).

Comments

- While there may be merit when applying this variant to Proposed Approach 6 (exclude deckhouses), "deckhouse" does not necessarily equate to "superstructure accommodation".
- If applied to Proposed Approach 4, a key advantage of simplicity in not linking the approach to design standards could be nullified.
- If applied to Proposed Approaches 1 through 3, imposing additional standards beyond what is required by the MLC 2006 adds complexity, is potentially controversial, and could jeopardize efforts to implement a GT_r parameter.

H. **Required MLC declarations** Provide for certification of volumes through attachment of a copy of "Declaration of Maritime Labour Compliance-Part II" to the ITC69 that identifies the excluded accommodation spaces and their volumes.

Table 2-3 **Proposed variants considered in Round 2**
I. **Attach ITC69 listing if No Suez** Attach a listing of the excluded accommodation spaces to the ITC69 as an addendum, along the lines of Appendix 2 to the TM.5/Circ.5, annex, only if a Suez Canal Special Tonnage Certificate has not also been issued.
J. **Conduct a poll** Poll persons serving on each type of ship to ascertain their level of expectations for the accommodations that should be provided for them. *Comments* • Limiting the poll to persons serving aboard ships could introduce some bias into the results.

Table 2-4
Participant views on proposed variants

Proposed approach and variant	Positions of respondents					
	Strongly favour	Somewhat favour	Neutral	Somewhat disfavour	Strongly disfavour	Consensus rating
1. **Further develop SLF 55/9/3**						
A. Definitions in IMO resolution	1	3	3	5	3	Somewhat disfavour
B. Definitions in TM circular	3	5	3	3	1	Somewhat favour
C. Exclude passageways	1	0	4	4	7	Strongly disfavour
D. Exclude personal storerooms	3	1	1	5	5	**Strongly disfavour**
E. Attach listing to ITC69	3	3	3	4	2	**Somewhat disfavour**
F. Optional MLC Declarations	1	3	3	3	2	Somewhat disfavour
G. Apply factors for crew comfort	2	2	2	4	4	**Strongly disfavour**
2. **Use MLC 2006 declarations**						
G. Apply factors for crew comfort	1	3	2	4	4	**Strongly disfavour**
H. Required MLC Declarations	1	3	4	3	4	Strongly disfavour
3. **SLF 55/9/3 no MLC 2006 linkage**						
A. Definitions in IMO resolution	0	4	4	3	4	Strongly disfavour
B. Definitions in TM circular	2	5	2	5	1	Somewhat disfavour
E. Attach listing to ITC69	2	1	4	5	3	Somewhat disfavour
G. Apply factors for crew comfort	1	3	1	5	5	**Stongly disfavour**
4. **Use Suez rules for spaces**						
A. Definitions in IMO resolution	1	3	1	4	7	**Strongly disfavour**
B. Definitions in TM circular	1	0	4	4	7	Strongly disfavour
E. Attach listing to ITC69	1	1	4	3	7	Strongly disfavour
G. Apply factors for crew comfort	0	3	1	6	6	Strongly disfavour
I. Attach ITC69 listing if no Suez	0	1	5	3	7	Strongly disfavour
5. **Exclude deckhouses**						
G. Apply factors for crew comfort	0	2	2	6	5	Somewhat disfavour
8. **Obtain additional information**						
J. Conduct a poll	0	0	5	7	2	Somewhat disfavour

Notes

With Consensus | With Limited Consensus | **Without Consensus**

Consensus categorization per "Ranking Ordinal Scales Using the Consensus Measure", Issues in Information Systems, Volume V1, No. 2, 2005. The positions displayed reflect those receiving the most support, with "Strongly Favour" assumed to be the preferred response in all cases. The color coding scheme is based on the following Consensus Measures (Cns) values: Green (Cns >= .7); Yellow (0.7 <= Cns < 0.5); Red (Cns < 0.5).

Definitions

2.4 Participants were invited to express their views on specific definitions identified in table 2-5, which carried forward from Round 1 and apply to multiple approaches and their variants. Comments related to each are summarized in this table, which also includes the participant preference results from the Round 2 evaluation.

Table 2-5
Proposed definitions evaluated in Round 2[1]

1. **Identification of crew/trainees** The following proposed definitions pertain to the identification of persons who occupy the spaces that are eligible for exclusion when calculating a possible GT_r parameter for accommodation spaces (applies only to Proposed Approaches 1 and 3).

Proposal 1 (4 preferred) Only those spaces used for the accommodation of seafarers are excluded. "Seafarer" means any person who is employed or engaged or works in any capacity on board a ship, which includes a person engaged in training and obtaining practical marine experience to develop seafaring skills.

Proposal 2 (7 preferred) Only those spaces used for the accommodation of members of the crew are excluded. "Member of the crew" is any person who is employed or engaged or works in any capacity on board a ship. This includes a person engaged in training and obtaining practical marine experience to develop seafaring skills.

Proposal 3 (0 preferred) Same as Proposal 1, except revise the definition to additionally provide for the use of a ship's safe manning certificate in identifying spaces eligible for exclusion.

Proposal 4 (0 preferred) Same as Proposal 2, except revise the definition to additionally provide for the use of a ship's safe manning certificate in identifying spaces eligible for exclusion.

None Satisfactory (4 preferred)

Comments

- The definition of Proposal 1 is unlike the MLC 2006 definition of "seafarer" in that it classifies trainees, cadets or midshipman as seafarers. Use of this definition for a GT_r parameter could facilitate the exclusion of such trainee spaces, and may ensure greater consistency when applying the GT_r parameter.
- Consideration should be given to modifying Proposal 2 to provide for limiting the number of seafarer cabins for passenger ships and yachts to those listed on the safe manning certificate.
- Rather than attempt to improperly use STCW or MLC 2006 terminology, criteria for accommodations could be applied by simply counting "non-passengers living on board". The MLC 2006 definition of "seafarer" is related to other parts of this instrument that deal with pay, hours of work, rest, etc.

2. **Types of accommodation spaces eligible for exclusion** The following proposed definitions pertain to the types of spaces that are eligible for exclusion when calculating a possible GT_r parameter for accommodation spaces (applies only to Proposed Approaches 1 and 3).

Proposal 1 (11 preferred) "Accommodation space" means an enclosed space for the exclusive use of, and occupation by, persons who work and live on board ship, to accommodate their living needs, such as a sleeping room, mess room, bathroom, recreational facility, or hospital space.

Proposal 2 (0 preferred) "Accommodation space" means a space used exclusively by the officers and seamen for living purposes. These spaces are marked with their designated use.

None Satisfactory (5 preferred)

Comments

Table 2-5
Proposed definitions evaluated in Round 2[1]

- Proposal 1 reflects the concept of excluding accommodation spaces for all persons employed in the business of the ship.
- Consideration should be given to requiring the marking of excluded accommodation spaces with their designated use.
- Excluding laundries and watch stations could stimulate enhanced comfort by encouraging the provision of additional spaces where large amounts of work time is spent.
- Consideration should be given to modifying Proposal 1 to include all supernumeraries and their living spaces, but not spaces designated as Suez crews, ship pilots, etc., or to limit its scope to spaces for the use of a person who is a "member of the crew".

3. **Treatment of shared spaces** The following proposed definitions pertain to the shared use of certain spaces that could be construed as accommodation spaces for crew or trainees (applies only to Proposed Approaches 1, 2 and 4).

Proposal 1 (1 preferred) "Shared accommodation spaces" are those used by the crew and other persons onboard, and are ineligible for exclusion.

Proposal 2 (1 preferred) "Shared accommodation spaces" are those used by the crew and other persons onboard, or by the crew for multiple purposes that include accommodations, and are ineligible for exclusion.

Proposal 3 (2 preferred) "Shared accommodation spaces" are those used by the crew and other persons onboard, or by the crew for multiple purposes. "Shared accommodation spaces" used by persons other than the crew are ineligible for exclusion. "Shared accommodation spaces" used by the crew for multiple purposes that include accommodations are eligible for exclusion (e.g. a captain's private room or day room that is occasionally used to conduct ship's business).

None satisfactory (12 preferred)

Comments

- Establishing definitions along these lines introduces unnecessary complexity. Space used by, and all others engaged on, the business of the ship should be excluded. Passenger spaces should not be excluded. Alternatively, spaces used for the accommodation of persons who work and live aboard the ship should be excluded.
- The language "and other persons onboard" in all three proposals appears to apply only to passengers, at least when the ship is underway. Spaces that the crew uses to deal with passengers would be "work spaces", and not "living spaces".
- The three proposals are not sufficiently clear to permit a satisfactory evaluation.

4. **Measureable volume boundaries** The following proposed definitions pertain to the boundaries of the measureable volumes of excludable accommodation spaces (applies only to Proposed Approaches 1, 2, 3 and 4).

Proposal 1 (0 preferred) The boundary of the measureable accommodation space corresponds to the inside of the framing, lining or false ceiling (where fitted).

Proposal 2 (12 preferred) The boundary of the measureable accommodation space volume corresponds to the moulded line of the boundary plating or surfaces (e.g. per Regulations 2, 3 and 6), extending from deck to deck.

None Satisfactory (4 preferred)

Comments

- Since accounting for only the usable interior volume of an accommodation space would not provide credit for sound and heat/cold attenuating materials, it would be more appropriate to use the moulded dimensions.

Table 2-5 **Proposed definitions evaluated in Round 2**[1]
• Use of moulded dimensions would simplify the measurements and avoid the need for measurement restrictions (e.g. thickness of frames and linings).
Notes 1. The parenthetical reference for each proposal represents the number of participants who indicated that the proposal was the one they most preferred.

Round 2 outcome

2.5 Based on this input, the group carried forward eight options for evaluation in Round 3. Due to the lack of agreement in Round 2 on the approaches, variants and definitions, and the large number of comments made, each option derives from a corresponding Round 2 approach, with revisions as appropriate consistent with the Round 2 input.

3 Evaluating options (Round 3)

3.1 Participants were invited to evaluate the eight options carried forward from Round 2, and indicate a most preferred option along with any comments. Table 3-1 lists these options, including a detailed description of each and the results of this evaluation. Participant comments for this Round are summarized in the subparagraphs which follow.

.1 In considering the option to recommend use of NT for assessing fees, one possible approach to address concerns over the absence of the linkage with minimum accommodation standard could be to recommend use of NT for fee assessment only if the ship complies with respective ILO standards. Similarly, to address concerns over the 0.3 GT cap, if means could be found, a re-examination of the calculation of NT would be justified, along with that of IMO instruments related to open-top containerships and segregated ballast tankers.

.2 Before the TM Convention, the net tonnage was calculated through the deduction of certain crew and other spaces (e.g. engine rooms). In developing the TM Convention, the basic concept of omitting the volume of such spaces was adhered to, although other approaches for fee assessment were considered (including use of displacement). This speaks to the use of NT tonnage for the purpose of assessing fees. A comparison showing the relationship between GT, NT and GT_r (as described in document SLF 55/9/3) is included as figure 8 at the end of this annex.

.3 Based on the experience of one flag Administration, an obstacle to using NT to assess fees may be the reluctance of the local authorities that set harbour fees to accept a net tonnage parameter for this purpose, whereas such authorities are more likely to accept any kind of gross tonnage parameter.

.4 One reason in favour of implementation of a GT_r parameter using the Suez Canal rules is the fact that many larger ships are measured under these rules. As reported to the group, 40% of one participant's flag Administration's fleet have Suez certificates.

.5 Consideration should be given to extending the concept of excluding accommodation spaces to the GT parameter for the yachting sector and commercial small-tonnage ships, so that the ships can remain within the 500 GT and 3000 GT limits with regards to safety regulations.

.6 The matter of periodic compliance surveys for accommodation spaces should be further addressed. A practical approach for a survey requirement would be to compare the volumes of the accommodation spaces which make up the tonnage reduction in the tonnage calculations with accommodation spaces specified in the MLC 2006 documentation on board. For this to work, routines would have to be implemented to ensure that calculation sheets are onboard for use during port State or flag State examinations.

.7 Due to the multitude of unknowns regarding how a GT_r parameter might be used, there may be little benefit from gathering more information on this subject.

Table 3-1
Options considered in Round 3[1]

1 **SLF 55/9/3 (2 preferred)** Implement a GT_r parameter using the framework of document SLF 55/9/3, with some changes as indicated below. Under this option:

- The GT_r parameter is calculated by excluding the volumes of certain living spaces that meet minimum MLC 2006 standards, regardless of whether MLC 2006 applies to the ship.
- Definitions related to excludable accommodation spaces are provided in general terms within the appropriate IMO resolution, with detailed definitions provided in a new TM Circular.
- Volumes are measured to the moulded line of the boundary plating or surfaces (e.g. the space's moulded length, moulded breadth, and height between the moulded deck lines).
- Periodic compliance surveys are completed in accordance with MLC 2006 requirements.
- The Sub-Committee would continue development of this option following completion of the correspondence group's work.

2 **MLC 2006 (1 preferred)** Implement a GT_r parameter using the framework of the MLC 2006. Under this option:

- The GT_r parameter is calculated by the ship's owner and declared on the "Declaration of Maritime Labour Compliance-Part II" document, whose submission by the ship's owner is required under the MLC 2006.
- The flag State/recognized organization receiving the "Declaration of Maritime Labour Compliance-Part II" authorizes the reduced gross tonnage, as appropriate.
- Definitions of "seafarer" and spaces are in accordance with their manner of treatment under the MLC 2006. Excludable accommodation spaces are all accommodation and recreational facilities which are required by MLC Title 3.
- Volumes are measured to the moulded line of the boundary plating or surfaces (e.g. the space's moulded length, moulded breadth, and height between the moulded deck lines).
- Periodic compliance surveys are completed in accordance with MLC 2006 requirements.
- The Sub-Committee would continue development of this option following completion of the correspondence group's work.

Table 3-1
Options considered in Round 3[1]

3 **Modified SLF 55/9/3 (1 preferred)** Implement a reduced gross tonnage approach using the framework to document SLF 55/9/3, but with references to MLC 2006 requirements removed, and the changes indicated in Option 1. Under this option:

- The GT_r parameter is calculated by excluding the volumes of certain living spaces, without regard to compliance with minimum MLC 2006 accommodation standards (or similar).
- Definitions related to excludable accommodation spaces are provided within the appropriate IMO resolution, possibly supplemented by a TM Circular providing more detailed definitions.
- Volumes are measured to the moulded line of the boundary plating or surfaces (e.g. the space's moulded length, moulded breadth, and height between the moulded deck lines).
- There is no requirement to conduct periodic compliance surveys.
- The Sub-Committee would continue development of this option following completion of the correspondence group's work.

4 **Suez Rules (1 preferred)** Implement a GT_r parameter using the framework of the Suez Canal Rules of Navigation (e.g. Part IV, CH XII) for identification of excludable spaces. Under this option:

- The GT_r parameter is calculated by excluding the volumes of spaces for the exclusive use of the officers, engineers and crew as described in the Suez Canal Rules of Navigation, regardless of whether or not the spaces meet any minimum accommodation standards.
- Passageways, provision rooms, swimming pools, changing rooms, lockers, galleys and laundries are excluded, as well as sleeping rooms and similar accommodation spaces.
- Volumes are measured to the moulded line of the boundary plating or surfaces (e.g. the space's moulded length, moulded breadth, and height between the moulded deck lines).
- Once excludable spaces are identified, reduced gross tonnage is calculated in a similar manner as identified in document SLF 55/9/3 (i.e. multiplying the volumes of these spaces by the K_1 factor and subtracting the product from the gross tonnage (GT)).
- There is no requirement to conduct periodic compliance surveys.
- The Sub-Committee would continue development of this option following completion of the correspondence group's work.

5 **Exclude deckhouses (0 preferred)** Implement a GT_r parameter using the simplified approach of excluding the volume of the entire deckhouse structure, less the engine room casing and navigation bridge or similar. Under this option:

- The GT_r parameter is calculated by excluding the volumes of accommodation spaces without regard to whether or not they meet any minimum accommodation standards.
- The exclusion is limited to qualifying portions of the deckhouse spaces that are already listed on the reverse of the ITC69.
- There is no requirement to conduct periodic compliance surveys.
- The Sub-Committee would continue development of this option following completion of the correspondence group's work.

6 **Apply 0.8 factor (0 preferred)** Implement a GT_r parameter 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 Labor Organization (ILO) instruments. Under this option:

- The GT_r parameter is calculated only if the ship is in full compliance with the following ILO Conventions/Recommendations: Accommodation of Crews Convention (Revised), 1949 (No. 92); Accommodation of Crews (Supplementary Provisions) Convention, 1970 (No. 133); Crew Accommodation (Air Conditioning) Recommendation, 1970 (No. 140); Crew Accommodation (Noise Control) Recommendation, 1970 (No. 141).
- Periodic compliance surveys are conducted as required by the associated ILO Convention/ Recommendation.
- The Sub-Committee would continue development of this option following completion of the correspondence group's work.

Table 3-1
Options considered in Round 3[1]

7 **Recommend NT (7 preferred)** Recommend the use of net tonnage (NT) when assessing fees, similar to approach evaluated under an earlier SLF planned output (see document SLF 53/3, option B). Under this option: • Use of the NT parameter for assessing fees would provide a mechanism to address the accommodation space problem. • Specifics remain to be developed by the Sub-Committee (e.g. development of an IMO Assembly resolution for this purpose, the relationship to existing resolutions A.747(18) and MSC.234(82) which recommend use of gross tonnage for assessing fees, etc). • The Sub-Committee would continue development of this option following completion of the correspondence group's work.
8 **Obtain more information (0 preferred)** Obtain additional information to support the further development and possible implementation of a GT_r parameter for accommodation spaces. Under this option, and following completion of the correspondence group's work: • The Sub-Committee would collect evidence of negative impacts on accommodations stemming from the widespread use of the gross tonnage (GT), as opposed to the net tonnage (NT), when assessing fees). • The Sub-Committee would assess the possibility that providing both the gross tonnage (GT) and net tonnage (NT) parameter on the front of the ITC69 form is contributing to the use of gross tonnage (GT) when assessing fees. • The Sub-Committee would implement this option following completion of the correspondence group's work. • The Sub-Committee would make a decision on how to proceed based on the additional information obtained.
None satisfactory (2 preferred)
Notes 1. The parenthetical reference for each proposal represents the number of participants who indicated that the proposal was the one they most preferred.

Round 3 outcome

3.2 The group developed a summary table, listing the benefits and disadvantages of implementing each option, for inclusion in the group's report (see annex 3 to document SDC 1/4).

Figure 1

Estimated port fee increases for additional accommodation spaces

Assessment of amount fee inclusion in case
the accommodation spaces are increased 1.5 times

Type of ship	GT	Total Volume (m3)	Va:Amount of deck houses Volume* (m3)	Rate of Accommodation Volume (%)	1.5 Va Increased GT	A:Original Port Fee** (JPY***)	B:Increased Port Fee** (JPY***)	B-A Increased Fee** (JPY***)
Oil Tanker	163	640	111	17.34	177	129,157	129,297	140
Oil Tanker	316	1209	180	14.86	339	130,688	130,918	230
Oil Tanker	741	2759	276	10.00	778	136,940	137,410	470
Oil Tanker	836	3191	401	12.55	888	138,146	138,807	661
Oil Tanker	1061	4052	511	12.62	1127	143,009	143,972	963
Oil Tanker	1357	4955	397	8.02	1411	147,328	148,116	788
Oil Tanker	1358	4959	559	11.26	1434	147,343	148,451	1,109
Oil Tanker	1990	7185	863	12.02	2109	156,563	158,299	1,736
Oil Tanker	2824	10084	801	7.94	2936	168,731	170,365	1,634
Containar	2065	7447	460	6.18	2128	157,658	158,577	919
Oil Tanker	3244	11540	1481	12.84	3452	191,959	194,993	3,034
Oil Tanker	3478	12344	1641	13.29	3709	195,373	198,743	3,370
Oil Tanker	3879	13724	1258	9.17	4056	201,223	203,806	2,583
Oil Tanker	28085	93805	3672	3.91	28634	631,040	639,049	8,010
Oil Tanker	28747	95953	4560	4.75	29430	640,698	650,663	9,965
RO-RO	32868	109272	3784	3.46	33437	721,524	729,825	8,301
Bulk	55327	181281	3468	1.91	55856	1,049,201	1,056,919	7,718
Oil Tanker	58225	198528	5634	2.84	59051	1,091,484	1,103,535	12,051
P C T C	59030	193099	3675	1.90	59591	1,103,230	1,111,415	8,185
P C T C	60295	197108	4943	2.51	61051	1,121,688	1,132,717	11,030
Bulk	84335	273196	4164	1.52	84977	1,472,432	1,481,799	9,366
Ore Carrier	119446	383208	5054	1.32	120233	1,984,702	1,996,184	11,482
Oil Tanker	160068	509608	7651	1.50	161269	2,577,379	2,594,900	17,522
Oil Tanker	160080	509649	5614	1.10	160961	2,577,554	2,590,408	12,854

* The spaces are all deck houses on upper deck include wheelhouses, part of engine rooms and deck stores.

**The amount port fee includes port due, pilot fee, line handling fee and towage per 1 hour, except NT base fee. And also the amount port fee does not include extra pay such as night-time surcharge or overtime premium.

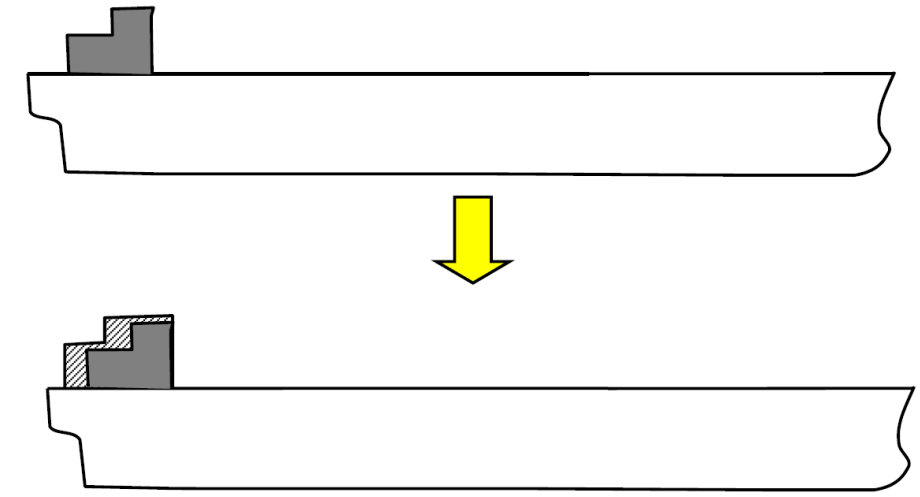
*** 1.00 JPY =

0.0098 USD	0.0599 CNY	10.905 KRW	0.065 SEK
0.051 ARS	0.0076 EUR	0.729 LRD	0.012 SGD
0.01 AUD	0.006 GBP	0.12 MXN	0.018 TRY
0.00976 BSD	0.5357 INR	0.057 NOK	0.907 VUV
0.0198 BRL	119.799 IRR	0.01 PAB	
0.01 CAD	10.905 KRW	0.306 RUB	

Figure 1 (continued)

Estimated port fee increases for additional accommodation spaces

Figures for Assessment of amount fee inclusion
in case the accommodation spaces are increased 1.5 times



Va: Accommodation spaces include wheelhouses, part of engine rooms and deck stores on upper deck

Vi: Increased spaces

Vi = 0.5Va

Figure 2

Sample MLC 2006 Declaration

Declaration of Maritime Labour Compliance – Part II
Measures adopted to ensure ongoing compliance between inspections

The following measures have been drawn up by the shipowner, named in the Maritime Labour Certificate to which this Declaration is attached, to ensure ongoing compliance between inspections:
(State below the measures drawn up to ensure compliance with each of the items in Part I)
1. Accommodation and Recreational Facilities (Regulation 3.1)
The following crew accommodation spaces and recreational facilities have been inspected and meet the minimum standards of code A3.1. Specifically, the volumetric values have been computed and certified and exceed the minimum requirements in accordance with Resolution A.XXX. These values are listed herein to be used as a reduced gross tonnage parameter;

4th Deck	Volume m^3	**2nd Deck**	Volume m^3
Captain Bedr	19	Cook	13.5
C.E. Bedroom	18	Crew A	20
WC	5	Crew B	20
3rd Deck		Crew C	20
2nd Eng	15	Crew D	20
3rd Officer	15	Crew E	20
2nd Officer	15	Crew F	20
Chief Officer	15	Bosun	13.5
Dispensary		WC (8)*2.5	20
WC (4)*2.5	10	**1st Deck**	
		Day Room	22
		Laundry	12
		Mess Room	28
		Galley	32
Total= 373m^3			

Declaration of Maritime Labour Compliance – Part II
Measures adopted to ensure ongoing compliance between inspections

The following measures have been drawn up by the shipowner, named in the Maritime Labour Certificate to which this Declaration is attached, to ensure ongoing compliance between inspections:
(State below the measures drawn up to ensure compliance with each of the items in Part I)
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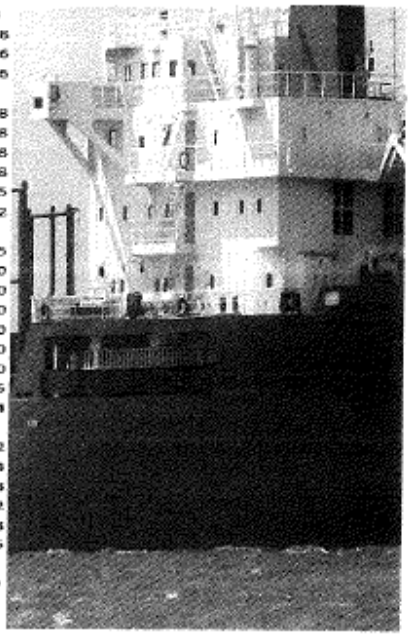
5th Deck	Volume m^3
Captain Bedr	28
C.E. Bedroom	26
WC (2)*8	16
4rd Deck	
2nd Eng	18
3rd Officer	18
2nd Officer	18
Chief Officer	18
Dispensary	22.5
WC (4)*8	32
3nd Deck	
Cook	13.5
Crew A	30
Crew B	30
Crew C	30
Crew D	30
Crew E	30
Crew F	30
Bosun	13.5
WC (8)*8	64
2nd Deck	
Day Room	32
Laundry	24
Mess Room	38
Galley	42
WC (1)*8	8
Total= 373m^3	611.5

Per Resolution GTr=GT - (k1*Va)
GTr=19883 - (.2567 * 608.5)
GTr=19727.5



NOTE: In this example a rough estimate of crew accommodation spaces of a typical 500' containerships was assumed using the criteria for qualifying spaces under draft resolution 55/9/3.

Figure 3

Excerpts from sample ship certificates and calculations

ITC69 spaces included in tonnage

IM VERMESSUNGSERGEBNIS ENTHALTENE RÄUME
SPACES INCLUDED IN TONNAGE

BRUTTORAUMZAHL / GROSS TONNAGE

Bezeichnung des Raumes Name of Space		Lage Location Spanten / Frames	Länge Length [m]		Volumen auf Mallkante Moulded Volume [m³]
Unterdeck	Underdeck	------	------		341152,00
Lange Back	Long forecastle	12 - 167 1/2	342,25		68010,53
Auf Hauptdeck	On upperdeck				
Luke	Hatch	8 - 9 1/2	1,25		1,02
Auf langer Back	On long forecastle				
Luke	Hatch	161 - 162 1/2	1,25		1,25
Niedergangshaus BB	Comp.house P	149 - 151	1,60		10,08
Lukentrunk 1F - 4A	Hatch coaming 1F - 4A	109 - 147	115,50		8247,19
Lukendeckel 1F	Hatch cover 1F	143 - 147	12,88		342,30
Lukendeckel 1A	Hatch cover 1A	138 - 142	12,88		407,77
Lukendeckel 2F	Hatch cover 2F	133 - 137	12,88		436,58
Lukendeckel 2A - 4A	Hatch cover 2A - 4A	110 - 132	12,88	(5)	2245,76
Deckshaus	Roundhouse	96 - 109	10,76		1470,63
Lukentrunk 5F - 9A	Hatch coaming 5F - 9A	41 - 96	146,18		10940,87
Lukendeckel 5F - 9A	Hatch cover 5F - 9A	43 - 95	12,88	(10)	4491,51
M-Schacht	Engine casing	31 - 41	8,00		1258,19
Lukentrunk 10F - 10A	Hatch coaming 10F - 10A	12 - 26	41,50		3115,90
Lukendeckel 10F - 10A	Hatch cover 10F - 10A	12 - 26	12,88	(3)	1347,45
Deckshaus auf A-Deck	Roundhouse on A-deck	96 - 109	10,76		1365,03
Deckshaus auf B-Deck	Roundhouse on B-deck	96 - 109	10,76		1331,91
Deckshaus auf C-Deck	Roundhouse on C-deck	96 - 109	10,76		923,41
Deckshaus auf D-Deck	Roundhouse on D-deck	96 - 109	10,76		896,96
Deckshaus auf E-Deck	Roundhouse on E-deck	96 - 109	10,76		819,71
Deckshaus auf F-Deck	Roundhouse on F-deck	96 - 109	10,76		813,07
Deckshaus auf G-Deck	Roundhouse on G-deck	96 - 109	10,76		664,72
Ruderhaus auf Nav.-Deck	Wheelhouse on Nav.-deck	96 - 108	9,96		497,63
M-Schacht auf A-Deck	Engine casing on A-deck	31 - 41	8,00		881,86
M-Schacht auf B-Deck	Engine casing on B-deck	31 - 41	8,00		821,95
Schornstein	Funnel	31 - 41	8,00		1905,66
			Gesamtvolumen Total Volume		**454.400,94**

AUSGESONDERTE RÄUME [Regel 2 (5)]
EXCLUDED SPACES [Regulation 2 (5)]

Räume, die zum Teil ausgesondert sind, sollen in der obenstehenden Aufstellung mit einem Stern (*) gekennzeichnet werden.
An asterisk (*) should be added to those spaces listed above which comprise both enclosed and excluded spaces.

Figure 3 (continued)

Excerpts from sample ship certificates and calculations

Suez Certificate Particulars of Superstructures

FULL DIMENSIONS AND TONNAGE OF SUPERSTRUCTURES, DECKSPACES, EXEMPTED AND OPEN SPACES

Length from inside the stem at half the height of forecastle to the inside of the stem timber at half the height of poop _____ metres.
One-eighth length _____ metres. One-tenth length _____ metres.

PARTICULARS OF SUPERSTRUCTURES AND DECKSPACES							CUBIC METRES	PARTICULARS OF EXEMPTED AND OPEN SPACES							CUBIC METRES
Forecastle 1st tier	fr.12 - fwd							comp. way C	2,30	x	2,00	x	4,22		**19,41**
				0,00				vent. trunk P	3,80	x	2,50	x	4,22		**40,09**
				47,60				vent. trunk S	7,20	x	2,50	x	4,22		**75,96**
		347,40	x	47,60	x	4,22	**65906,10**								**135,46**
				47,60											
				47,60											
				47,60											
less as opposite							**-135,46**								
							65770,64								
Roundhouse on focl. 2nd tier															
	fr.96 - 109	10,19	x	35,78	x	3,75	**1367,24**	comp. way C	2,30	x	2,00	x	3,75		**17,25**
less as opposite							**-62,67**	vent. trunk S	2,06	x	5,88	x	3,75		**45,42**
							1304,57								**62,67**
Roundhouse A-deck 3rd tier															
	fr.96 - 109	10,19	x	35,78	x	3,48	**1268,80**	comp. way C	2,30	x	2,00	x	3,48		**16,01**
less as opposite							**-16,01**								
							1252,79								
Roundhouse B-deck 4th tier															
	fr.96 - 109	10,19	x	35,78	x	3,38	**1232,34**	comp. way C	2,30	x	2,00	x	3,38		**15,55**
less as opposite							**-15,55**								
							1216,79								
Roundhouse C-deck 5th tier															
	fr.96 - 109	10,29	x	24,02	x	3,48	**860,14**	comp. way C	2,30	x	2,00	x	3,48		**16,01**
less as opposite							**-16,01**								
							844,13								
Roundhouse D-deck 6th tier															
	fr.96 - 109	10,29	x	24,02	x	3,48	**860,14**	comp. way C	2,30	x	2,00	x	3,48		**16,01**
less as opposite							**-16,01**								
							844,13								
Roundhouse E-deck 7th tier															
	fr.96 - 109	5,04	x	24,02	x	3,38	**409,19**	comp. way C	2,30	x	2,00	x	3,38		**15,55**
		1,35	x	20,66	x	3,38	**94,27**								
		3,95	x	18,98	x	3,38	**253,40**								
less as opposite							**756,86**								
							-15,55								
							741,31								
Roundhouse F-deck 8th tier															
	fr.96 - 109	5,04	x	24,02	x	3,38	**409,19**	comp. way C	2,30	x	2,00	x	3,38		**15,55**
		1,35	x	20,66	x	3,38	**94,27**								
		3,95	x	18,98	x	3,38	**253,40**								
less as opposite							**756,86**								
							-15,55								
							741,31								
Roundhouse G-deck 9th tier															
	fr.96 - 109	5,04	x	18,98	x	3,38	**323,33**	comp. way C	2,30	x	2,00	x	3,38		**15,55**
		1,35	x	18,18	x	3,38	**82,96**								
		3,95	x	15,62	x	3,38	**208,54**								
less as opposite							**614,83**								
							-15,55								
							599,28								
Wheelhouse nav. deck 10th tier															
	fr.96 - 108	1,66	x	9,10	x	2,82	**42,60**	comp. way C	2,30	x	2,00	x	2,82		**12,97**
		4,50	x	18,28	x	2,82	**231,97**								
		1,25	x	16,62	x	2,82	**58,59**								
		2,50	x	14,35	x	2,82	**101,17**								
		0,36	x	1,80	x	2,82	**1,83**								
		0,36	x	8,26	x	2,82	**8,39**								
							444,54								
less as opposite							**-12,97**								
							431,57								
Roundhouse aft E/C on focl. 2nd tier															
	fr.31 - 41	7,64	x	37,58	x	4,06	**1165,67**	vent. trunk P&S	7,00	x	3,60	x	4,06	x 2	**204,62**
less as opposite							**-471,12**	engine casing	5,70	x	11,20	x	4,06		**259,19**
							694,55	comp. way	2,00	x	0,90	x	4,06		**7,31**
															471,12
Roundhouse aft E/C A-deck 3rd tier															
	fr.31 - 41	7,64	x	22,58	x	4,50	**776,30**	vent. trunk P&S	7,00	x	3,60	x	4,50	x 2	**226,80**
less as opposite							**-522,18**	engine casing	5,70	x	11,20	x	4,50		**287,28**
							254,12	comp. way	2,00	x	0,90	x	4,50		**8,10**
															522,18
Roundhouse aft E/C B-deck 4st tier															
	fr.31 - 41	7,64	x	22,58	x	4,50	**776,30**	vent. trunk P&S	7,00	x	3,60	x	4,50	x 2	**226,80**
less as opposite							**-418,11**	engine casing	5,50	x	4,30	x	4,50		**106,43**
							358,19		5,25	x	3,25	x	4,50		**76,78**
								comp. way	2,00	x	0,90	x	4,50		**8,10**
															418,11
Other exempted spaces															
On maindeck (mooringdeck)								**Comp. house P**	fr.149 - 151	0,85	x	2,20	x	4,22	**7,89**
Comp. house C	fr.11 - 13	1,60	x	5,00	x	2,40	**19,20**								
								On E/C B-deck 4th tier							
On long Forecastle								**Funnel**	fr.31 - 40 1/2	8,00	x	9,50	x	18,00	**1321,56**
Comp. hatch C	fr.161 - 162	0,85	x	2,20	x	4,22	**7,89**			7,70	x	9,20			

Figure 3 (continued)

Excerpts from sample ship certificates and calculations

Suez Certificate Deductions from Gross Tonnage

DEDUCTIONS FROM GROSS TONNAGE

												CUBIC METRES
1. Crew accommodations:												
Crew (5th tier)		45,31	cbm,	Bosun (6th tier)		54,47	cbm,	Cooks (7th tier)	55,06	cbm, (2nd tier)		cbm,
	45,31	44,97	cbm,	Bosun's washr		9,38	cbm,	Cook washr	9,38	cbm, Hospital	63,06	cbm,
	44,97	44,97	cbm,				cbm,			cbm, Hospital washr	10,69	cbm,
(6th tier)	39,75	39,75	cbm,	E.R. Hands			cbm,	Stewards (6th tier)	39,75	cbm,		cbm,
	39,75		cbm,	(5th tier)	45,31	44,97	cbm,	Stewards' washr	9,38	cbm, Med locker		cbm,
E/C (2nd tier)	29,07	35,57	cbm,		55,19	57,03	cbm,			cbm,		cbm,
			cbm,				cbm,	Mess man (6th tier)	40,29	cbm, Crew's pantry		cbm,
Passageways(2nd tier)		7,40	cbm,	Fitter (6th tier)		56,16	cbm,	Mess man washr	9,38	cbm,		cbm,
Passageways(2nd tier)		80,22	cbm,	Fitters washr		9,38	cbm,			cbm, (2nd tier)		cbm,
Staircase (2nd tier)		10,05	cbm,				cbm,			cbm, Safery locker	39,38	cbm,
(4th tier)			cbm,	Pass.w. (5th tier)		119,08	cbm,	Passageways (6th tier)	110,75	cbm,		cbm,
Seamen's messr		166,48	cbm,	Staircase(5th tier)		8,35	cbm,	Staircase (6th tier)	8,11	cbm, (5th tier)		cbm,
Seamen's pantry		32,86	cbm,				cbm,			cbm, Drying room	17,82	cbm,
Seamen's washr			cbm,	E/C (2nd tier)			cbm,			cbm,		cbm,
(5th tier)	9,66	9,66	cbm,	Duty messr		74,95	cbm,	TV room (4th tier)	89,74	cbm,		cbm,
	9,66	9,66	cbm,	Lobby		13,85	cbm,			cbm, (3rd tier)		cbm,
	9,66		cbm,				cbm,			cbm, Linen locker	20,85	cbm,
(6th tier)	9,38	9,38	cbm,	E.R. Hands' washr			cbm,	Change room(2nd tier)	78,44	cbm,		cbm,
	9,38		cbm,	(5th tier)	9,66	9,66	cbm,			cbm, (2nd tier)		cbm,
E/C (2nd tier)	9,21	9,97	cbm,		9,66	9,66	cbm,	Change room(3rd tier)	31,88	cbm, Electr.room	30,33	cbm,
											TOTAL	2053,04
2. Officer's accommodations:												
(8th tier)			cbm,	(9th tier)			cbm,	Electr (7th tier)	114,95	cbm, Oilskin locker		cbm,
Ch. Offr's bedr		38,55	cbm,	Ch.Engr's bedr		49,89	cbm,	Electr washr	9,38	cbm,		cbm,
Ch. Offr's dayr		78,20	cbm,	Ch.Engr's dayr		90,79	cbm,			cbm, Overall locker		cbm,
Ch. Offr's washr		9,38	cbm,	Ch. Engr's washr		9,38	cbm,			cbm,		cbm,
			cbm,				cbm,	2nd Electr (7th tier)	55,63	cbm, Linen store		cbm,
2nd Offr (8th tier)		55,06	cbm,	(8th tier)			cbm,	2nd Electr washr	9,38	cbm,		cbm,
DOW (8th tier)		55,63	cbm,	2nd Engr		114,95	cbm,			cbm,		cbm,
Spare offr (7th tier)		55,63	cbm,	EOW		55,06	cbm,			cbm, Communication	85,45	cbm,
			cbm,				cbm,			cbm, center (4th tier)		cbm,
Passageways (4th tier)		126,56	cbm,	4th Engr (7th tier)		55,06	cbm,	Swimmingp (3rd tier)	109,38	cbm, (4th tier)		cbm,
Staircase (4th tier)		8,11	cbm,				cbm,	Sportroom (3rd tier)	98,53	cbm, Safety locker	3,99	cbm,
			cbm,	Staircase (7th tier)		8,11	cbm,			cbm,		cbm,
			cbm,				cbm,	Passageways (9th tier)	89,82	cbm,		cbm,
			cbm,	Pass.w. (8th tier)		100,85	cbm,	Staircase (9th tier)	16,92	cbm,		cbm,
Offr's messr (4th tier)		369,13	cbm,	Staircase(8th tier)		8,11	cbm,	Staircase (9th tier)	8,09	cbm,		cbm,
			cbm,				cbm,			cbm, (10th tier)		cbm,
			cbm,				cbm,			cbm, Nav locker	17,95	cbm,
Offr's pantry (4th tier)		40,31	cbm,	Elect locker (9th tier)		39,21	cbm,			cbm,		cbm,
			cbm,				cbm,	(3rd tier)		cbm,		cbm,
			cbm,				cbm,	Conf. room	81,30	cbm, (3rd tier)		cbm,
Offr's washr			cbm,	Engr's washr			cbm,	Ship & engr's office	138,98	cbm, Passageways	102,70	cbm,
(7th tier)		9,38	cbm,	(7th tier)		9,38	cbm,	Capt.&Ch.engr's office	130,29	cbm, Passageways	39,04	cbm,
(8th tier)	9,38	9,38	cbm,	(8th tier)	9,38	9,38	cbm,			cbm, Staircase	9,74	cbm,
			cbm,				cbm,			cbm,		cbm,
											TOTAL	2545,77
3. Master's accommodations:			(9th tier)									
Bedroom		49,89	cbm,	Dayroom		92,43	cbm,	Bath	9,38	cbm,		cbm,
Passageways			cbm,				cbm,	W.C.		cbm,		cbm,
											TOTAL	151,70
4. Galleys, etc, for exclusive use of officers and crew:												
Galley (4th tier)								Fire ext plant (on floor)				
0,70	x	7,39	x	3,38	=	17,48	cbm,	1,50	x	1,50	x 3,20 =	7,20 cbm,
2,51	x	8,36	x	3,38	=	70,92	cbm,	Fire control station (E/C 2nd tier)				
1,17	x	6,87	x	3,38	=	27,17		2,97	x	2,32	x 4,06 =	27,98 cbm,
Seamen's W.C.							cbm,	CO_2 (2nd tier)				
1,66	x	1,80	x	3,48	= (3rd tier)	10,40	cbm,	1,84	x	20,40	x 3,75 =	140,76 cbm,
2,04	x	1,70	x	3,38	= (4th tier)	11,72	cbm,	2,70	x	26,08	x 3,75 =	264,06 cbm,
1,70	x	1,68	x	3,38	= (4th tier)	9,65	cbm,	2,48	x	10,32	x 3,75 =	95,98 cbm,
2,16	x	1,36	x	2,82	= (10th tier)	8,28	cbm,	3,10	x	6,25	x 3,75 =	72,66 cbm,
E.R. Hands' W.C.								Offrs' W.C. (10th tier)				
	x		x		=		cbm,	2,16	x	1,36	x 2,82 =	8,28 cbm,
	x		x		=		cbm,	Engrs' W.C.				
Refr machinery (on partial deck)									x		x =	cbm,
4,10	x	7,40	x	2,44	=	74,03	cbm,		x		x =	cbm,
	x		x		=		cbm,	Jr.Offrs' W.C.				
Sanitary exhaust fan roomr (6th tier)									x		x =	cbm,
2,34	x	1,92	x	3,38	=	15,19	cbm,	Laundry machinery (5th tier)				
A/C (6th tier)								3,85	x	4,08	x 3,48 =	54,66 cbm,
6,51	x	8,25	x	3,38	=	181,53	cbm,	Offr's laundry machinery (6th tier)				
	x		x		=		cbm,	2,20	x	3,68	x 3,38 =	27,36 cbm,
											TOTAL	1125,32
5. Closed-in spaces above the uppermost deck used in working the ship:												
Wheel house (10th tier)			cbm,	Anchor gear			cbm,	Conv. room		cbm, EL.switch		cbm,
Chart house		378,87	cbm,	Steering gear			cbm,			cbm,		cbm,
Radio house			cbm,	Lamp room			cbm,	(2nd tier)		cbm, (E/C 2nd tier)		cbm,
Lookout houses			cbm,	Battery room (9th tier)		43,40	cbm,	Emergency gen.	162,25	cbm, Bottlestore	12,66	cbm,
Gyro compass			cbm,	Search light space			cbm,			cbm,		cbm,
Radar			cbm,	Chain locker		100,82	cbm,	Bunker station		cbm,		cbm,
											TOTAL	597,18
											TOTAL	6473,01
											TOTAL DEDUCTIONS PERMISSIBLE	20.449,82

Figure 3 (continued)

Excerpts from sample ship certificate and calculations

Suez underdeck and forecastle tonnage calculations

Surveyor:

SUEZ Calculation

Name of ship: **vessel name** IMO-No.:

Date: 05/14/2012
BISS-No.:
Page: 5

Name of space	I. UNDERDECK					n = 12							
Section No.	1	2	3	4	5	6	7	8	9	10	11	12	13
Location (Frm No.) [1] [mm]	5250 v 20	10162 v 18	15024 v 16	2486 v 15	7398 v 13	12310 v 11	17222 v 9	4634 v 8	9546 v 6	14458 v 4	1870 v 3	6782 v 1	11700 v -1
Frame height [2] [mm]	300 - 400	300 - 400	300 - 400	300 - 400	250 - 500	250 - 500	250 - 500	250 - 500	250 - 550	250 - 550	300 - 425	300 - 425	300
Side ceiling													
Depth of space on MS (D)	8.81	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	22.95	23.17	10.63
Camber [3]	0.00	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Bottom ceiling													
Calc. depth Dc [m]	8.81	23.49	23.49	23.49	23.49	23.49	23.49	23.49	23.49	23.49	22.81	23.03	10.49
Dist. of breadth (b=Dc/n) [4]	1.468	3.915	3.915	3.915	3.915	3.915	3.915	3.915	3.915	3.915	3.801	3.838	1.748
Breadth: 1 Multipl.:	0.00	39.35	47.60	47.60	47.60	47.60	47.60	47.60	47.60	47.60	47.60	47.60	47.60
2 4	3.82	23.32	41.90	47.60	47.70	47.70	47.70	47.70	47.70	47.70	47.60	47.60	47.60
3 2	4.93	14.98	36.20	46.73	47.40	47.40	47.40	47.40	47.40	47.40	47.60	47.17	47.60
4 4	5.12	11.39	31.08	44.36	47.60	47.60	47.60	47.60	47.60	47.60	47.60	36.22	45.65
5 1 | 2 [5]	4.42	10.01	26.04	41.62	46.90	47.40	47.40	47.40	47.40	47.40	47.74	41.35	9.44	40.44
6 4	3.98	7.55	20.45	34.55	43.83	47.20	47.20	47.20	46.58	35.23	22.40	3.65	29.55
7 1	0.00	3.29	15.55	24.51	37.12	45.00	45.80	45.19	39.45	24.02	14.20	4.80	0.00
Sum of products	70.38	261.66	561.35	754.85	829.84	852.20	853.00	852.39	844.17	784.02	710.10	515.50	714.88
1/3 dist. of breadth b	0.489	1.305	1.305	1.305	1.305	1.305	1.305	1.305	1.305	1.305	1.267	1.279	0.583
Area Qx	34.45	341.43	732.48	984.97	1082.82	1111.99	1113.04	1112.24	1101.52	1023.03	899.75	659.48	416.51
Multipl. Cx for Vol.	1	4	2	4	2	4	2	4	2	4	2	4	1

I. Underdeck L = 361.05 m d =L/n= 30.088 m d/3 = 10.029 Σ (Qx * Cx)= 31242.72 m² **V = 313338.47 m³**

1) beginning fwd.
2) existing frames
3) reduct. of D:
camber of beam: -1/3 camber depth
break camber: -k = a (B-b) / 2B *)
gable camber: -1/2 camber depth

4) Numb. of partition: if Dc < 4,88m => n = 4
if Dc > 4,88m => n = 6
5) Multipl. depending on partition

*) to 3) aux. calc. if break camber:
B = 48.20 m
a = 0.30 m
b = 3.00 m
reduction of D = 0.1407 m

Surveyor:

SUEZ Calculation

Name of ship: **vessel name** IMO-No.: **0**

Date: 05/14/2012
BISS-No.: **0**
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Name of space	II. BULBOUS BOW		
Section No.	1	2	3
Location (Frm No.) [1] [mm]	9700 v 20	7475 v 20	5250 v 20
Frame height [2] [mm]	300	300 - 350	300 - 400
Side ceiling			
Depth of space on MS (D)	0.00	7.27	8.81
Camber [3]	0.00	0.00	0.00
Bottom ceiling			
Calc. depth Dc [m]	0.00	7.27	8.81
Dist. of breadth (b=Dc/n) [4]	0.000	1.212	1.468
Breadth: 1 Multipl.:	0.00	0.00	0.00
2 4	0.00	3.33	3.82
3 2	0.00	4.40	4.93
4 4	0.00	4.42	5.12
5 1 | 2 [5]	0.00	3.90	4.42
6 4	0.00	2.62	3.98
7 1	0.00	0.00	0.00
Sum of products	0.00	58.08	70.38
1/3 dist. of breadth b	0.000	0.404	0.489
Area Qx	0.00	23.46	34.45
Multipl. Cx for Vol.	1	4	1

Name of space	Long forecastle						
Section No.	1	2	3	4	5	6	7
III. FORECASTLE Location	7000 v 20	1600 v 17	13700 v 13	8300 v 10	2900 v 7	1500 v 3	9600 v 0
Calc. depth Dc [m]	4.22	4.22	4.22	4.22	4.22	4.22	4.22
n = 6 Breadth	0.00	47.60	47.60	47.60	47.60	47.60	47.60
Area Qx	0.00	200.87	200.87	200.87	200.87	200.87	200.87
IV. POOP Location							
Calc. depth Dc [m]							
n = Breadth							
Area Qx	0.00	0.00	0.00	0.00	0.00	0.00	0.00
V. E.R. Location	Spt 22	~ Spt 20,75	~ Spt 19,6	~ Spt 18,7	~ Spt 17,5	~ Spt 16	Spt 15
Calc. depth Dc [m]	9.69	9.69	9.69	9.69	9.69	9.69	9.69
n = 6 Breadth	12.70	9.79	7.42	5.07	3.12	1.98	1.03
Area Qx	123.06	94.87	71.90	49.13	30.23	19.19	9.98
VI. Location							
Calc. depth Dc [m]							
n = Breadth							
Area Qx	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Multipl. Cx for Vol. n=4	1	4	2	4	1		
Multipl. Cx for Vol. n=6	1	4	2	4	2	4	1

II. Bulbous Bow L = 3.09 m d =L/n= 1.545 m d/3 = 0.515 Σ (Qx * Cx)= 128.28 m² **V = 66.06 m³**
III. Forecastle L = 96.63 m d =L/n= 16.105 m d/3 = 5.368 Σ (Qx * Cx)= 3414.82 m² **V = 18331.91 m³**
IV. Poop L = m d =L/n= 0.000 m d/3 = 0.000 Σ (Qx * Cx)= 0.00 m² **V = 0.00 m³**
V. E.R. L = 19.40 m d =L/n= 3.233 m d/3 = 1.078 Σ (Qx * Cx)= 990.03 m² **V = 1067.03 m³**
VI. L = m d =L/n= 0.000 m d/3 = 0.000 Σ (Qx * Cx)= 0.00 m² **V = 0.00 m³**

Figure 4

Summary table for treatment of accommodation spaces

A		Converter Room	Ded.	Deck Storekeeper(In Tanker)	Inc.
Apprentice	Ded.	Cook Bedroom	Ded.	Dumb Waiter	Ded.
Air Condition Unit Room	Ded.	Cordage (=Rope) Store	Inc.	Dry Provision Store	Inc.
		Chief Officer Bedroom	Ded.	Deck Store Keeper's Room	Inc.
		Chief Officer's Bathroom	Ded.	Duct / Trunk Space	Inc.
				Distilling Apparatus	Ded.
		Chief Officer's Locker	Inc.	Disnfecting Apparatus	Ded.
		Chief Engineer Bedroom	Ded.	Duty Messroom	Ded.
B		Chief Engineer's Bathroom	Ded.		
Baggage Locker	Inc.				
Bath Room	Ded.	Chief Engineer's Locker	Inc.	E	
Battery Room	Ded.	Chief Steward Bedroom	Ded.	Electrician Bedroom	Ded.
Beer Store	Inc.	Cable Duct / Trunk	Inc.	Emergency Generator	Ded.
Bloom Locker	Inc.	Capstan Gear Room	Ded.	Engineer Bedroom	Ded.
Boat Gear Store	Inc.	Cargo Pump Room	Inc.	Engineer's Locker	Inc.
Bosun Store	Inc.	Cargo Winch Cont. Room	Inc.	Engine Casing (above 2nd tier)	Inc.
Boy Bedroom	Ded.	Consulting Room	Ded.	Emergency Compressor	Ded.
Bosun Bedroom	Ded.	Chemist's Laboratory	Ded.	Engine Rm. Ratings	Ded.
Bonded Store	Inc.	Cable Duct / Trunk	Inc.	Engineer Store Keeper Cabin	Ded.
Butcher Shop	Inc.	Changing Room(for Crew)	Ded.	Emergency Fire Pump Room	Ded.
Bar	Ded.	Changing Room(for Officer)	Ded.		
Bakery	Ded.	Changing Room(for Engineer)	Ded.	Electric Equip. Room	Ded.
		Conference Room	Ded.		
		Cargo Control Room	Inc.		
		Clean Gear Lkr	Inc.		
C					
Cadet Bedroom	Ded.				
Captain's Room(Day, Bed, Bath., W.C, Passageway, Office & Etc.)	Ded.				
		D			
		Dentist's cabin	Ded.		
Carpenter Bedroom	Ded.	Domestic Water Pump Room	Ded.		
Carpenter's Shop	Inc.	Direction finder space	Ded.	F	
Canvas Store	Inc.	Day Room (for Crew,Engineer)	Inc.		
Cargo Gear Store	Inc.	Day Room (for Ch.Officer, Ch.Engineer)	Ded.	Fire Extinguishing Installation	Ded.
Cattlemen	Inc.	Dark Room	Ded.	Fire Fighting Personnel	Ded.
		Deck Store	Inc.	Fitter Bedroom	Ded.
Chart House	Ded.	Dining Room (for Crew)	Ded.		
Clean Linen Locker	Inc.	Dining Room (for Officer)	Ded.		
Clerk	Inc.	Dispensary	Ded.		
CO_2 Bottle Room	Ded.	Daily Provision Store	Inc.		
Cofferdam	Inc.	Dirty Linen Locker	Inc.		
Companion (for down)	Inc.	Doctor's Cabin	Ded.		
		Donkey Man's Room	Ded.		
Cook-house	Ded.	Drying Room (for Crew)	Ded.		
Chief Cook Bedroom	Ded.	Drying Room(for Officer, Engineer)	Ded.		

Figure 4 (continued)

Summary table for treatment of accommodation spaces

G		Lavatory (for Officer, Engineer)	Ded.	P	
Galley	Ded.	Life Store	Inc.	Pantry (for Crew)	Ded.
Galley Store	Inc.	Linen Locker	Inc.	Pantry (for Officer, Eng.)	Ded.
Garbage Store	Inc.	Lobby	Inc.	Pantry (for Captain)	Ded.
Greaser Room	Ded.	Lounge	Inc.	Pantry Store	Inc.
Gyro Compass Space	Ded.	Locker	Inc.	Paint Store	Inc.
General Office	Inc.	Library	Ded.	Paint & Lamp Store	Inc.
Garbage Store	Inc.	Look-out Houses	Ded.	Passanger's Accom.	Inc.
Gymnasium	Ded.	Lecture Room	Ded.	Petty Officer Bedroom	Ded.
Suez Crew / Gymnasium	Inc.			Pilot	Inc.
				Pipe Recess	Inc.
				Pipe Duct (In Double Bottom)	Inc.
				Plan Locker	Inc.
		M		Potato Store	Inc.
H		Machinis Bedroom	Ded.	Purser's Rm.	Inc.
Heating Boiler	Ded.	Mail Room	Inc.	Purser's Locker	Inc.
Hospital	Ded.	Messroom (for Crew)	Ded.	Pump Man's Room(in Tanker)	Inc.
Hospital Bathroom	Ded.	Messroom(for Officer, Engineer)	Ded.	Passageway (for Crew)	Ded.
Hospital W.C	Ded.	Mess Man Bedroom	Ded.	Passageway (Officer, Engineer)	Ded.
Hose Store	Inc.	Medician Locker	Ded.	Passageway (for Captain)	Ded.
Hyd. Power Unit Rm.	Inc.	Master's bridge space	Ded.	Provision Store	Inc.
Hobby Room	Ded.			Pump Room	Inc.
I		N			
Infirmary	Ded.	Night Watchmen Accom.	Ded.		
		Nav. Bridge Space	Ded.		
				Q	
				Quartermaster Bedroom	Ded.
J		O			
		Officer's Room	Ded.		
		Oiler's Room	Ded.		
		Office (for Captain)	Ded.	R	
		Office (for Chief Officer)	Ded.	Radio Room	Ded.
		Office (for Chief Engineer)	Ded.	Radio Locker	Ded.
K		Office (except above)	Inc.	Refrigerating Machinery	Ded.
		Operating Room	Ded.	Ref. Prov. Chamber	Inc.
		Owner's Room or Lkr.	Inc.	Recreation Room	Ded.
L		Oil Skin Locker	Ded.	Rice Store	Inc.
Lifebelt Lkr	Ded.	OX. / AC. Room	Inc.	Repair Man Bedroom	Ded.
Lamp Room	Ded.			Rope Store	Inc.
Lamp Room (combined lamp and paint Rm)	Inc.				
Laundry	Ded.			Radar Space	Ded.
Lavatory (for Crew)	Ded.			Refrigerating Engineer	Inc.

Figure 4 (continued)

Summary table for treatment of accommodation spaces

S		W			
Suez Crew	Inc.	Wet Provision Store	Inc.		
Sea Man Bedroom	Ded.	Wine Store	Inc.		
Sealed Locker	Inc.	Wiper Bedroom	Ded.		
Shower Room (for Crew)	Ded.	W.C or Toilet (Public)	Ded.		
Shower Room (for Officer, Engineer)	Ded.	Windlass Gear	Ded.		
Scullery	Ded.	Wheel House	Ded.		
Spare Room	Inc.	Wardrobes Lkr.	Ded.		
Stewards Cabin	Ded.	Washplace (for Crew)	Ded.		
Steward's Locker	Inc.	Washplace (for Officer, Engineer)	Ded.		
Stretcher Locker	Inc.	Wireless Operator Cabin	Ded.		
Switchboard Locker	Ded.	Wireless Telegraphy Space	Ded.		
Smokeroom (for Crew)	Ded.	Water Tender Cabin	Ded.		
Smokeroom (for Officer, Engineer)	Ded.	Winchmen	Inc.		
Sauna	Ded.	Worker Bedroom	Ded.		
		X			
Searchlight Space	Ded.				
Sky Light	Inc.				
Store	Inc.				
Surgery Room	Ded.	Y			
Searchlight Space	Ded.				
Submarine Telephone Space	Ded.				
Sounding Space	Ded.				
Swimming Pool(In Door)	Ded.				
T		Z			
Tally Office	Inc.				
Toilet or W.C (Public)	Ded.				
Transfomer Rm	Ded.				
Treatment Rm.(Dispensary)	Ded.				
U					
V					
Ventilators	Ded.				

Figure 5

Sample MLC 2006 Declaration

Declaration of Maritime Labour Compliance – Part II

Measures adopted to ensure ongoing compliance between inspections

The following list of Seafarer Accommodation spaces has been drawn up by the shipowner, named on the Maritime Labour Certificate, to which this Declaration is attached, to ensure ongoing compliance between inspections:

1. Accommodation and Recreational Facilities (Regulation 3.1)

The following crew accommodation spaces and recreational facilities have been inspected and meet the minimum standards of code A3.1 of the Maritime Labour Convention 2006. Specifically, the volumetric values have been measured and certified that they exceed the minimum requirements in accordance with IMO TM.5/Circ X. These values listed herein were then computed and are to be used as a GT_r parameter, calculated below;

5th Deck	Volume m^3	
Captain Bedroom	28	
C.E. Bedroom	26	
WC (2)*8	16	
4th Deck		
2nd Eng	18	
3rd Officer	18	
2nd Officer	18	
Chief Officer	18	
Dispensary	22.5	
WC (4)*8	32	
3nd Deck		
Cook	13.5	
Crew A	30	
Crew B	30	
Crew C	30	
Crew D	30	
Crew E	30	
Crew F	30	
Bosun	13.5	
WC (8)*8	64	
2nd Deck		
Day Room	32	
Laundry	24	
Mess Room	38	
Galley	42	
WC (1)*8	8	
Total =	**611.5**	**m^3**

Per Resolution GT_r=GT - (k1*Va)
GT_r =19883 - (.2557 * 611.5)
GT_r =19726.6

Figure 6

Identification of crew and trainees for TM circular

Licensed Certificated Mariner Per STCW	**Short Term Seafarer**	**Seafarer By Job Title**
Seaman	Pilots	Scientific Personnel
Tankerman	Fitters	Researchers
Radar Observer	Guest Instructors	Specialist
Master	Entertainers	Offshore Technicians
Officer	Shipyard Personnel	Salvage Personnel
Deck Officer	Repair Technicians	Cable-Laying Personnel
Chief mate		Seismic Personnel
Engineer Officer	**Other Seafarer Jobs**	Divers
Chief Engineer Officer	Inspectors	Pipe-Laying Personnel
Second Engineer Officer	Surveyors	Industrial Personnel
Assistant Engineer Officer	Port Workers	Offshore Workers
Radio Operator	Superintendents	Crane Operating Personnel
	Law Enforcement Seafarers	
	Government Security	
	Military	

Figure 7

Identification of excludable spaces for TM circular

Rooms for Sleeping;	**Rooms for Eating & Drinking;**	**Recreational Rooms;**
Sleeping room	Mess room	Smoking room
Engineer/storekeeper/water tender cabins	Catering facility	TV viewing and radio broadcast room
Master Accommodation	Galley	Library
Stewards cabins	Pantry	Recreational facility
Doctor/Dentist cabin	Refrigerating Machinery	**Offices Rooms;**
Fire fighting personnel	Bakery	Chemist lab
Night Watchmen accommodations	Food lockers	C.E, C.M, Master sitting/day room
Crew accommodation	Cooking area	Office of C.E.
Master's Cabin	Scullery	Radio Room
Hospital & Recovery Rooms;	Bars	
Hospital	**Sanitary Rooms;**	**Crew Use Rooms;**
Consulting Rooms	Sanitary facilities	Laundry facility
Infirmary	Bathroom	Drying Room
Surgery/Operating room	Lavatories	Wardrobe, oilskin & lifebelt lockers
Dispensary	Washing places (W.C.)	Dirty clothes compartments
Facility for sick or injured	Sanitary accommodation	
Cabin for... Who suffer illness	Water Closets	

Figure 8

Comparison of relationship between GT, NT and GT_r

Type of Ship	GT	Total Volume (m3)	Va(m3)*	Rate of Accommodation Volume (%)	NT	GTR**	GTR'***
Tug	249	960	197	20.5	74	198	173
Tug	496	1,872	358	19.1	148	401	354
Tug	497	1,874	315	16.8	149	414	372
Tug	709	2,644	576	21.8	212	555	478
Tug	720	2,684	498	18.6	216	587	520
OSV	998	3,680	731	19.9	299	800	701
Research	3,350	11,900	2,968	24.9	1,005	2,515	2,097
Oil Tanker	3,478	12,344	1,641	13.3	1,546	3,016	2,785
Oil Tanker	3,879	13,724	1,258	9.2	1,796	3,524	3,346
Research	3,991	14,103	3,976	28.2	1,197	2,866	2,304
Research	4,439	15,639	2,904	18.6	1,331	3,615	3,203
Research	4,517	15,907	3,384	21.3	1,355	3,556	3,076
Research	8,672	29,957	3,304	11.0	2,601	7,716	7,238
Oil Tanker	28,085	93,805	3,672	3.9	11,785	26,986	26,436
Oil Tanker	28,747	95,953	4,560	4.8	12,066	27,381	26,698
Passenger	50,142	164,780	21,834	13.3	20,880	43,498	40,176
Bulk	55,327	181,281	3,468	1.9	25,614	54,269	53,740
Research	56,752	185,828	17,958	9.7	17,025	51,268	48,526
Oil Tanker	58,225	190,528	5,634	3.0	31,847	56,504	55,643
PCTC	59,030	193,099	3,675	1.9	19,006	57,907	57,345
PCTC	60,295	197,108	4,943	2.5	18,474	58,783	58,027
Bulk	84,335	273,196	4,163	1.5	56,021	83,050	82,408
Ore Carrier	119,446	383,208	5,054	1.3	42,557	117,871	117,084
Oil Tanker	160,068	509,608	7,650	1.5	95,829	157,666	156,464
Oil Tanker	160,080	509,649	5,613	1.1	103,057	158,317	157,436

*Va:Estimated total volume of all accommodation spaces.
Accommodation spaces include crew rooms, passages, sauna rooms, bath rooms, gymnasium, recreation rooms, laundry rooms, dry rooms, galley, pantry, salons, exchanging rooms for submarine operators, hospitals, libraries and so on.

**GTR: Described in SLF 55/9/3 as follow
GTR = GT − K1 X Va

***GTR': Calculated according to the following formula.
GTR' = GT − 1.5 X (K1 X Va)