



**COUNCIL OF
THE EUROPEAN UNION**

Brussels, 20 February 2006

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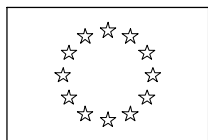
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COVER NOTE

from:	Secretary-General of the European Commission, signed by Mr Jordi AYET PUIGARNAU, Director
date of receipt:	20 February 2006
to:	Mr Javier SOLANA, Secretary-General/High Representative
Subject:	Commission staff working document IMO - European Community submission to be adopted by the Council for the 81st Session of the IMO Maritime Safety Committee (Agenda item 20) meeting in London from 10 to 19 May 2006

Delegations will find attached Commission document SEC(2006) 254.

Encl.: SEC(2006) 254



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 17.2.2006
SEC(2006) 254

COMMISSION STAFF WORKING DOCUMENT

For the Council Shipping Working Party

**IMO - European Community submission to be adopted by the Council for the 81st
Session of the IMO Maritime Safety Committee (Agenda item 20)
meeting in London from 10 to 19 May 2006**

COMMISSION STAFF WORKING DOCUMENT

For the Council Shipping Working Party

IMO - European Community submission to be adopted by the Council for the 81st Session of the IMO Maritime Safety Committee (Agenda item 20) meeting in London from 10 to 19 May 2006

1. INTRODUCTION

- 1.1. Following recent transfer of vessels between Sweden, UK and France, an important safety issue for existing Ro-Ro passenger vessels has come to light. The issue relates to the differing ways in which SOLAS chapter II-1 regulations 10(3), (4) and (5) is being interpreted by different Maritime Administrations.
- 1.2. The loss of the “Estonia” was caused by heavy weather damage to the outer bow door or visor, causing damage to the ramp which in turn was connected to the inner bow door. The damage to the ramp caused the opening of the inner bow door, flooding of the vehicle deck, a rapid and catastrophic loss of stability, the sinking of the ship and the loss of 852 lives.
- 1.3. This problem was addressed in SOLAS by Regulation 10(3), (4) and (5). Regulation 10(3) is worth setting out in detail as follows:

“Where a long forward superstructure is fitted, the forepeak or collision bulkhead on all passenger ships shall be extended weathertight to the next full deck above the bulkhead deck. The extension shall be so arranged as to preclude the possibility of the bow door causing damage to it in the case of damage to, or detachment of, a bow door.”
- 1.4. Problems have arisen due to the different interpretations of the term “extension to the collision bulkhead”. The chapeau to 10(4) states that *“The extension need not be fitted directly above the bulkhead below, provided that all parts of the extension are not located forward of the limit specified in paragraph 1 or 2.”*
- 1.5. Some contracting parties interpret the phrase “all parts” to include any ramp which is attached to the extension. Several flag States require ships which cannot meet the requirements of regulation 10(4) to have ramps separated from the inner bow doors. This is to prevent the ramp from opening the inner bow door in the event of damage.
- 1.6. Other contracting parties do not interpret the regulation in the same way. They consider that “extension” does not cover the whole ramp, but only the part which is weathertight, inasmuch as it has been demonstrated by ramp design rules and, if necessary, strength calculations, that any accident affecting the ship’s shell door(s) or the ramp section stowed horizontally will not damage the extension of the bulkhead door.

- 1.7 As a result, contracting parties are applying different interpretations to SOLAS chapter II-1 regulation 10. In the EU, this causes real problems when vessels of different flags operate in the same area. It also causes similar problems when ships change flag.
- 1.8 Due to the fact that the SOLAS rules related to Ro-Ro bow doors are also part of Directive 98/18/EC (See hereunder) the United Kingdom and France raised the issue at the Committee on Safe Seas (COSS). This one being competent for providing an opinion on specific measures related to Directive 98/18/EC proposed by the Commission. The issue of different interpretations within the Community of SOLAS chapter II-1 regulation 10 was therefore discussed during the COSS meeting held in Brussels on 23 November 2005.

2. COMMUNITY LEGISLATION

- 2.1. Council Directive 98/18/EC of 17 March 1998 on safety rules and standards for passenger ships introduces a uniform level of safety of life and property on new and existing passenger ships and high speed passenger craft, when both categories of ships and craft are engaged on domestic voyages, and lays down procedures for negotiation at international level with a view to a harmonisation of the rules for passenger ships engaged on international voyages. In addition, Annex I to this Directive contains several harmonised interpretations for SOLAS requirements no harmonised interpretations of SOLAS requirements related to the bow doors have, at this stage, been included in paragraph 9 of Part B of Annex I.
- 2.2 Consequently, Commission has no ability neither to interpret or either to modify the technical rules governing bow door, this task pertaining to IMO.
- 2.3 With regard to passenger ships engaged on international voyages, Article 12 of Council Directive 98/18/EC requires the Community, inter alia, to submit a request on the basis of the harmonised interpretations laid down in Annex I to the IMO to establish harmonised interpretations regarding the regulations in SOLAS Chapters II-1, II-2 and III containing issues left to the discretion of the Administration and to adopt amendments to the latter accordingly. However, due to a lack of harmonised interpretations related to the bow doors in Annex I the Commission had no legal basis for adopting a harmonised interpretation through the comitology procedure.
- 2.4 Due to the importance of the issue and the provision of Community legislation both the Member States and the Commission were of the opinion that the matter should be urgently brought to the attention of the IMO.
- 2.5 In order to resolve the issue and to prepare a Community position on a possible harmonised interpretation of the relevant SOLAS requirements, the Commission asked the European Maritime Safety Agency (EMSA) to convene a technical expert meeting.
- 2.6 In addition, the link between Directive 98/18/EC and Directive 99/35/EC should be considered from an operational point of view.

3. VIEWS OF THE GROUP OF EXPERTS OF THE MEMBER STATES

- 3.1 The EMSA workshop took place on 13th December 2005. Experts from Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Malta, Poland, Portugal, Spain and Sweden attended.
- 3.2 The views of the experts can be summarised as follows: The bow doors on a Ro-Ro ferry are critical items of equipment. The consequences of their failure have been tragically demonstrated in the past. Serious failures can still occur. Bow doors must be treated with the greatest of respect, and any problems associated with their structure or operating equipment must be dealt with urgently.
- 3.3 Member States' technical experts concluded that the most appropriate way of proceeding is two separate submissions to the IMO in view of discussions on the occasion of the next meeting of the Maritime Safety Committee, i.e. (a) a proposal for a Unified Interpretation of the bow doors SOLAS requirements and (b) a proposal for amending SOLAS regulation II-1/12. The Unified Interpretation should be applied until the new SOLAS provision would enter into force. These proposals are reproduced in Annex I and II.
- 3.4 With regard to the content of the proposed interpretation the experts stressed that whilst there are arguments for and against both interpretations (see points 1.5 and 1.6 above), and both interpretations are in line with SOLAS provisions, flag States should adopt the more stringent interpretation for new ships. To which extent this harmonised interpretation should also apply to existing ships has been left to the discretion of the MSC.

4. THE COMMISSION'S VIEW

- 4.1 The Commission concurs with the opinion of the experts that the most appropriate solution is to forward two submissions of less than 6 pages to the IMO Maritime Safety Committee for its 81st session to be held from 10 to 19 May 2006.
- 4.2 The Commission further, to a large extent, shares the view of the experts. However, it is of the opinion that the scope of the Unified Interpretation i.e., to apply the Unified Interpretation solely to new ships or to all ships, cannot be left to the sole discretion of the IMO Member States. Therefore, it has included an alternative solution in paragraph 12 of Annex I. Contrary to the experts the Commission proposes, for safety reasons, to apply the Unified Interpretations to all ships, leaving only the decision about the timeframe for such application, to the IMO/MSC. The relevant sentence of paragraph 12 has been put between brackets in Annex I. If the Council shares the view of the Commission, these brackets will be deleted.
- 4.3 The Commission expresses its confidence in the ability for the MSC to agree at its next session on a Unified Interpretation, as well as on a SOLAS amendment. Once the MSC will have agreed on a Unified Interpretation, it is the Commission's intention to propose through the comitology procedure to, include this interpretation in Directive 99/35/EC through the committee procedure. In those circumstances this Unified interpretation will become mandatory for all Ro-Ro sailing on regular service to and from European ports, providing the highest possible level of safety to the passengers using these ferries.

5. ACTION REQUESTED

The Council's Shipping Party is invited to agree through a Community position on:

- a) the deletion of the brackets in paragraph 12 of Annex I;
- b) on the content of two submissions (annexes I and II) of this Staff Working Document;
- c) the transmission of both document to the IMO before 7 March by the Presidency of the Council.

ANNEX I

INTERNATIONAL MARITIME
ORGANIZATION



E

MARINE SAFETY COMMITTEE.

MSC81/20/..

81st session

-- January 2006

Agenda item 20

Original: ENGLISH

IMPLEMENTATION OF INSTRUMENTS AND RELATED MATTERS

Need for uniform interpretation of SOLAS requirements pertaining to Bow doors and the extension of the collision bulkhead as per Reg. II-1 10(3), (4) and (5)

Submitted by Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Malta, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom, and by the European Commission

SUMMARY

<i>Executive summary:</i>	This paper comments on difficulties arising from the differing interpretations by Flag States of SOLAS II-1, Regulations 10(3), 10(4) and 10(5) and puts forward proposals for a uniform interpretation.
<i>Action to be taken:</i>	Paragraph 13
<i>Related documents:</i>	SOLAS amendments proposed in paper [MSC81/20/XXX]

1. Difficulties have arisen due to differences in interpretation of SOLAS regulation II-1/10, specifically the amendments following the “Estonia” casualty (Regulation 10(3), (4) and (5)). An extract of regulation 10 is contained in annex 1.

The Problem

2. Contracting Parties are applying different interpretations to regulation 10. This causes real problems when vessels of different flags operate in the same area. It also causes similar problems when ships change flag.

3. A recent case has occurred where a ship transferred from one flag State to another, both contracting parties to the Convention. The ramp on that ship did not comply

with the receiving flag state's interpretation of the requirements of Regulation 10, but this was not identified by the receiving flag State. The new port state (which applies the same interpretation of Regulation 10) has refused to permit operation of this vessel until the ramp has been modified. The modification has been completed.

4. Other ships have been identified with similar arrangements under the flag of another contracting party to SOLAS, operating in the same region. The port State believes it is its duty to prevent operation of these vessels, but the flag State involved has a difference of opinion because it applies a different interpretation to Regulation 10.

5. An interpretation is therefore required which can be uniformly applied by all flag States.

Background

6. The loss of the "Estonia" was caused by heavy weather damage to the outer bow door or visor, causing damage to the ramp which in turn was connected to the inner bow door. The damage to the ramp caused the opening of the inner bow door, flooding of the vehicle deck, a rapid and catastrophic loss of stability, the sinking of the ship and the loss of 852 lives.

7. This problem was addressed in SOLAS by Regulation 10(3), (4) and (5). Regulation 10(3) is worth setting out in detail as follows:

"Where a long forward superstructure is fitted, the forepeak or collision bulkhead on all passenger ships shall be extended weathertight to the next full deck above the bulkhead deck. The extension shall be so arranged as to preclude the possibility of the bow door causing damage to it in the case of damage to, or detachment of, a bow door."

Different interpretations of Regulation 10

8. Problems arise due to the different interpretations of the term "extension to the collision bulkhead". The chapeau to 10(4) states that *"The extension need not be fitted directly above the bulkhead below, provided that all parts of the extension are not located forward of the limit specified in paragraph 1 or 2."*

9. Some contracting parties interpret the phrase "*all parts*" to include any ramp which is attached to the extension. This interpretation is derived from the remainder of regulation 10(4), because it expressly refers to the ramp, allowing a limited exception for existing ships (i.e. pre 1997 ships) from the requirement in the chapeau. Several flag States require ships which cannot meet the requirements of regulation 10(4) to have ramps separated from the inner bow doors. This is to prevent the ramp from opening the inner bow door in the event of damage. To illustrate this interpretation a drawing is attached at Annex 2.

10. Other contracting parties do not interpret the regulation in the same way. They consider that "extension" does not cover the whole ramp, but only the part which is

weathertight and is generally positioned vertically in the closed position, inasmuch as it has been demonstrated by ramp design rules and, if necessary, strength calculations, that any accident affecting the ship's shell door(s) or the ramp section stowed horizontally will not damage the extension of the bulkhead door. In these conditions, the arrangement fulfils the terms of Rule 10(3). To illustrate this interpretation a drawing is attached at Annex 3.

11. Examples can be given of ships which have been modified to disconnect ramps from inner bow doors without interfering with the loading or unloading of vehicles. For relatively little cost, this modification significantly reduces the risk of a similar accident occurring as occurred to the "Estonia" and the balance between cost and benefit is right.

Proposal

12. Whilst there are arguments for and against both interpretations, and both interpretations are in line with SOLAS provisions, it is proposed that flag States adopt the more stringent interpretation which is detailed in paragraph 10 above for new ships [and for all existing ships, within a timeframe to be defined by the MSC.].

Action Requested:

13. The Committee is requested to consider the above proposal for a unified interpretation and decide as appropriate.

Annex 1: Extract from Regulation 10 - Peak and machinery space bulkheads, shaft tunnels, etc., in passenger ships

1. A forepeak or collision bulkhead shall be fitted which shall be watertight up to the bulkhead deck. This bulkhead shall be located at a distance from the forward perpendicular of not less than 5% of the length of the ship and not more than 3 m plus 5% of the length of the ship.

2. Where any part of the ship below the waterline extends forward of the forward perpendicular, e.g. a bulbous bow, the distances stipulated in paragraph 1 shall be measured from a point either:

.1 at the mid-length of such extension; or

.2 at a distance 1.5% of the length of the ship forward of the forward perpendicular; or

.3 at a distance 3 m forward of the forward perpendicular;

whichever gives the smallest measurement.

3. Where a long forward superstructure is fitted, the forepeak or collision bulkhead on all passenger ships shall be extended weathertight to the next full deck above the bulkhead deck. The extension shall be so arranged as to preclude the possibility of the bow door causing damage to it in the case of damage to, or detachment of, a bow door.

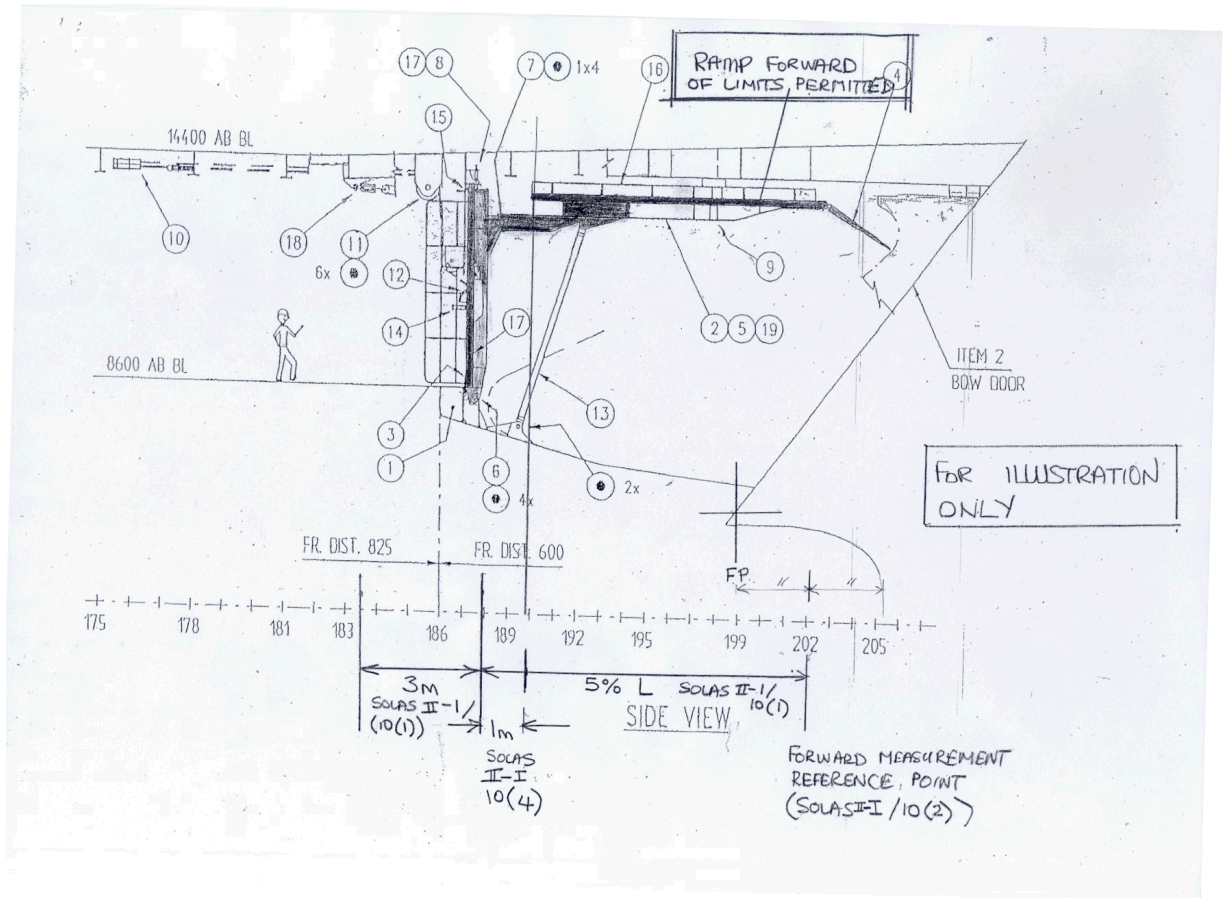
4. The extension required in paragraph 3 need not be fitted directly above the bulkhead below, provided that all parts of the extension are not located forward of the forward limit specified in paragraph 1 or paragraph 2. However, in ships constructed before 1 July 1997:

.1 where a sloping ramp forms part of the extension, the part of the extension, which is more than 2.3 m above the bulkhead deck, may extend no more than 1m forward of the forward limits specified in paragraph 1 or paragraph 2; and

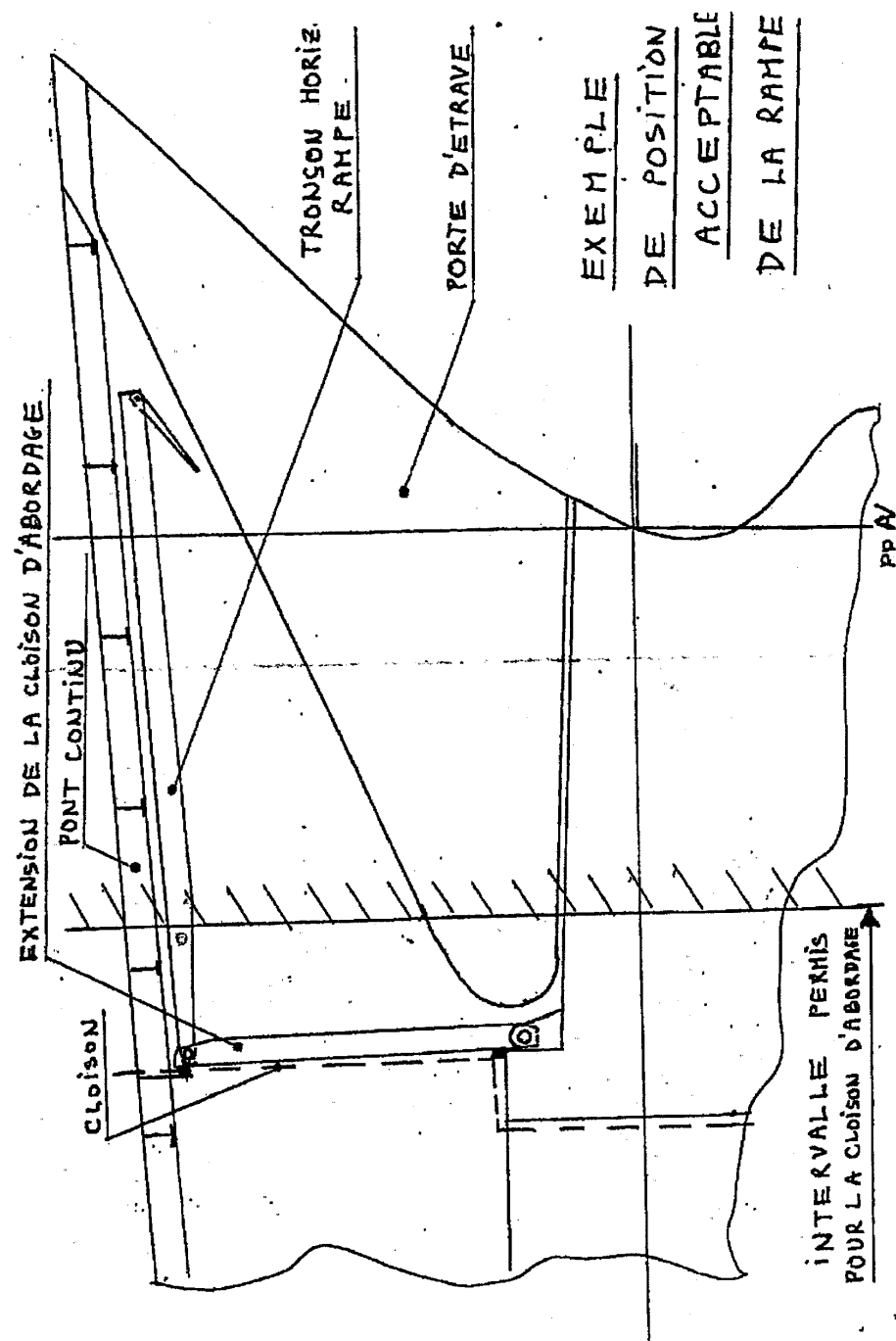
.2 where the existing ramp does not comply with the requirements for acceptance as an extension to the collision bulkhead and the position of the ramp prevents the sitting of such extension within the limits specified in paragraph 1 or paragraph 2, the extension may be sited within a limited distance aft of the aft limit specified in paragraph 1 or paragraph 2. The limited distance aft should be no more than is necessary to ensure non-interference with the ramp. The extension to the collision bulkhead shall open forward and comply with the requirements of paragraph 3 and shall be so arranged as to preclude the possibility of the ramp causing damage to it in the case of damage to, or detachment of, the ramp.

5. Ramps not meeting the above requirements shall be disregarded as an extension of the collision bulkhead.

Annex 2: Example Drawing of Bow Door Arrangements



Annex 3: Example Drawing of Bow Door Arrangements



ANNEX II

INTERNATIONAL MARITIME
ORGANIZATION



E

MARINE SAFETY COMMITTEE.

MSC81/20/..

81st session

-- January 2006

Agenda item 20

Original: ENGLISH

IMPLEMENTATION OF INSTRUMENTS AND RELATED MATTERS

Need for amendment of SOLAS requirements pertaining to Bow doors and the extension of the collision bulkhead as per Reg. II-1 12

Submitted by Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Malta, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom, and by the European Commission

SUMMARY

Executive summary:

This paper suggests amendments to SOLAS Regulation 12 to facilitate uniform interpretation of the bow doors and the extension to the collision bulkhead.

Action to be taken:

Paragraph 3

Related documents:

SOLAS amendments proposed in paper [MSC81/20/XXX]

1. Difficulties have arisen due to differences in interpretation of SOLAS regulation II-1/10 in relation to the uniform application of requirements for bow doors and the extension to the collision bulkhead. Amendments were introduced following the “Estonia” disaster and these have not been applied in a consistent manner.

2. A separate paper has been introduced to provide a uniform interpretation of the existing SOLAS regulation II-1/10 [ref. MSC 81/20/XXX], but a similar requirement for uniform interpretation has been identified in the amendment regulation, SOLAS II-1 regulation 12, which is due to enter force on 1 January 2009. Annex 1 proposes a suitable amendment for the new replacement regulation to align with the proposal for uniform interpretation of the existing regulation.

3. The Committee is requested to consider the proposed amendment and take action as necessary.

Proposed amendment to Regulation II-1/12

*(in Italics below)***Regulation 12****Peak and machinery space bulkheads, shaft tunnels, etc.**

1 A collision bulkhead shall be fitted which shall be watertight up to the bulkhead deck. This bulkhead shall be located at a distance from the forward perpendicular of not less than $0.05L$ or 10 m whichever is the less, and, except as may be permitted by the Administration, not more than $0.08L$ or $0.05L + 3$ m, whichever is the greater.

2. Where any part of the ship below the waterline extends forward of the forward perpendicular, e.g. a bulbous bow, the distances stipulated in paragraph 1 shall be measured from a point either:

- .1 at the mid-length of such extension; or
- .2 at a distance 1.5% of the length of the ship forward of the forward perpendicular; or
- .3 at a distance 3 m forward of the forward perpendicular;

whichever gives the smallest measurement.

3. The bulkhead may have steps or recesses provided they are within the limits prescribed in paragraph 1 or 2.

4 No doors, manholes, access openings, ventilation ducts or any other openings shall be fitted in the collision bulkhead below the bulkhead deck.

5.1 Except as provided in paragraph 5.2, the collision bulkhead may be pierced below the bulkhead deck by not more than one pipe for dealing with fluid in the forepeak tank, provided that the pipe is fitted with a screw-down valve capable of being operated from above the bulkhead deck, the valve chest being secured inside the forepeak to the collision bulkhead. The Administration may, however, authorise the fitting of this valve on the after side of the collision bulkhead provided that the valve is readily accessible under all service conditions and the space in which it is located is not a cargo space. All valves shall be of steel, bronze or other approved ductile material. Valves of ordinary cast iron or similar material are not acceptable.

5.2 If the forepeak is divided to hold two different kinds of liquids the Administration may allow the collision bulkhead to be pierced below the bulkhead by two pipes, each of which is fitted as required by paragraph 5.1, provided the Administration is satisfied that there is no practical alternative to the fitting of such a second pipe and that, having regard to the additional subdivision provided in the forepeak, the safety of the ship is maintained.

6. Where a long forward superstructure is fitted the collision bulkhead shall be extended weathertight to the deck next above the bulkhead deck. The extension need not be fitted directly above the bulkhead below provided *that all parts of the extension, including any*

part of the ramp attached to it are ~~it is~~ located within the limits prescribed in paragraph 1 or paragraph 2 with the exception permitted by paragraph 7 and that the part of the deck which forms the step is made effectively weathertight. The extension shall be so arranged as to preclude the possibility of the bow door *or ramp, where fitted*, causing damage to it in the case of damage to, or detachment of a bow door *or any part of the ramp*.

7. Where bow doors are fitted and a sloping loading ramp forms part of the extension of the collision bulkhead above the bulkhead deck the ramp shall be weathertight over its complete length. In cargo ships the part of the ramp which is more than 2.3 m above the bulkhead deck may extend forward of the limit specified in paragraph 1 or 2. Ramps not meeting the above requirements shall be disregarded as an extension of the collision bulkhead.

[In passenger ships constructed before [1 July 1997], if any part of the ramp is attached to the extension, it shall not extend forward more than 1 m forward of the forward limit specified in paragraph 1 or 2.]

8. The number of openings in the extension of the collision bulkhead above the freeboard deck shall be restricted to the minimum compatible with the design and normal operation of the ship. All such openings shall be capable of being closed weathertight.

9. Bulkheads shall be fitted separating the machinery space from cargo and accommodation spaces forward and aft and made watertight up to the bulkhead deck. In passenger ships an afterpeak bulkhead shall also be fitted and made watertight up to the bulkhead deck. The afterpeak bulkhead may, however, be stepped below the bulkhead deck, provided the degree of safety of the ship as regards subdivision is not thereby diminished.

10. In all cases stern tubes shall be enclosed in watertight spaces of moderate volume. In passenger ships the stern gland shall be situated in a watertight shaft tunnel or other watertight spaces separate from the stern tube compartment and of such volume that, if flooded by leakage through the stern gland, the bulkhead deck will not be immersed. In cargo ships other measures to minimize the danger of water penetrating into the ship in case of damage to stern tube arrangements may be taken at the discretion of the Administration.