INTERNATIONAL MARITIME ORGANIZATION

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SUB-COMMITTEE ON SHIP DESIGN AND EQUIPMENT
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GUIDANCE TO ENSURE CONSISTENT POLICY FOR DETERMINING THE NEED FOR WATERTIGHT DOORS TO REMAIN OPEN DURING NAVIGATION

Comments on document DE 54/4/Rev.1

Submitted by Cruise Lines International Association (CLIA)

SUMMARY

Executive summary:	CLIA notes that IMO is more and more relying on risk assessment for the development of regulations and guidance in the safe design and operation of vessels. CLIA suggests that the floatability assessment requirements contained in the draft guidelines be implemented on a situation-by-situation basis as a result of the risk assessment, rather than requiring this comprehensive assessment regardless of the condition in which the ship is sailing and subject to little or no risk of collision or grounding.
Strategic direction:	2
High-level action:	2.0.1
Planned output:	2.0.1.6
Action to be taken:	Paragraph 10
Related documents:	DE 54/4/Rev.1; DE 53/9, DE 53/9/Corr.1; SLF 52/WP.3, SLF 52/19, section 7; and DE 53/26, section 9

Background

1 Reference is made to annex 1 of document DE 54/4/Rev.1, which describes the Guidance for Administrations to ensure consistent policy for determining the need for watertight doors to remain open during navigation on passenger ships. The importance of watertight doors cannot be disputed.

Discussion

2 Passenger ships are constructed in accordance with SOLAS regulations which address in a deterministic manner both subdivision and stability and, more recently, probability of survival. Neither the deterministic rules nor the probabilistic rules take into account the overlay of an additional deterministic requirement such as the proposed floatability assessment.

.1 Additionally, the standards for construction of watertight doors constructed after February 1992, which comply with SOLAS regulations II-1/15.6.1 to 6.4 (revised SOLAS regulations II-1/13.5.1 to 13.5.3 and 13.6), is well thought out and conceived. To assume that these doors will not close in the event of an emergency, other than when the door is directly involved in the damage scenario, has not been supported by any subsequent serious investigation or risk assessment.

.2 CLIA is of the view that watertight doors should be designed for frequent use. Testing or cycling of these doors on a daily basis, as required by SOLAS chapter II-1, regulation 21.2, is normal to assure their continued proper operation. CLIA members have examined their records of these daily cycling events and have found that of the millions of door cycling events over the years, there have been less than 15 failures affecting door closure.

.3 Thus we are not convinced of the statement that frequent cycling increases the risk of mechanical failure. If this is shown positively to be the case, then the robustness of the door operating systems should be reviewed and that issue addressed directly.

3 Annex 1 to document DE 54/4/Rev.1 describes the Guidance for Administrations to ensure consistent policy for determining the need for watertight doors to remain open during navigation on passenger ships. The importance of watertight doors to ships stability and survivability is clear and ships at risk of collision or grounding should keep all watertight doors closed. Thus, the Guidance calls for a risk assessment of vessel operations to determine when watertight doors should be closed and specifies, in addition, certain circumstances when doors should remain closed.

4 The Guidelines also call for concurrent conduct of a floatability assessment while assuming certain open watertight doors remain open after an incident that initiated flooding. This requirement is for the floatability assessment to be conducted irrespective of risk of collision or risk of grounding. Ships failing the assessment would not be permitted to have the affected watertight doors open irrespective of associated risk. The important factor is the situation in which the ship is sailing and as such, ships in open waters far from the grounding line, in good visibility, with little or no traffic should have zero risk of collision or grounding and thus not be required to keep all watertight doors closed.

5 CLIA believes that there is a valuable function for a floatability assessment in relation to the risk assessment approach undertaken by the DE Sub-Committee. In the event that a ship wants to keep the authorized door(s) open when operating in the waters designated by the Guidelines where the doors should otherwise be closed, or when the risk assessment shows it would otherwise be closed, then the full floatability assessment should be conducted to show that the ship could survive the collision, grounding or other initiating event.

6 It is CLIA's view that the deterministic assessment is relevant only when a WTD door is requested to be kept open when the ship is within the defined areas of risk or those other areas as defined by the risk assessment.

Further discussion

7 CLIA agrees with the categories A, B, C and D with regard to determining the extent to which doors may remain open during navigation. However, the Guidance for determining the need for these doors to remain open should be based on a risk assessment of the operational areas of the vessel during the time the doors are open together with survivability risk and operational justification from the company.

8 Paragraph 3.1 of annex 1 to document DE 54/4/Rev.1 references a casualty investigation in which several compartments of a ship were flooded due to open watertight doors which could not be closed after the damage. Under the proposals in this document and the current method of operation for cruise ships (watertight doors closed in higher risk areas), this ship was clearly not following the proposed requirement to keep watertight doors closed in areas close to the grounding line. This appears to also be true of subsequent casualties in Greece and Antarctica which have been referenced during these discussions. In all these cases, from what we can ascertain, the watertight doors should have remained closed when utilizing these Guidelines.

9 In this regard, CLIA would welcome an analysis as to whether the accidents referred to in the various IMO submissions would have been prevented by adoption of these Guidelines.

Action requested of the Sub-Committee

10 The Sub-Committee is invited to consider this information and decide as appropriate.