

## PSC Related Circular

# No.PSC 27/2021

Dated: 17.08.2021

Subject:

### Paris MoU and Tokyo MoU CIC on Stability in General



The CIC on Stability in General by the Paris and Tokyo MoUs will be carried out from **1 September to 30 November 2021**. The Black Sea, Indian Ocean, Mediterranean, Riyadh and Vina del Mar MoUs will join this initiative.

The CIC on Stability in General **is initiated due to several serious incidents due to incorrect ship loading conditions** or **missing** intact stability documentation on board.

It is expected that **focus will be set on the stability booklet** and loading computer and Port State Control Officer (PSCO) will evaluate whether the **Master** and responsible **officers** are **well trained** and **familiarized** with the systems provided on board.

**The CIC will be included in the routine PSC inspections** in the period from September to November 2021. The focus on the special topic is carried out on a common additional checklist for every PSCO.

PSCO will mainly relate to operational issues and the familiarization of these by the Master and officers.

During the inspection, **PSCOs** might **ask to show and explain the stability calculation** for the current voyage and if approved conditions of stability are available.

The purpose of the campaign on ship's stability in general is:

- to **confirm** that the ship's crew are familiar with assessing the actual stability condition on completion of cargo operations before departure of the ship and on all stages of the voyage;
- to **create awareness** among the ship's crew and owners about the importance of calculating the actual stability condition of the ship on completion of cargo operations and before departure of the ship;
- to **verify** that the ship complies with intact stability requirements (and damage stability requirements, if applicable) under the relevant IMO instruments;

You may find attached also ICS document providing information and guidance to assist shipowners and operators with preparations for Port State Control (PSC) inspections involving the Concentrated Inspection Campaign (CIC) on "Stability in General".

**Attachment:**  
[International Chamber of Shipping  
Information and guidance to assist with preparations  
for the Concentrated Inspection Campaign \(CIC\) on  
"Stability in General"](#)



## Information and guidance to assist with preparations for the Concentrated Inspection Campaign (CIC) on “Stability in General”

### Introduction

This document provides information and guidance to assist shipowners and operators with preparations for Port State Control (PSC) inspections involving the Concentrated Inspection Campaign (CIC) on “Stability in General”.

The Member Authorities of the Paris MoU and Tokyo MoU will conduct a Concentrated Inspection Campaign (CIC) on “Stability in General” from 1 September to 30 November 2021.

According to the Paris MoU and Tokyo MoU, the purpose of the CIC is to:

- *confirm that the ship’s crew are familiar with assessing the actual stability condition on completion of cargo operations before departure of the ship and on all stages of the voyage;*
- *create awareness among the ship’s crew and owners about the importance of calculating the actual stability condition of the ship on completion of cargo operations and before departure of the ship; and*
- *verify that the ship complies with intact stability requirements (and damage stability requirements, if applicable) under the relevant IMO instruments.*

CICs are an annual initiative of the PSC MoUs which are designed to focus PSC inspections during a three-month period on specific topics where either high levels of deficiencies have been encountered in recent years, or where new international regulations have entered into force. In this instance the CIC was instigated in view of several recent stability related incidents, the primary contributing factor in all these incidents was concluded as being “a lack of assessment that the ship had adequate stability upon completion of cargo operations and before departure of the ship”.

The results of the CIC are expected to be released by the Paris MoU and Tokyo MoU in mid-2022, and will be formally reported to the IMO Sub-Committee on Implementation of IMO Instruments for information.

## Standard questionnaire for the CIC

A standard questionnaire has been jointly developed by the Paris MoU and Tokyo MoU for use by Port State Control Officers (PSCOs) during the CIC. It was issued by means of press releases dated 23 July 2021, with a copy reproduced on page 3 of this document.

Specific information and guidance is provided for each question on the standard questionnaire. It should not be seen in any way as superseding or replacing any relevant information or guidance provided by flag States or other advice on compliance with statutory requirements or preparations for PSC inspections.

All the questions require a “Yes”, “No” or “Not Applicable” answer to be recorded by the PSCO. Where a “No” is recorded, a relevant deficiency will be recorded in the inspection report. If a “NO” is recorded for questions marked with an “\*”, the ship may be considered for detention. It is also to be noted that questions 7 and 8 are for information purposes only and it is expected that no deficiency should be assigned if the either question is answered “No” .

Other PSC MoUs have indicated that they may also conduct CICs on “Stability in General”. It is anticipated they will use the same, or a similar, questionnaire.

### Applicability of the CIC

The CIC will be conducted on ships eligible or due for PSC inspection in ports of the Member Authorities of the Paris MoU and Tokyo MoU during the period of the CIC. Ships should be targeted for inspection in accordance with the normal methods used by national PSC authorities. A ship should be subject to only one inspection involving the standard questionnaire during the period of the CIC.

A PSC inspection involving the standard questionnaire is likely to be combined with a normal PSC inspection of a ship. As such, the specific focus of a CIC does not preclude that the PSC inspection will also include verification for compliance with other applicable international requirements.

### Relevant IMO instruments and Relevant IMO guidance

See information provided with guidance related to each individual CIC question.

#### **Disclaimer**

*This document is intended as voluntary advice which shipowners and operators are not in any way obligated to accept, although they are invited to consider its value in the context of preparations for the Concentrated Inspection Campaign (CIC) on “Stability in General” being held from 1 September to 30 November 2021.*

*While the information in this document has been developed using the best information sources currently available, it is intended purely as information and guidance to be used at the user’s own risk. No responsibility is accepted by ICS or by any person, firm, corporation or organisation who or which has been in any way concerned with the furnishing or supply of information, compilation, publication or authorised translation of this information, for the accuracy of the information herein, or for any omission or for any consequences whatsoever resulting directly or indirectly from using the information contained herein even if caused by want of due diligence or reasonable care.*

## Questionnaire for the 2020 CIC on Ship's Stability in general

CIC on Ship's Stability in general			
<b>Inspection Authority</b>			
<b>Ship name</b>		<b>IMO Number</b>	
<b>Date of Inspection</b>		<b>Inspection Port</b>	

**QUESTIONS 1 - 6 ANSWERED WITH A "NO" MUST BE ACCOMPANIED BY A RELEVANT DEFICIENCY ON THE REPORT OF INSPECTION**

No.	Questions	Yes	No	N/A	Detention
1*	Has the ship been provided with approved stability information which can be understood and easily used by the Master and loading officer?				
2*	Is the data used in the stability check for departure complete and correct?				
3*	Does the ship comply with the stability criteria as applicable to the ship type?				
4*	Is there evidence to show that the Master or responsible officer can determine the stability of the ship under varying conditions of service using the approved stability information provided on board?				
5*	If the ship is provided with a Stability Instrument, is it approved by the Administration?				
6	If the ship is provided with a Stability Instrument, does the type of stability software in use meet the requirements for the relevant ship type?				

No.	Questions	Yes	No	N/A
7 Note 1	[Is there evidence on board to show that the master/loading officer confirms that the "calculated" displacement and trim corresponds with the "observed" draughts?]			
8 Note 1	[If the ship is provided with a Stability Instrument, has the accuracy of the stability instrument been verified periodically by applying at least one approved test condition?]			

**If "No" is ticked for questions marked with an asterisk "\*", the ship may be considered for detention**

Note 1: Questions 7 and 8 are for information purposes only.

## Question 1

**“Q1\*- Has the ship been provided with approved and correct stability information which can be understood and easily used by the Master and loading officer?”**

This question addresses the availability and accuracy of approved stability information onboard the ship and the ability of the Master and loading officer to use it. The International Convention on Load Lines, 1966, as modified by the 1988 Protocol relating thereto, as amended (ICLL) Regulation 10.1) and 2) states that the Master shall be supplied with sufficient information, in an approved form, giving guidance for the stability of the ship under varying conditions of service and to avoid the creation of unacceptable stresses. The PSCO will ensure that the approved Stability Booklet and strength data, if needed, is on board and where required, an approved Loading Manual is on board.

**If a “No” is recorded by the PSCO for this question, the ship may be considered for detention.**

### Preparations

Ships should ensure that:

- They can demonstrate they have been provided with stability information approved by the Administration or Recognised Organisation acting on behalf of the Administration;
- The approved stability information can be understood by the Master and loading officer; and
- They can show whether the approved stability information has been amended to consider any alterations to the ship’s structure.

### Inspection

Ships should be prepared to show the PSCO:

- The stability information approved by the Administration or Recognised Organisation acting on behalf of the Administration;
- The Master and loading officer understand and can correctly use the approved stability information provided; and
- Where the approved stability information has been amended, and re-approved, to consider any relevant alterations to the ship’s structure that could affect the ships stability.

### Relevant references in IMO instruments and IMO guidance

- ICLL 1988 Protocol / ANNEX I / Reg. 10 (for ships constructed on or after 21/07/1968 and before 01/01/2005)
- ICLL 2003 Amend / ANNEX I / Reg. 10 (for ships constructed on or after 01/01/2005)

- SOLAS 1960 / Chapter II / Reg. 19 (for ships constructed before 25-5-1980)
- SOLAS 1974 Convention / Chapter II-1 / Reg. 19 (for ships constructed On or after 25-5-1980 Before 1-9-1984)
- SOLAS 1981 Amend / Chapter II-1 / Reg. 22 (for ships constructed On or after 1-9-1984 Before 29-4-1990)
- SOLAS 1988 Amend / Chapter II-1 / Reg. 22 (for ships constructed On or after 29-4-1990 Before 1-2-1992)
- SOLAS 1989/1990 Amend / Chapter II-1 / Reg. 25-8 (for ships constructed On or after 1-2-1992 Before 1-1-2009)
- SOLAS 2006 Amend / Chapter II-1 / Reg. 5-1 (for ships constructed On or after 1-1-2009 Before 1-7-2020)
- SOLAS 2017 Amendment (98th) / Chapter II-1 / Reg. 5-1 (for ships constructed on or after 1-7-2020)
- SOLAS 2008 Amend, Ch.II-1, Reg.5-1 (S 74 Ch.II-1, Reg.19 / S 81 Ch.II-1, Reg.22)
- SOLAS Ch.VI 1991/1992, Reg.9, Grain code Part A, 6
- HSC Code 2000 Section 2.7.3

## Question 2

### **“Q2\*- Is the data used in the stability check for departure complete and correct?”**

This question addresses the ships loading condition and specifically the accuracy of the data used in the stability calculation.

**If a “No” is recorded by the PSCO for this question, the ship may be considered for detention.**

#### **Preparations**

Ships should ensure that:

- With respect to the ships loading condition that all the data input is accurate and correct.

#### **Inspection**

Ships should be prepared to show the PSCO:

- That the correct light weight, including the position (LCG, VCG, TCG) of the ship has been applied in the stability calculation;
- That the correct density of liquids such as fuels (MGO/HFO), ballast water, fresh water has been used in the stability calculation;
- That the correct local water density in which the ship is sitting has been used for the stability calculation (dock water, sea water, fresh water);
- That correct cargo information has been used for the stability calculation including:
  - Verified Gross Mass (Containers)
  - Stowage Factor and Gross mass (Bulk and general cargo)
  - Specific gravity/density (Liquid cargo)
  - Number of vehicles, weight, VCG/LCG of freight vehicles (Ro-Ro cargo)
  - Number of passengers (Passenger ships)
- That correct tank content volumes have been used for the stability calculation (cargo and ballast);
- That the VCG/LCG have been applied correctly in the stability calculation;
- That the correction for trim has been applied for obtaining ballast and fuel tank volumes;
- That the effect of free surface of partially filled tanks has been considered in the stability calculation;
- That the effect of the adverse environmental conditions such as ship’s deck and superstructure icing has been considered in the stability calculation.
- That if the vessel has undergone alterations such as the installation of additional equipment or structures (e.g. scrubbers, cranes etc) which materially affects the lightweight data for the ship then the amended lightweight data (reflecting the alterations) is contained in approved stability information provided to the master. (reference SOLAS Ch.II-1 Reg.5.4 and ILLC Annex I Reg.10.4)

## Relevant references in IMO instruments and IMO guidance

- ICLL 2008 Amend / Chapter I / Reg. 1 SOLAS 2014 Amend, Chapter VI, Reg 2;
- 2008 IS CODE 2018 Amend / PART A / Chapter 2 (for ships constructed on or after 1.7.2010);
- SOLAS 2008 Amend, Chapter II-1, Reg.20.1;
- SOLAS 2006 Amend / Chapter II-1 / Reg. 20 (passenger ships constructed on or after 1.1.2009 before 1.7.2020);
- SOLAS 2017 Amendment (98th) / Chapter II-1 / Reg. 20 (passenger and cargo ships constructed on or after 1.7.2020);
- SOLAS 1988 Amend / Chapter II-1 / Reg. 8.7.4 (for passenger ship constructed On or after 29-4-1990 Before 1-10-1994 – retroactive requirement);
- SOLAS 1991/1992 Amend / Chapter II-1 / Reg. 8.7.4 (for passenger ship constructed On or after 1-10-1994 Before 1-7-1997);
- SOLAS 1994/1995 Amend / Chapter II-1 / Reg. 8.7.4 (for passenger ships constructed On or after 1-7-1997 Before 1-7-1998);
- SOLAS 1996-1998 Amend / Chapter II-1 / Reg. 8.7.4 (for passenger ships constructed On or after 1-7-1998 Before 1-1-2009);
- GRAIN Code/Annex/Part A/7;
- SOLAS 1960/Chapter II/Reg. 19 (for ships constructed before 25-5-1980);
- SOLAS 1974 Convention/Chapter II-1/Reg. 19 (for ships constructed On or after 25-5-1980 Before 1-9-1984);
- SOLAS 1981 Amend /Chapter II-1/Reg. 22 (for ships constructed On or after 1-9-1984 Before 29-4-1990); and
- SOLAS 1988 Amend / Chapter II-1 / Reg. 22 (for ships constructed On or after 29-4-1990 Before 1-2-1992)

## Question 3

### **“Q3\*- Does the ship comply with the stability criteria as applicable to the ship type?”**

This question addresses the ships compliance with the applicable stability criteria. Checks for compliance will be made for the current and past loading conditions.

**If a “No” is recorded by the PSCO for this question, the ship may be considered for detention.**

#### **Preparations**

Ships should ensure that:

- It can be demonstrated that the current and past loading conditions of the ships complied with the applicable stability criteria;
- Have available examples of previous loading conditions similar to the current loading condition to show the PSCO for comparison purposes between stability calculations;
- On ships which are required to comply with damage stability requirements, use of the damage stability booklet/ stability instrument incorporating the damage stability criteria can be demonstrated.

#### **Inspection**

Ships should be prepared to show the PSCO:

- Evidence of loading condition compliance with stability criteria for recent loading conditions and/or the current/planned loading conditions;
- Previous records of loading conditions similar to the current loading condition for comparison purposes between stability calculations; and
- On ships which are required to comply with damage stability requirements, use of the damage stability booklet/ stability instrument incorporating the damage stability criteria.

#### **Notes**

All passenger ships regardless of size and all cargo ships having a length of 24m and upwards shall comply with the intact stability criteria and those ships constructed on or after 01-July-2010 shall comply with the requirements of Part A of the 2008 Intact Stability Code.

Where a ship must comply with both intact and damage stability criteria it is essential that loading conditions are verified for compliance with both sets of criteria and not just those for intact stability. The following types of ships are required to comply with damage stability requirements:

- Passenger ships
- Cargo ships constructed on or after 01-Jan-2009 of 80m and more in length

- Cargo ships constructed on or after 01-Jul-1998 of 80m and more in length
- Cargo ships constructed on or after 01-Feb-1992 of 100m and more in length
- Oil tankers, chemical tankers and Gas carriers

### **Relevant references in IMO instruments and IMO guidance**

#### Intact stability:

- ICLL Chapter I, Reg 1/ANNEX I/ Reg.27;
- SOLAS 2008 Amend, Ch.II-1, Reg.5-1 (S 74 Ch.II-1, Reg.19 / S 81 Ch.II-1, Reg.22);
- SOLAS Ch.VI, Reg.9, Grain code Part A 7;
- SOLAS 1988 Amend / Chapter II-1 / Reg. 22 (For ships constructed On or after 29-4-1990 Before 1-1-2009 – retroactive requirement);
- SOLAS 2006 Amend / Chapter II-1 / Reg. 5 (for ships constructed On or after 1-1-2009 Before 1-7-2010);
- SOLAS 2008 Amend, Ch.II-1, Reg.5.-1 (for ships constructed On or after 1-7-2010 Before 1-7-2020); and
- SOLAS 2017 Amendment (98th) / Chapter II-1 / Reg. 5 (for ships constructed on or after 1-7-2020)

#### Damage stability for passenger ships:

- SOLAS 1974 Convention / Chapter II-1 / Reg. 7 (passenger ships constructed on or after 25-5-1980 Before 1-9-1984);
- SOLAS 1981 Amend / Chapter II-1 / Reg. 8 (passenger ships constructed on or after 1-9-1984 Before 29-4-1990);
- SOLAS 1988 Amend / Chapter II-1 / Reg. 8.1(passenger ships constructed on or after 29-4-1990 Before 1-10-1994);
- SOLAS 1991/1992 Amend / Chapter II-1 / Reg. 8 (passenger ships constructed on or after 1-10-1994 Before 1-7-1997);
- SOLAS 1994/1995 Amend / Chapter II-1 / Reg. 8 (passenger ships constructed on or after 1-7-1997 Before 1-7-1998);
- SOLAS 1996-1998 Amend / Chapter II-1 / Reg. 8 (passenger ships constructed on or after 1-7-1998 Before 1-1-2009);
- SOLAS 2006 Amend / Chapter II-1 / Reg. 8 (passenger ships constructed on or after 1-1-2009 Before 1-7-2020); and
- SOLAS 2018 Amendment (99th) / CHAPTER II-1 / Reg. 8 (passenger ships constructed on or after 1-7-2020).

#### Damage stability for cargo ships:

- SOLAS 1989/1990 Amend / Chapter II-1 / Reg. 23-1 (cargo ships constructed On or after 1-2-1992 Before 1-1-2009);
- SOLAS 1996-1998 Amend / Chapter II-1 / Reg. 25-1 (cargo ships constructed On or after 1-7-1998 Before 1-1-2009); and
- SOLAS 2006 Amend / Chapter II-1 / Reg. 5-1 (cargo ships constructed On or after 1-1-2009 Before 1-7-2020).

## Question 4

**“Is there evidence to show that the Master or responsible officer can determine the stability of the ship under varying conditions of service using the approved stability information provided on board?”**

This question addresses the Master or responsible officer’s ability to be able to determine the stability of the ship under varying conditions of service.

**If a “No” is recorded by the PSCO for this question, the ship may be considered for detention.**

### Preparations

Ships should ensure that:

- It can be demonstrated that the Master and the officer(s) responsible for cargo operations have received familiarisation training on carrying out stability calculations and in using the stability instrument (if applicable);
- It can be demonstrated that the Master or the officer(s) in charge is/are familiar with the verification and calculation of ship’s stability;
- It can be shown that the Master has been supplied with stability information necessary to facilitate rapid and simple processes to obtain accurate guidance as to the stability of the ship under varying conditions of service;
- It can be demonstrated that the effect of free surface of partially filled tanks has been taken into account correctly in stability calculations by the officer in charge;
- It can be demonstrated that all applicable stability criteria have been applied in stability calculations for all loading conditions including the standard loading conditions detailed in section 3.4 of the 2008 IS Code (International Code on Intact Stability, 2008) as follows:

Cargo ship:

1. ship in the fully loaded departure condition, with cargo homogeneously distributed throughout all cargo spaces and with full stores and fuel;
  2. ship in the fully loaded arrival condition with cargo homogeneously distributed throughout all cargo spaces and with 10% stores and fuel remaining;
  3. ship in ballast in the departure condition, without cargo but with full stores and fuel;
- and
4. ship in ballast in the arrival condition, without cargo and with 10% stores and fuel remaining.

Cargo ship intended to carry deck cargoes:

1. ship in the fully loaded departure condition with cargo homogeneously distributed in the holds and with cargo specified in extension and mass on deck, with full stores and fuel; and
2. ship in the fully loaded arrival condition with cargo homogeneously distributed in holds and with a cargo specified in extension and mass on deck, with 10% stores and fuel

## Inspection

Ships should be prepared to show the PSCO:

- That the Master and the officer(s) responsible for cargo operations have received familiarisation training on carrying out stability calculations and in using the stability instrument (if applicable);
- That the Master or the officer(s) in charge is/are familiar with the verification and calculation of ship's stability;
- That the Master has been supplied with stability information necessary to facilitate rapid and simple processes to obtain accurate guidance as to the stability of the ship under varying conditions of service;
- That the effect of free surface of partially filled tanks has been taken into account correctly in stability calculations by the officer in charge;
- That all applicable stability criteria have been applied in stability calculations for all loading conditions including the standard loading conditions detailed in section 3.4 of the 2008 IS Code (International Code on Intact Stability, 2008) as follows:

### Cargo ship

1. ship in the fully loaded departure condition, with cargo homogeneously distributed throughout all cargo spaces and with full stores and fuel;
2. ship in the fully loaded arrival condition with cargo homogeneously distributed throughout all cargo spaces and with 10% stores and fuel remaining;
3. ship in ballast in the departure condition, without cargo but with full stores and fuel; and
4. ship in ballast in the arrival condition, without cargo and with 10% stores and fuel remaining.

### Cargo ship intended to carry deck cargoes

1. ship in the fully loaded departure condition with cargo homogeneously distributed in the holds and with cargo specified in extension and mass on deck, with full stores and fuel; and
2. ship in the fully loaded arrival condition with cargo homogeneously distributed in holds and with a cargo specified in extension and mass on deck, with 10% stores and fuel

## Notes

Where the master or responsible officer is not able to understand the stability information and calculate ship's stability, detention will be considered by the PSCO

## **Relevant references in IMO instruments and IMO guidance**

- STCW Code Section A-VIII/2, Part 5 (102.6);
- SOLAS 1960 / Chapter II / Reg. 19 (for ships constructed before 25-5-1980);
- SOLAS 1974 Convention / Chapter II-1 / Reg. 19 (for ships constructed On or after 25-5-1980 Before 1-9-1984);
- SOLAS 1981 Amend / Chapter II-1 / Reg. 22 (for ships constructed On or after 1-9-1984 Before 29-4-1990);
- SOLAS 1988 Amend / Chapter II-1 / Reg. 22 (for ships constructed On or after 29-4-1990 Before 1-2-1992);
- SOLAS 1989/1990 Amend / Chapter II-1 / Reg. 25-8 (for ships constructed On or after 1-2-1992 Before 1-1-2009);
- SOLAS 2006 Amend / Chapter II-1 / Reg. 5-1 (for ships constructed On or after 1-1-2009 Before 1-7-2020); and
- SOLAS 2017 Amendment (98th) / Chapter II-1 / Reg. 5-1 (for ships constructed on or after 1-7-2020)

## Question 5

### **“Q5\*- If the ship is provided with a Stability Instrument, is it approved by the Administration?”**

This question addresses whether a stability instrument provided on board the ship has been approved by the Administration or a Recognised Organisation (RO) on their behalf.

**If a “No” is recorded by the PSCO for this question, the ship may be considered for detention.**

#### **Preparations**

Ships should ensure that:

- If a stability instrument is provided onboard evidence can be provided to the PSCO to show that is approved by the Administration or a Recognised Organisation acting on behalf of the Administration;
- A document of approval for the stability instrument issued by the Administration is provided on board, if applicable

#### **Inspection**

Ships should be prepared to show the PSCO:

- That if provided the ship’s stability instrument is approved by the Administration or a Recognised Organisation acting on behalf of the Administration.
- The document of approval for the stability instrument issued by the Administration has been provided on board, if applicable.

#### **Notes**

An approved stability instrument is not a substitute for the approved stability booklet. The approved stability instrument is used as a supplement to the approved stability booklet to facilitate stability calculations.

#### **Relevant references in IMO instruments and IMO guidance**

- SOLAS 2008 Amendments II-1/5.1;
- Intact Stability Code 2008, Part A, Chapter 2, 2.2;
- SOLAS 2004 Amendments XII/11.2 (Bulk carriers of L < 150 m, KL ≥ 01.07.2006);
- MARPOL 2014 Amend (66th) / Annex I / Reg. 28 (oil tankers);
- BCH 2018 Consolidated Edition / 2.2 - IBC / IBC 2014 Amend / 2.2 (chemical tankers); and
- GC Code / 2.2 - IGC 2014 Amend / Chapter 2 / 2.2 (gas carriers).

## Question 6

### **“Q6- If the ship is provided with a Stability Instrument, does the type of stability software in use meet the requirements for the relevant ship type?”**

This question addresses whether the stability software installed in a stability instrument, if provided, is appropriate for the type of ship on which the stability instrument is being used.

#### **Preparations**

Ships should ensure that:

- The software installed and in use in the stability instrument, if provided onboard, is relevant to the ship type (suitability should be able to be determined from the user manual for the stability instrument and evidence provided to the PSCO accordingly).

#### **Inspection**

Ships should be prepared to show the PSCO:

- That the type of stability software in use is relevant to the ship type.

#### **Relevant references in IMO instruments and IMO guidance**

- Intact Stability Code, Part A 2.1.6, 2.1.1, if applicable;
- SOLAS Ch.XII Reg.11.3 (Bulkers), MARPOL An.I Reg. 28.6 (Tankers), IBC code 2.2.6 (Chemical tankers), IGC code 2.2.6 (Gas carriers));
- SOLAS 2004 Amendments XII/11.2 (Bulk carriers of L < 150 m, KL ≥ 01.07.2006);
- MARPOL 2014 Amend (66th) / Annex I / Reg. 28 (oil tankers);
- BCH 2018 Consolidated Edition / 2.2 - IBC / IBC 2014 Amend / 2.2 (chemical tankers); and
- GC Code / 2.2 - IGC 2014 Amend / Chapter 2 / 2.2 (gas carriers).

## Question 7

**“Q7- Is there evidence on board to show that the master/loading officer confirms that the “calculated” displacement and trim corresponds with the “observed” draughts?”**

This question addresses whether the ships Master/loading officer verify and document the ships actual “observed” draughts against the corresponding “calculated” draughts for a given loading condition.

This question is included in the CIC for information/data analysis purposes only by the PSC MOU. **No deficiency should be assigned** if the question is answered “No” as there are no appropriate corresponding convention references directly relating to this question.

### Preparations

Ships should be prepared to:

- Demonstrate to what level that the ship’s crew are routinely verifying, and documenting, that the calculated draughts, trim and displacement corresponds with the actual observed draughts; and
- Show the draught marks are marked clearly at the bow and the stern.

### Inspection

Ships should be prepared to show the PSCO:

- That the ship’s crew are routinely verifying, and documenting, that the calculated draughts, trim and displacement corresponds with the actual observed draughts. It is expected that the PSCO confirm this by checking the previous stability calculation record and draught records in the ship’s logbook, voyage plan etc. The PSCO may request the Master/Chief Officer to calculate the displacement at the time of the inspection and verify whether the observed draughts correspond with the results of the calculation.
- That the draught marks are marked clearly at the bow and the stern.

### Relevant references in IMO instruments and IMO guidance

None.

## Question 8

**“Q8- If the ship is provided with a Stability Instrument has the accuracy of the stability instrument been verified periodically by applying at least one approved test condition?”**

This question addresses whether, in line with the recommendatory part B of the 2008 IS Code, specifically paragraph 4.1.9.1, the stability instrument is verified annually for accuracy against at least 1 approved test condition.

This question is included in the CIC for information/data analysis purposes only by the PSC MOU. **No deficiency should be assigned** if the question is answered “No” as the periodical verification concerned is only contained in the recommendatory part of the 2008 IS Code and is not prescribed in SOLAS Ch. XII Reg.11.

### Preparations

Ships should be prepared to:

- Demonstrate whether the accuracy of the stability instrument is being verified annually against at least one approved test condition and that the results show that the stability instrument is accurate and reliable.

### Inspection

Ships should be prepared to show the PSCO:

- whether the accuracy of the stability instrument has been verified by applying at least one approved test condition and that the results show that the stability instrument is accurate and reliable.

### Notes

Paragraph 4.1.9.1 of Part B of the 2008 IS Code reads “It is the responsibility of the ship’s master to check the accuracy of the stability instrument at each annual survey by applying at least one approved test condition.” However, NB Part B of the 2008 IS Code is recommendatory.

It should also be noted that Bulk Carriers of less than 150 m in length are required to be provided with standard conditions for testing purpose, however the implementation of a periodical test is not prescribed in SOLAS Ch. XII Reg.11.

Therefore, where this question is answered NO, deficiency shall not be pointed out. This question is treated for the statistical information purpose.

## **Relevant references in IMO instruments and IMO guidance**

- Intact Stability Code, Part A 2.1.6, B 4.1.9;
- SOLAS Ch.XII Reg.11.3 (Bulkers), MARPOL An.I Reg. 28.6 (Tankers), IBC code 2.2.6 (Chemical tankers), IGC code 2.2.6 (Gas carriers));
- SOLAS 2004 Amendments XII/11.2 (Bulk carriers of L < 150 m, KL ≥ 01.07.2006);
- MARPOL 2014 Amend (66th) / Annex I / Reg. 28 (oil tankers);
- BCH 2018 Consolidated Edition / 2.2 - IBC / IBC 2014 Amend / 2.2 (chemical tankers);
- GC Code / 2.2 - IGC 2014 Amend / Chapter 2 / 2.2 (gas carriers);
- SOLAS 2018 Amend (99th) Chapter II-1/Reg. 8.1.3.1.