

SUB-COMMITTEE ON SHIP SYSTEMS AND
EQUIPMENT
11th session
Agenda item 10

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**UNIFIED INTERPRETATION OF PROVISIONS OF IMO SAFETY,
SECURITY, ENVIRONMENT, FACILITATION, LIABILITY AND
COMPENSATION-RELATED CONVENTIONS**

**IACS unified interpretation SC 211/Rev.1 of SOLAS regulations II-2/3.6 and II-2/4.5.1.1
relating to the protection of fuel oil tanks and to the designation of fore peak spaces**

Submitted by IACS

SUMMARY

Executive summary: This document presents Revision 1 of IACS UI SC 211, which provides unified interpretations of SOLAS regulations II-2/3.6 and II-2/4.5.1.1 to facilitate uniform consideration of spaces in the forecabin area protected from cargo tanks.

*Strategic direction,
if applicable:* 7

Output: 7.1

Action to be taken: Paragraph 10

Related document: FP 51/9/3

Introduction

1 In the context of aligning IACS unified requirement F44 with IEC 60092, IACS reviewed its unified interpretation UI SC 211 on the protection of fuel oil tanks and designation of fore peak spaces; and prepared a new revision.

Background

2 The categorization of spaces as cargo area for oil tankers is specified in SOLAS regulations II-2/3.6 and II-2/4.5.1.1, and for chemical tankers in paragraphs 1.3.6 and 3.2.1 of the IBC Code, which read, as follows:

.1 SOLAS regulation II-2/3.6:

"Cargo area is that part of the ship that contains cargo holds, cargo tanks, slop tanks and cargo pump-rooms including pump-rooms, cofferdams, ballast and void spaces adjacent to cargo tanks and also deck areas throughout the entire length and breadth of the part of the ship over the above-mentioned spaces.";

.2 SOLAS regulation II-2/4.5.1.1:

"Cargo pump-rooms, cargo tanks, slop tanks and cofferdams shall be positioned forward of machinery spaces. However, oil fuel bunker tanks need not be forward of machinery spaces. Cargo tanks and slop tanks shall be isolated from machinery spaces by cofferdams, cargo pump-rooms, oil bunker tanks or ballast tanks. Pump-rooms containing pumps and their accessories for ballasting those spaces situated adjacent to cargo tanks and slop tanks and pumps for oil fuel transfer, shall be considered as equivalent to a cargo pump-room within the context of this regulation provided that such pump-rooms have the same safety standard as that required for cargo pump-rooms. Pump-rooms intended solely for ballast or oil fuel transfer, however, need not comply with the requirements of regulation 10.9. The lower portion of the pump-room may be recessed into machinery spaces of category A to accommodate pumps, provided that the deck head of the recess is in general not more than one third of the moulded depth above the keel, except that in the case of ships of not more than 25,000 tonnes deadweight, where it can be demonstrated that for reasons of access and satisfactory piping arrangements this is impracticable, the Administration may permit a recess in excess of such height, but not exceeding one half of the moulded depth above the keel.";

.3 paragraph 1.3.6 of the IBC Code:

"Cargo area is that part of the ship that contains cargo tanks, slop tanks, cargo pump-rooms including pump rooms, cofferdams, ballast or void spaces adjacent to cargo tanks or slop tanks and also deck areas throughout the entire length and breadth of the part of the ship over the above-mentioned spaces. Where independent tanks are installed in hold spaces, cofferdams, ballast or void spaces at the after end of the aftermost hold space or at the forward end of the forward-most hold space are excluded from the cargo area."; and

.4 paragraph 3.2.1 of the IBC Code:

"No accommodation or service spaces or control stations shall be located within the cargo area except over a cargo pump-room recess or pump-room recess that complies with SOLAS regulation II-2/4.5.1 to 4.5.2.4 and no cargo or slop tank shall be at the forward end of any accommodation."

Discussion

3 IACS UI SC 211 was developed in 2006 for oil tankers to clarify arrangements that safely provide for the segregation which is required by SOLAS regulation II-2/4.5.1.1 and the protection of fuel oil tanks as contained in MARPOL regulation I/12A, as set out in resolution MEPC.141(54), while maintaining compliance with the single failure principle in MSC/Circ.1120 (MSC/Circ.1120/Corr.1) in that in the event of a crack occurring at the cruciform, leaked cargo oil is retained in the void space and does not leak into the engine-room (FP 51/9/3).

4 IACS UI SC 268 (MSC.1/Circ.1527) specifies the term "adjacent" used in the regulations cited above, as spaces located adjacent to cargo tanks which form a cruciform (corner to corner) contact with the cargo tanks.

5 The 2006 version of IACS UI SC 211 addressed oil tankers, in particular the spaces located behind the cargo area, and did not reflect that most ship designs also have void spaces and other stores forward of the cargo area.

6 IACS noticed that current multiple designs, both oil tankers and chemical/product tankers, are being built with forepeak tanks and/or void space being located adjacent to the cargo tanks. This implies that the bosun's store (and the paint store and other stores) are located within the cargo area as per SOLAS regulations II-2/3.6 and II-2/4.5.1.1 and paragraphs 1.3.6 and 3.2.1 of the IBC Code.

7 Neither SOLAS nor the IBC Code mention bosun's stores or paint stores in the cargo area and whether these belong to the cargo area. Therefore, IACS has adopted a revision of UI SC 211 to address this ambiguity. Revision 1 of UI SC 211 clarifies that:

- .1 a non-hazardous space in the forecastle area which is protected from cargo tanks by a cofferdam, void space or other compartments is not part of the cargo area; and
- .2 a compartment located above the cofferdam, void space or other compartment protecting the non-hazardous spaces will be defined as part of the cargo area.

8 This interpretation takes into account that a forepeak tank, when ballasted with the system serving other ballast tanks within the cargo area, is considered as a hazardous zone, but not as a cargo area when protected by a cofferdam, void space or other compartments.

Proposal

9 IACS UI SC 211/Rev.1, as set out in the annex, will be applied by all IACS members for ships contracted for construction on or after 1 January 2026 when acting as recognized organizations authorized by flag Administrations to act on their behalf, unless advised otherwise in writing.

Action requested of the Sub-Committee

10 The Sub-Committee is invited to note the foregoing, the unified interpretation in the annex and to take action, as appropriate.

ANNEX

IACS UNIFIED INTERPRETATION SC 211/REV.1 OF SOLAS REGULATIONS II-2/3.6 AND II-2/4.5.1.1 AND PARAGRAPHS 1.3.6 AND 3.2.1 OF THE IBC CODE REGARDING PROTECTION OF FUEL OIL TANKS AND DESIGNATION OF FORE PEAK SPACES

SOLAS regulation II-2/3.6 reads as follows:

"Cargo area is that part of the ship that contains cargo holds, cargo tanks, slop tanks and cargo pump-rooms including pump-rooms, cofferdams, ballast and void spaces adjacent to cargo tanks and also deck areas throughout the entire length and breadth of the part of the ship over the above-mentioned spaces."

SOLAS regulation II-2/4.5.1.1 reads as follows:

"Cargo pump-rooms, cargo tanks, slop tanks and cofferdams shall be positioned forward of machinery spaces. However, oil fuel bunker tanks need not be forward of machinery spaces. Cargo tanks and slop tanks shall be isolated from machinery spaces by cofferdams, cargo pump-rooms, oil bunker tanks or ballast tanks. Pump-rooms containing pumps and their accessories for ballasting those spaces situated adjacent to cargo tanks and slop tanks and pumps for oil fuel transfer, shall be considered as equivalent to a cargo pump-room within the context of this regulation provided that such pump rooms have the same safety standard as that required for cargo pump-rooms. Pump-rooms intended solely for ballast or oil fuel transfer, however, need not comply with the requirements of regulation 10.9. The lower portion of the pump-room may be recessed into machinery spaces of category A to accommodate pumps, provided that the deck head of the recess is in general not more than one third of the moulded depth above the keel, except that in the case of ships of not more than 25,000 tonnes deadweight, where it can be demonstrated that for reasons of access and satisfactory piping arrangements this is impracticable, the Administration may permit a recess in excess of such height, but not exceeding one half of the moulded depth above the keel."

Paragraph 1.3.6 of the IBC Code reads as follows:

"Cargo area is that part of the ship that contains cargo tanks, slop tanks, cargo pump rooms including pump rooms, cofferdams, ballast or void spaces adjacent to cargo tanks or slop tanks and also deck areas throughout the entire length and breadth of the part of the ship over the above-mentioned spaces. Where independent tanks are installed in hold spaces, cofferdams, ballast or void spaces at the after end of the aftermost hold space or at the forward end of the forward-most hold space are excluded from the cargo area."

Paragraph 3.2.1 of the IBC Code reads as follows:

"No accommodation or service spaces or control stations shall be located within the cargo area except over a cargo pump-room recess or pump-room recess that complies with SOLAS regulation II-2/4.5.1 to 4.5.2.4 and no cargo or slop tank shall be at the forward end of any accommodation."

Interpretation 1

Void space or ballast water tank protecting fuel oil tank as shown in figure 1 of the annex, need not be considered as "cargo area" defined in SOLAS regulation II-2/3.6 even though they have a cruciform contact with the cargo oil tank or slop tank.

The void space protecting fuel oil tank is not considered as a cofferdam specified in SOLAS regulation II-2/4.5.1.1. There is no objection to the locations of the void space shown in figure 1, even though they have a cruciform contact with the slop tank.

Interpretation 2

Regarding spaces referred to in SOLAS regulation II-2/3.6 and paragraph 1.3.6 of the IBC Code, the following interpretation is provided:

1. a non-hazardous space in the forecastle area which is protected from the cargo tanks by cofferdam, void space or other compartments, will not be defined as part of cargo area;
2. compartments located above the cofferdam, void or other compartments protecting the non-hazardous spaces will be defined as part of the cargo area.

Interpretation 2 is illustrated in figure 2 of the annex.

ANNEX

Figure 1

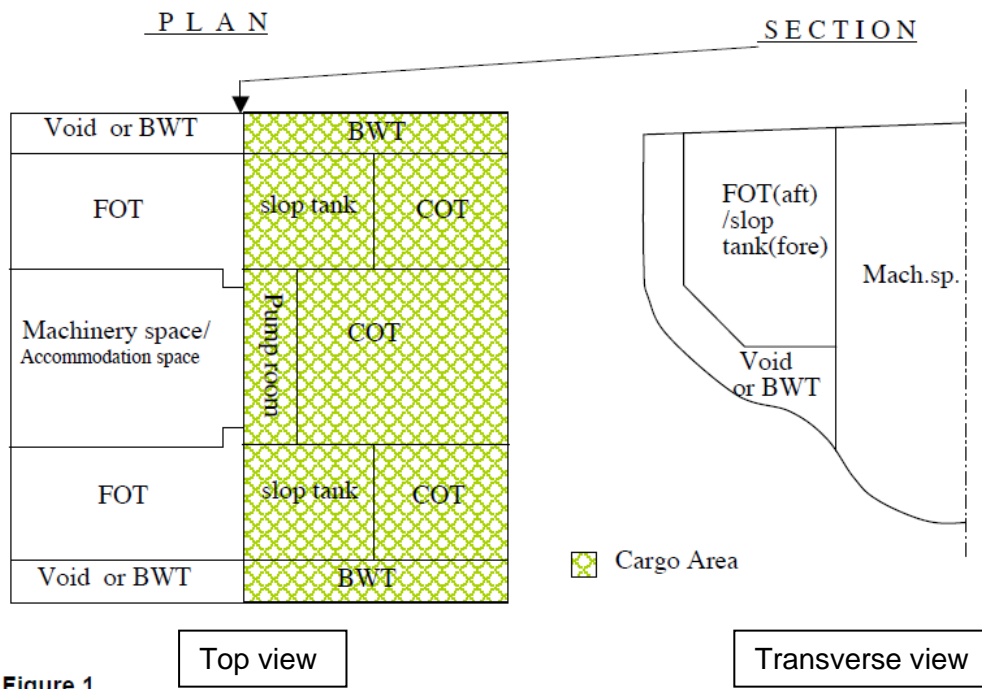


Figure 1

BWT ballast water tank

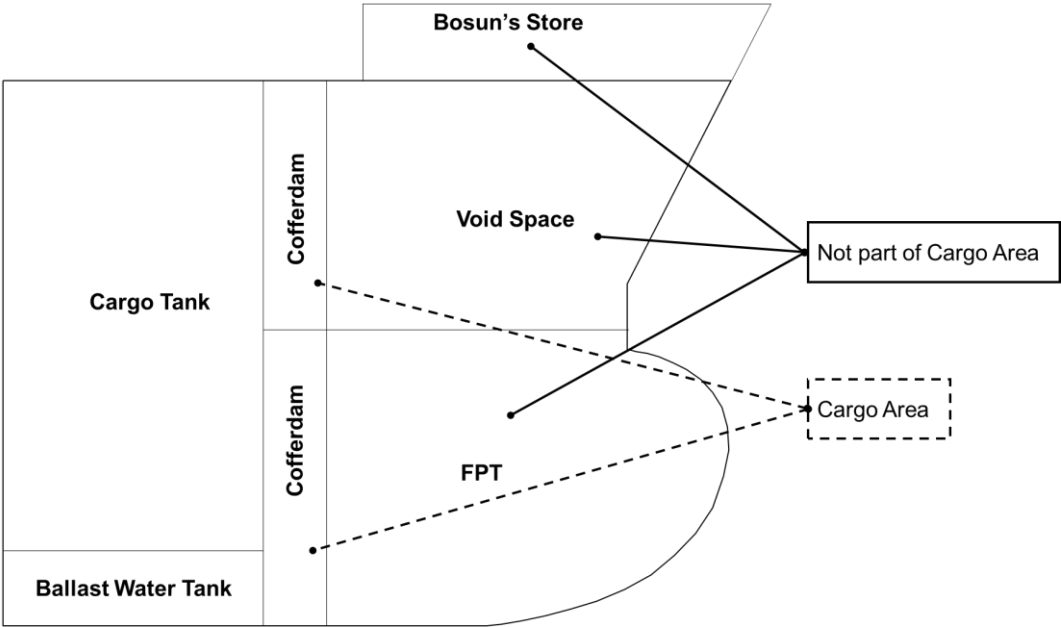
FOT Fuel oil tank

COT Cargo oil tank

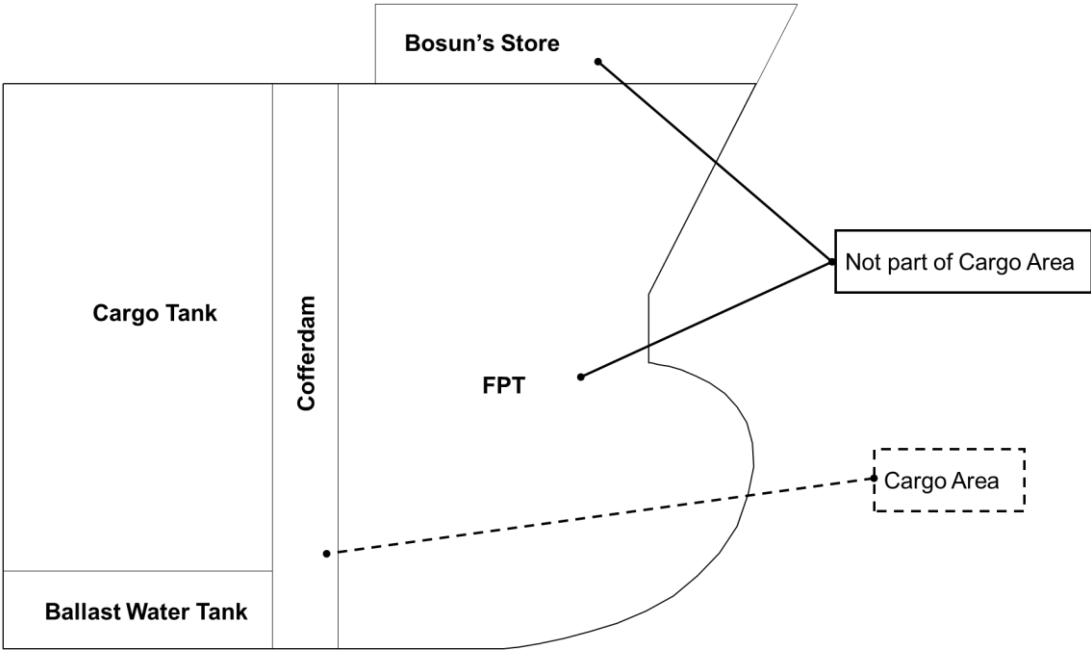
Figure 2

Arrangements shown in samples 1, 2, 5 and 6 are applicable to both oil tankers and chemical tankers.

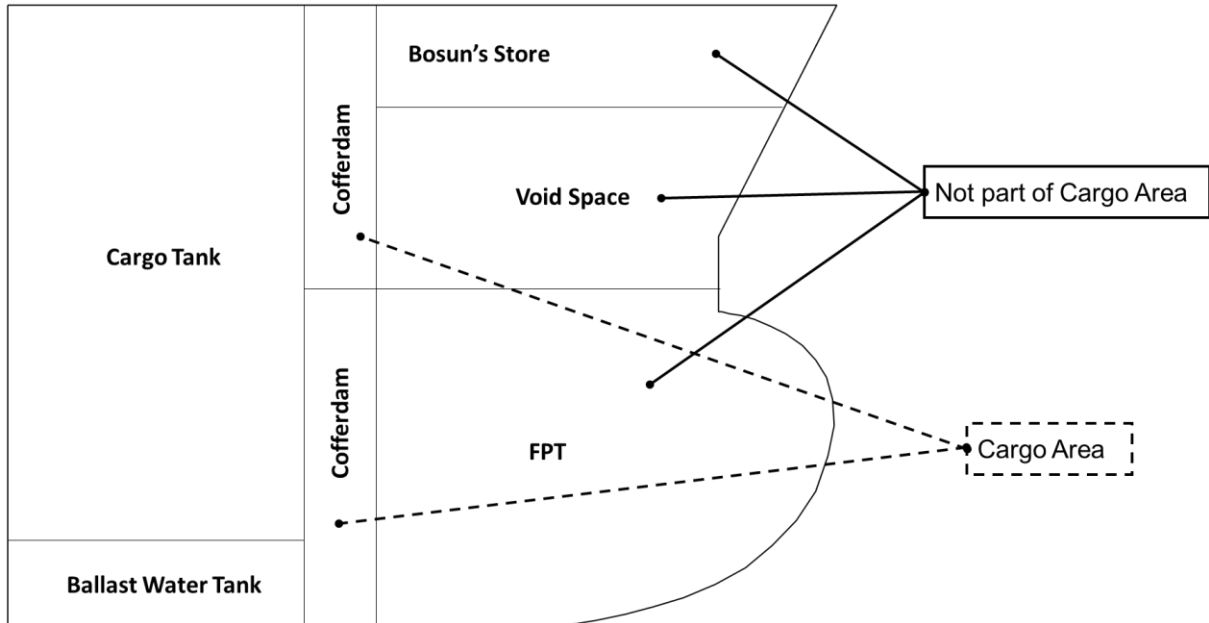
[Sample 1]



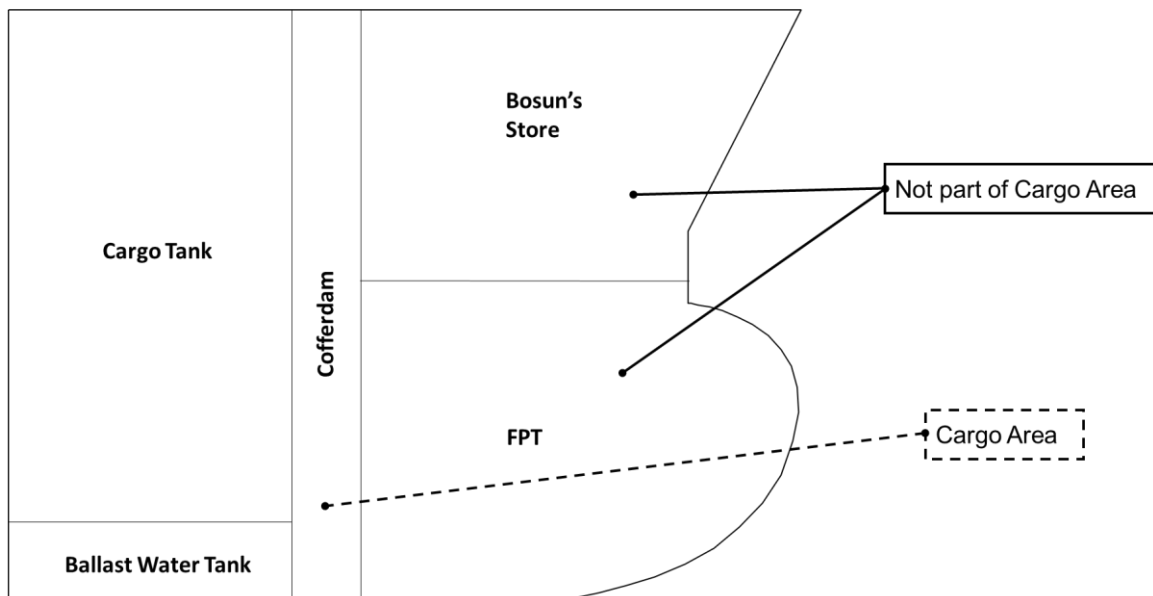
[Sample 2]



[Sample 5]

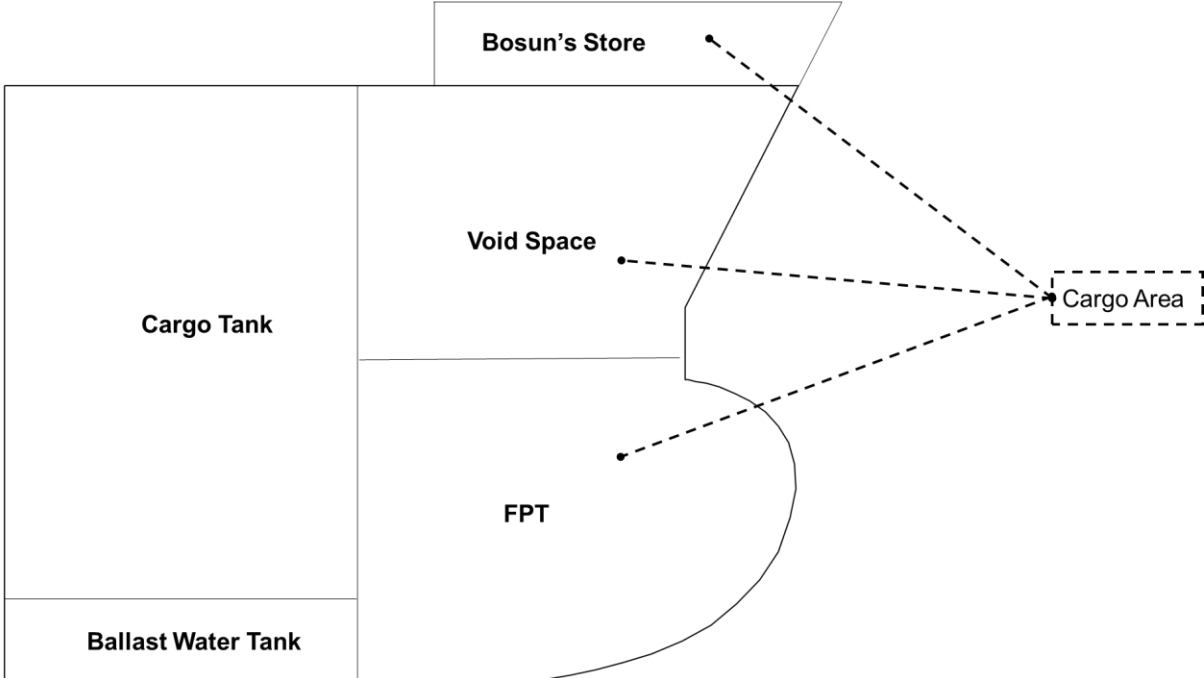


[Sample 6]



Arrangements shown in samples 3 and 4 are applicable to oil tankers only.

[Sample 3]



[Sample 4]

