**Sayı** : 38591462 – 410.01 – 2019 – 2952 **08.08.2019**

**Konu** : "Acil Durum Sistemleri ve Prosedürleri" Yoğunlaştırılmış Denetim Kampanyası Hk.

**SİRKÜLER NO:536 / 2019**

**İlgi** : Uluslararası Deniz Ticaret Odası (ICS)'nın 05.08.2019 tarihli ve MC(19)69 sayılı yazısı.

Uluslararası Deniz Ticaret Odası (ICS) tarafından gönderilen ilgi yazıda; **1 Eylül -30 Kasım 2019 tarihleri arasında** Paris Memorandumu (Paris MoU) ile Tokyo Memorandumu (Tokyo MoU) tarafından uygulanacak olan **"Acil Durum Sistemleri ve Prosedürleri" Yoğunlaştırılmış Denetim Kampanyası (CIC)'na** hazırlık maksadıyla ilgili memorandumlarca yayımlanmış kontrol listelerine ilave olarak ICS'in söz konusu CIC için düzenlediği rehber dokümanları ekte sunulmaktadır.

"Acil Durum Sistemleri ve Prosedürleri" Yoğunlaştırılmış Denetim Kampanyasının ilgili tarih aralığında Hint Okyanusu Memorandumu gibi diğer memorandumlar tarafından da uygulanabileceği, denetimlerin benzer kontrol listeleri üzerinden gerçekleştirileceğinin beklendiği ifade edilmektedir.

Bilgilerinizi arz/rica ederim

Saygılarımla,

**İsmet SALİHOĞLU**
Genel Sekreter

**Ek:** İlgi Yazı ve Ekleri (26 sayfa)

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5 August 2019

**MC(19)69**

**TO: MARINE COMMITTEE**

**Copy: All Full and Associate Members (for information)**

# INFORMATION AND GUIDANCE TO ASSIST WITH PREPARATIONS FOR THE CONCENTRATED INSPECTION CAMPAIGN (CIC) ON "EMERGENCY SYSTEMS AND PROCEDURES" BEING HELD FROM 1 SEPTEMBER TO 30 NOVEMBER 2019

**Action required:** ***Members are invited to note and disseminate, as soon as possible, the information and guidance developed by ICS to assist shipowners and operators with preparations for the Concentrated Inspection Campaign (CIC) on "Emergency Systems and Procedures" being conducted by the Paris MoU and Tokyo MoU from 1 September to 30 November 2019.***

Members are advised that the Member Authorities of the Paris MoU and Tokyo MoU will conduct a Concentrated Inspection Campaign (CIC) on "Emergency Systems and Procedures" from 1 September to 30 November 2019.

The ICS Secretariat has developed the information and guidance to assist shipowners and operators with preparations for PSC inspections involving the CIC (**Annex A**). It has been prepared based on the standard questionnaire released for the CIC by the Paris MoU and Tokyo MoU on 26 July 2019 (**Annex B**).

Members are advised that other PSC MoUs, such as the Indian Ocean MoU, have indicated that they may also conduct CICs on "Emergency Systems and Procedures" during the same period. It is anticipated they will use the same (or similar) questionnaire.

Any issues experienced during the CIC or comments on its conduct by PSC should be reported to the undersigned (stewart.inglis@ics-shipping.org and sunil.krishnakumar@ics-shipping.org).

Stewart Inglis
Senior Adviser

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Shaping the Future of Shipping

# Information and guidance to assist with preparations for the Concentrated Inspection Campaign (CIC) on "Emergency Systems and Procedures"

## 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 "Emergency Systems and Procedures".

The Member Authorities of the Paris MoU and Tokyo MoU will conduct a Concentrated Inspection Campaign (CIC) on "Emergency Systems and Procedures" from 1 September to 30 November 2019.

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

- *Ships are capable of responding appropriately and promptly to emergency situations in order to preserve human lives, protect the marine environment and minimize damage to ships;*
- *Necessary measures are taken by responsible stakeholders, such as shipping companies and ship managers having a direct influence on the safety of ships and by raising their awareness of the importance of ship emergency systems;*
- *Emergency systems installed on board can be properly operated and effectively managed in any emergency situations; and*
- *Masters and crews understand their assigned roles and duties in case of emergency and enhance their familiarity with the situations so that they can act immediately when circumstances arise.*

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. The results of the CIC are expected to be released by the Paris MoU and Tokyo MoU in mid-2020, and are likely 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 26 July 2019, with copies reproduced on pages 3 and 4 of this document.

Specific information and guidance is provided for each question on the standard questionnaire developed jointly by the Paris MoU and Tokyo MoU. 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.

Most of 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.

Other PSC MoUs, such as the Indian Ocean MoU, have indicated that they may also conduct CICs on "Emergency Systems and Procedures". 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

International Convention for the Safety of Life at Sea (SOLAS), 1974

- Chapter II-1 (Construction: Structure, Subdivisions and Stability, Machinery and Electrical Installations)
- Chapter II-2 (Construction: Fire Protection, Fire Detection and Fire Extinction)
- Chapter III (Life-Saving Appliances)
- Chapter XII (Additional Safety Measures for Bulk Carriers)

International Life-Saving Appliance Code (LSA Code)
International Code for Fire Safety Systems (FSS Code)
International Management Code for the Safe Operation of Ships and for Pollution Prevention (ISM Code)

## Relevant IMO guidance

- *Procedures for Port State Control, 2017* (Resolution A.1119(30))
- *Guidelines for damage control plans and information to the master* (MSC.1/Circ.1245 & MSC.1/Circ.1570)
- *Recommendation on performance standards for public address systems on passenger ships, including cabling* (MSC/Circ.808)
- *Performance standards for water level detectors on bulk carriers and single hold cargo ships other than bulk carriers* (Resolution MSC.188(79))

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on Port State Control

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| CIC on Emergency Systems and Procedures | | | |
|---|---|---|---|
| **Inspection Authority** | | | |
| **Ship Name** | | **IMO Number** | |
| **Date of Inspection** | | **Inspection Port** | |

**QUESTIONS 1 TO 10 ANSWERED WITH A "NO" MUST BE ACCOMPANIED BY A RELEVANT DEFICIENCY ON THE REPORT OF INSPECTION.**

| No. | Question | Yes | No | N/A |
|---|---|---|---|---|
| | **Documentation** | | | |
| 1 | Is the damage control plan readily available on board? | ☐ | ☐ | ☐ |
| | **Operating of Emergency system** | | | |
| 2* | Is the public address system capable of broadcasting emergency announcements? | ☐ | ☐ | ☐ |
| 3* | For ships with water level detectors installed, is the system and alarm arrangements operational? | ☐ | ☐ | ☐ |
| 4* | Is the steering gear system and its related emergency alarms operational? | ☐ | ☐ | ☐ |
| 5 | Does the muster list specify details in accordance with the requirements of SOLAS 1996-1998 Amendment, Chapter III, Regulation 37? | ☐ | ☐ | ☐ |
| 6* | Does the emergency source of electrical power supply its power correctly to essential equipment for safety in an emergency? | ☐ | ☐ | ☐ |
| 7a* | Where the emergency source of electrical power is a generator, is it in correct operational condition? | ☐ | ☐ | ☐ |
| 7b* | Where the emergency source of electrical power is an accumulator battery, are the batteries and its switchboard in good condition? | ☐ | ☐ | ☐ |
| 8* | Is the emergency fire pump in full operational condition? | ☐ | ☐ | ☐ |
| | **Crew familiarization with emergency systems** | | | |
| 9* | Where a fire drill and/or abandon ship drill was witnessed, was it found to be satisfactory? | ☐ | ☐ | ☐ |
| 10* | For the above checked emergency equipment, are the relevant crews familiar with the operation? | ☐ | ☐ | |
| 11 | Has the ship been detained, as a result of the Inspection Campaign? | ☐ | ☐ | |

NOTE
1. If "NO" is selected, for question marked an "*", the ship may be considered for detention.
2. Where there is no box in the N/A column, then either box "Yes" or "No" should be selected as appropriate.

| CIC on Emergency Systems and Procedures | | | |
|---|---|---|---|
| Inspection Authority | | | |
| Ship Name | | IMO Number | |
| Date of Inspection | | Inspection Port | |

QUESTIONS 1 TO 10 ANSWERED WITH A "NO" MUST BE ACCOMPANIED BY A RELEVANT DEFICIENCY ON THE REPORT OF INSPECTION.

| No. | Question | Yes | No | N/A |
|---|---|---|---|---|
| | **Documentation** | | | |
| 1 | Is the damage control plan readily available on board? | ☐ | ☐ | ☐ |
| | **Operating of Emergency system** | | | |
| 2* | Is the public address system capable of broadcasting emergency announcements? | ☐ | ☐ | ☐ |
| 3* | For ships with water level detectors installed, is the system and alarm arrangements operational? | ☐ | ☐ | ☐ |
| 4* | Is the steering gear system and its related emergency alarms operational? | ☐ | ☐ | ☐ |
| 5 | Does the muster list specify details in accordance with the requirements of SOLAS 1996-1998 Amendment, Chapter III, Regulation 37? | ☐ | ☐ | ☐ |
| 6* | Does the emergency source of electrical power supply its power correctly to essential equipment for safety in an emergency? | ☐ | ☐ | ☐ |
| 7a* | Where the emergency source of electrical power is a generator, is it in correct operational condition? | ☐ | ☐ | ☐ |
| 7b* | Where the emergency source of electrical power is an accumulator battery, are the batteries and its switchboard in good condition? | ☐ | ☐ | ☐ |
| 8* | Is the emergency fire pump in full operational condition? | ☐ | ☐ | ☐ |
| | **Crew familiarization with emergency systems** | | | |
| 9* | Where a fire drill and/or abandon ship drill was witnessed, was it found to be satisfactory? | ☐ | ☐ | ☐ |
| 10* | For the above checked emergency equipment, are the relevant crews familiar with the operation? | ☐ | ☐ | |
| 11 | Has the ship been detained, as a result of the Inspection Campaign? | ☐ | ☐ | |

NOTE

1. If "NO" is selected, for question marked an "*", the ship may be considered for detention.
2. Where there is no box in the N/A column, then either box "Yes" or "No" should be selected as appropriate.

Question 1

## "Is the damage control plan readily available on board?"

This question addresses the requirement for damage control information on ships.

Requirements related to damage control information are set out in SOLAS regulation II-1/19.

Damage control plans are required to be permanently exhibited or readily available on the navigation bridge.[1]

Damage control booklets are required to be made available to the Master and officers of the ship.[2]

Relevant IMO guidance on damage control information, including on the placement of damage control plans on board ships, is provided in the *Guidelines for damage control plans and information to the master* (MSC.1/Circ.1245 & MSC.1/Circ.1570).

### Preparations

Ships should ensure that:

- Damage control plans are permanently exhibited or readily available on the bridge; and
- Booklets containing the requisite information are available to the Master and officers.

### Inspection

Ships should be prepared to show the PSCO:

- The location of where the damage control plans are exhibited and readily available to the Master and officers;
- The damage control plan for the ship; and
- The damage control booklet for the ship.

### Additional comment

Masters should check the applicability of the question to the ship based on the applicability of the requirements for damage control information, which is determined by the date of construction of the ship. For example, the requirements are not applicable to cargo ships built prior to 1 February 1992. In such cases, the PSCO should record the answer as "N/A".

[1] SOLAS regulation II-1/19.1

[2] SOLAS regulation II-1/19.1

Question 2

## "Is the public address system capable of broadcasting emergency announcements?"

This question addresses the requirement for a public address system (or other suitable means of communication) to supplement the general emergency alarm system on board on ships.

Requirements related to public address systems (or other suitable means of communication) are set out in SOLAS regulation III/6.4.2 and section 7.2.2 of the LSA Code. Additional requirements for public address systems fitted on passenger ships are set out in SOLAS regulation III/6.5.

Public address systems are to be a loudspeaker installation enabling the broadcast of messages into all spaces where crew members or passengers (or both) are normally present, and to muster stations.[3] They are to:

- Allow the broadcast of messages from the navigation bridge and such other places on board the ship (as the flag State deems necessary);
- Be installed with regard to acoustically marginal conditions;
- Not require any action from the addressee; and
- Be protected against unauthorized use.[4]

On passenger ships, the public address systems are additionally required to:

- Be clearly audible above the ambient noise in all spaces; and
- Be provided with an override function controlled from one location on the navigation bridge and such other places on board (as the flag State deems necessary), so that all emergency messages will be broadcast if any loudspeaker in the spaces concerned has been switched off, its volume has been turned down or the public address system is used for other purposes.[5]
- Have at least two loops which shall be sufficiently separated throughout their length and have two separate and independent amplifiers; and
- Be approved by the flag State having regard to the performance standards for public address systems on passenger ships recommended by the IMO;[6] and
- Be connected to the emergency source of electrical power on board the ships.[7]

Relevant IMO performance standards for public address systems fitted on passenger ships are provided in the *Recommendation on performance standards for public address systems on passenger ships, including cabling* (MSC/Circ.808).

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[3] LSA Code, section 7.2.2
[4] LSA Code, section 7.2.2
[5] SOLAS regulation III/6.5.2
[6] SOLAS regulation III/6.5.3
[7] SOLAS regulation III/6.5.4

## Preparations

Ships should ensure that:

- The public address system (or other suitable means of communication) provides a loudspeaker installation enabling the broadcast of messages that are audible in accommodation spaces, working spaces and at muster stations; and

- The public address system (or other suitable means of communication) is fully operative.

Additionally, passenger ships should ensure that:

- The public address system is connected to the emergency source of electrical power on board ship.

## Inspection

Ships should be prepared to show the PSCO:

- A demonstration of the functioning of the public address system on board the ship, including its audibility in accommodation spaces, working spaces and at muster stations.

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

## Additional comment

Masters should check the applicability of the question to the ship based on the applicability of the requirements for public address systems, which is determined by its date of construction. For example, the requirements are not applicable to cargo ships built prior to 1 July 1986 (if the ship does not have a public address system). In such cases, the PSCO should record the answer as "N/A".

Question 3

## "For ships with water level detectors installed, is the system and alarm arrangements operational?"

This question addresses the requirements for water level detectors on bulk carriers and single hold cargo ships.

Requirements related to the installation of water level detectors are set out in SOLAS regulation XII/1 (bulk carriers) and SOLAS regulation II-1/25 (single hold cargo ships other than bulk carriers).

On bulk carriers, water level detectors are required to be installed:

- In each cargo hold, giving audible and visual alarms, one when the water level above the inner bottom in any hold reaches a height of 0.5 m and another at a height not less than 15% of the depth of the cargo hold but not more than 2 m. On certain bulk carriers,[8] detectors with only the latter alarm need be installed. The water level detectors are required to be fitted in the aft end of the cargo holds. For cargo holds which are used for water ballast, an alarm overriding device may be installed. The visual alarms are required to clearly discriminate between the two different water levels detected in each hold;

- In any ballast tank forward of the collision bulkhead, giving an audible and visual alarm when the liquid in the tank reaches a level not exceeding 10% of the tank capacity. An alarm overriding device may be installed to be activated when the tank is in use; and

- In any dry or void space other than a chain cable locker, any part of which extends forward of the foremost cargo hold, giving an audible and visual alarm at a water level of 0.1 m above the deck. Such alarms need not be provided in enclosed spaces the volume of which does not exceed 0.1% of the ship's maximum displacement volume.[9]

The audible and visual alarms are required to be located on the navigation bridge.[10]

On single hold cargo ships, water level detectors are required to be installed that:

- Give an audible and visual alarm at the navigation bridge when the water level above the inner bottom in the cargo hold reaches a height of not less than 0.3 m, and another when such level reaches not more than 15% of the mean depth of the cargo hold; and

- Be fitted at the aft end of the hold, or above its lowest part where the inner bottom is not parallel to the designed waterline, and where webs or partial watertight bulkheads are fitted above the inner bottom, the flag State may require the fitting of additional detectors.[11]

Relevant IMO guidance on water level detectors is provided in the *Performance standards for water level detectors on bulk carriers and single hold cargo ships other than bulk carriers* (Resolution MSC.188(79)).

[8] Bulk carriers to which SOLAS regulation XII/9.2 applies.
[9] SOLAS regulation XII/12.1
[10] SOLAS regulation XII/12.2
[11] SOLAS regulation II-1/25.3

### Preparations

If the ship is fitted with water level detectors, it should ensure that:

- The audible and visual alarms associated with the water level detectors are located on the navigation bridge; and

- The audible and visual alarms on the navigation bridge associated with the water level detectors are fully operative.

### Inspection

Ships should be prepared to show the PSCO:

- The location of the audible and visual alarms on the navigation bridge associated with the water level detectors; and

- A demonstration of the functioning of the audible and visual alarms on the navigation bridge associated with the water level detectors.

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

### Additional comments

Masters should check the applicability of the question to the ship based on the applicability of the requirements for water level detectors, which is determined *inter alia* by the ship type, design and date of construction. SOLAS regulation XII/12 applies to all bulk carriers regardless of their date of construction, whereas the applicable single hold cargo ships are defined by SOLAS regulation II-1/25.2.

If the ship is not required to have water level detectors installed on board, the PSCO should record the answer as "N/A".

## "Is the steering gear system and its related emergency alarms operational?"

This question addresses the requirements for main and auxiliary steering gears on ships.

Requirements related to main and auxiliary steering gears are set out in SOLAS regulation II-1/29.

Main and auxiliary steering gear power units are required to be:

- Arranged to restart automatically when power is restored after a power failure; and
- Capable of being brought into operation from a position on the navigation bridge.[12]

Audible and visual alarms on the navigation bridge are required in order to indicate:

- A power failure to any one of the steering gear power units;[13] and
- A failure of electrical power supply to the steering gear control system.[14]

Where a ship has a hydraulic power-operated steering gear, it is required to have:

- A low-level alarm for each hydraulic fluid reservoir to give the earliest practicable indication of hydraulic fluid leakage; and

- Audible and visual alarms given on the navigation bridge and in the machinery space.[15]

### Preparations

Ships should ensure that:

- The audible and visual alarms associated with the steering gear arrangements on board ship are located on the navigation bridge and machinery space (as applicable); and

- The audible and visual alarms associated with the steering gear arrangements on board ship are fully operable.

### Inspection

Ships should be prepared to show the PSCO:

- The location of the audible and visual alarms associated with the steering gear arrangements on board ship, particularly those located on navigation bridge; and

- A demonstration of the functioning of the audible and visual alarms associated with the steering gear arrangements on board ship.

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

[12] SOLAS regulation II-1/29.5
[13] SOLAS regulation II-1/29.5
[14] SOLAS regulation II-1/29.8
[15] SOLAS regulation II-1/29.12

## "Does the muster list specify details in accordance with the requirements of SOLAS 1996-1998 Amendment, Chapter III, Regulation 37?"

This question addresses the requirements related to the muster lists of ships.

Requirements related to muster lists are set out in SOLAS regulation III/8 and SOLAS regulation III/37.

Muster lists and emergency instructions are required to be exhibited in conspicuous places throughout the ship including the navigation bridge, engine-room and crew accommodation spaces,[16] and are to be prepared before the ship proceeds to sea.[17]

Masters are required to prepare a revised or new muster list if any change takes place in the crew which necessitates an alteration in the muster list of the ship.[18]

Muster lists are required to specify:

- Details of the general emergency alarm and public address system on the ship;
- Action to be taken by crew and passengers when the general emergency alarm is sounded; and
- How the order to abandon ship will be given.[19]

Muster lists are required to show the duties assigned to the different members of the crew including:

- Closing of the watertight doors, fire doors, valves, scuppers, sidescuttles, skylights, portholes and other similar openings in the ship;
- Equipping of the survival craft and other life-saving appliances;
- Preparation and launching of survival craft;
- General preparations of other life-saving appliances;
- Muster of passengers;
- Use of communication equipment;
- Manning of fire parties assigned to deal with fires; and
- Special duties assigned in respect to the use of fire-fighting equipment and installations.[20]

Muster lists are additionally required to specify:

- Which officers are assigned to ensure that life-saving and fire appliances are maintained in good condition and are ready for immediate use;[21]

- Substitutes for key persons who may become disabled, taking into account that different emergencies may call for different actions; and[22]

- Duties assigned to members of the crew in relation to passengers in case of emergency.[23]

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[16] SOLAS regulation III/8.3
[17] SOLAS regulation III/37.7
[18] SOLAS regulation III/37.7
[19] SOLAS regulation III/37.1
[20] SOLAS regulation III/37.3
[21] SOLAS regulation III/37.4
[22] SOLAS regulation III/37.5
[23] SOLAS regulation III/37.6

For passenger ships, muster lists are required to be approved,[24] and should have procedures in place for locating and rescuing passengers trapped in their staterooms.[25]

### Preparations

Ships should ensure that:

- The muster list provides at least the minimum details required to be specified;
- The muster list has been updated to take account of any changes in the crew, equipment or systems; and
- The muster list is exhibited in conspicuous places throughout the ship including on the navigation bridge, and in the engine-room and crew accommodation spaces.

Passenger ships should also ensure that the muster list has been approved.

### Inspection

Ships should be prepared to show the PSCO:

- The muster list of the ship; and
- Locations on board the ship, particularly on the navigation bridge and in the engine-room and crew accommodation spaces, where the muster list is being conspicuously exhibited.

### Additional comment

Masters should note that, if the ship is not required to have a muster list (e.g. it is below SOLAS Convention size), the PSCO should record the answer as "N/A".

[24] SOLAS regulation III/37.8

[25] SOLAS regulation III/37.2

## "Does the emergency source of electrical power supply its power correctly to essential equipment for safety in an emergency?"

This question addresses the requirement for an emergency source of electrical power supply on ships.

Requirements related to the emergency sources of electrical power supply are set out in SOLAS regulation II-1/43 (cargo ships) and SOLAS regulation II-1/42 (passenger ships).

A self-contained emergency source of electrical power is required to be provided on ships.[26]

The emergency source of electrical power supply is required to:

- Be sufficient to supply all those services that are essential for safety in an emergency, due regard being paid to such services as may have to be operated simultaneously; and

- Be capable, having regard to starting currents and the transitory nature of certain loads, of supplying simultaneously at least those services for the periods specified (18h for cargo ships and 36h for passenger ships), if they depend upon an electrical source for their operation.[27]

Essential services specified in the requirements *inter alia* include emergency lighting, navigation lights, communication equipment, shipborne navigational equipment, fire detection and fire alarm system, fire pumps and steering gear.[28]

Independent supply from an accumulator battery suitably located for use in an emergency can be used to supply emergency electrical power to some essential services.[29]

Periodic testing of the complete emergency power supply system is required, including the testing of its automatic starting arrangements.[30]

### Preparations

Ships should ensure that:

- The essential services (including equipment) to be supplied by the emergency sources of electrical power are connected to the emergency power supply system as required;

- The emergency lighting on board is properly installed and in working order;

- The emergency source of electrical power on board the ship (e.g. emergency generator, accumulator battery) is ready and functional; and

- Relevant personnel are familiar with the procedures for conducting, and their roles and responsibilities during, a blackout test on board the ship.

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[26] SOLAS regulation II-1/43.1 (cargo ships), SOLAS regulation II-1/42.1 (passenger ships)
[27] SOLAS regulation II-1/43.2 (cargo ships), SOLAS regulation II-1/42.2 (passenger ships)
[28] SOLAS regulation II-1/43.2.1-43.2.6 (cargo ships), SOLAS regulation II-1/42.2.1-42.2.7 (passenger ships)
[29] SOLAS regulation II-1/43.2 (cargo ships), SOLAS regulation II-1/42.2 (passenger ships)
[30] SOLAS regulation II-1/43.7 (cargo ships), SOLAS regulation II-1/42.7 (passenger ships)

If time or circumstances permit, ships might consider conducting a blackout test in advance of the CIC or prior arriving at a port in a region where the CIC is being held.

### Inspection

Ships should be prepared to show the PSCO:

- A blackout test of the ship's emergency power supply system and arrangements; and
- The essential services (including equipment) can be supplied from the emergency source(s) of electrical power on board the ship (including independent supplies of emergency power).

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

### Additional comment

Masters should only agree to conduct a blackout test of the ship's emergency power supply system and arrangements if, in their judgement, it will not jeopardize the safety of the ship, crew, passengers or cargo. PSCOs should accept the judgement of the Master regarding the conduct of a blackout test.

Masters should note that, if the ship is not required to have certain abovementioned equipment or the Master judged it unsafe to conduct a blackout test, the PSCO should record the answer as "N/A".

Question 7a

## "Where the emergency source of electrical power is a generator, is it in correct operational condition?"

This question addresses the emergency generator on ships.

Specific requirements related to emergency generators used as the emergency sources of electrical power are set out in SOLAS regulation II-1/43.3.1 (cargo ships) and SOLAS regulation II-1/42.3.1 (passenger ships).

Where an emergency source of electrical power is a generator, it is required to:

- Be driven by a suitable prime mover with an independent supply of fuel (flashpoint of not less than 43°C);
- Automatically start upon failure of the main source of electrical power supply unless a transitional source of emergency electrical power is provided;
- Automatically connect to the emergency switchboard;
- Automatically connect the essential services (including equipment); and
- Be provided with a transitional source of emergency electrical power, unless an emergency generator is provided capable both of supplying the requisite services and of being automatically started and supplying the required load as quickly as is safe and practicable subject to a maximum of 45 seconds.[31]

### Preparations

Ships should ensure that:

- All available means of starting the emergency generator are tested and confirmed as operational.
- The emergency generator, once started, is tested and confirmed as working normally (indicated by cooling water pressure, lubricant oil pressure etc.) and the emergency switchboard confirms a normal state of frequency, voltage and insulation resistance; and
- Any separate device installed to test the automatic starting of the emergency generator is operational.

### Inspection

Ships should be prepared to show the PSCO:

- A test of available means of starting the emergency generator; and
- The emergency generator is working normally once started.
- Any separate device installed to test the automatic starting of the emergency generator is operational.

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

[31] SOLAS regulation II-1/43.3.1 (cargo ships), SOLAS regulation II-1/42.3.1 (passenger ships)

## "Where the emergency source of electrical power is an accumulator battery, are the batteries and its switchboard in good condition?"

This question addresses the accumulator battery on ships.

Specific requirements related to an accumulator battery used as the emergency sources of electrical power are set out in SOLAS regulation II-1/43.3.2 (cargo ships) and SOLAS regulation II-1/42.3.2 (passenger ships).

Where an emergency source of electrical power is an accumulator battery, it is required to be capable of:

- Carrying the emergency electrical load without recharging while maintaining the voltage of the battery throughout the discharge period within 12% above or below its nominal voltage;
- Automatically connecting to the emergency switchboard in the event of failure of the main source of electrical power; and
- Immediately supplying at least certain specified services.[32]

### Preparations

Ships should ensure that:

- The accumulator battery is suitably housed and compartments used for its accommodation are in good order and sufficiently ventilated;
- The cables associated with the accumulator battery, including those connecting it to the emergency switchboard, are in good condition;
- The accumulator battery is able to carry the emergency electrical load of the ship without recharging while maintaining the voltage of the battery; and
- Emergency switchboard, including all indicators, are in good condition.

### Inspection

Ships should be prepared to show the PSCO:

- The location and condition of the accumulator battery and its associated cables and ventilation;
- The location of emergency switchboard and that all its indicators are operational; and
- The charging status of the accumulator battery.

PSCO may request a blackout test instead of, or in addition to, inspection of the above.

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

[32] SOLAS regulation II-1/43.3.2 (cargo ships), SOLAS regulation II-1/42.3.2 (passenger ships)

## "Is the emergency fire pump in full operational condition?"

This question addresses the requirement for emergency fire pumps on ships.

Requirements for emergency fire pumps are set out in SOLAS regulation II-2/10.

The number and position of hydrants is required to be such that at least *two jets of water* not emanating from the same hydrant, one of which shall be from a single length of hose, may reach any part of the ship normally accessible to the passengers or crew while the ship is being navigated and any part of any cargo space when empty, any ro-ro space or any vehicle space, in which latter case the two jets are to reach any part of the space, each from a single length of hose.[33]

The arrangement of sea connections, fire pumps and their sources of power is required to ensure that:

- On cargo ships and passenger ships of less than 1,000 gross tonnage, if a fire in any one compartment could put all the pumps out of action, there is required to be an alternative means consisting of an emergency fire pump complying with the provisions of the FSS Code with its source of power and sea connection located outside the space where the main fire pumps or their sources of power are located; and

- On passenger ships of 1,000 gross tonnage and upwards, in the event of a fire in any one compartment, all the fire pumps will not be put out of action.[34]

The emergency fire pump shall be of a fixed independently driven power-operated pump.[35]

Chapter 12 of the FSS Code details the specifications for emergency fire pumps (capacity, pressure etc.).[36]

The capacity of the emergency fire pump is required to not be less than 40% of the total capacity of the ship's fire pumps and in any case not less than the following:

- For passenger ships less than 1,000 gross tonnage and for cargo ships of 2000 gross tonnage and upwards, 25 $m^3/h$; and

- For cargo ships less than 2,000 gross tonnage, 15 $m^3/h$.

The capacity of the two jets of water is required to be not less than $25m^3/h$.[37]

The pressure at any hydrants is required to be not less than $25m^3/h$ when the pump is delivering the quantity of water required above.[38]

If the emergency fire pump is driven by an electric motor, it is required to be supplied with emergency electrical power from the emergency switchboard.[39]

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[33] SOLAS regulation II-2/10.2.1.5.1

[34] SOLAS regulation II-2/10.2.2.3.1

[35] FSS Code, chapter 12/2.1

[36] Chapter 12 of the FSS Code is not applicable to passenger ships of 1,000 gross tonnage and upwards.

[37] FSS Code, chapter 12/2.2.1.1, in conjunction with MSC.1/Circ.1214 (Application of SOLAS regulation II-2/10 and chapter 12 of the FSS Code related to emergency fire pump capacity)

[38] FSS Code, chapter 12/2.2.1.2, in conjunction with MSC.1/Circ.1214 (Application of SOLAS regulation II-2/10 and chapter 12 of the FSS Code related to emergency fire pump capacity)

[39] SOLAS regulation II-1/43 (cargo ships), SOLAS regulation II-1/42 (passenger ships)

If the emergency fire pump is driven by a diesel engine, it is required to be readily started in its cold condition down to the temperature of 0°C by hand (manual) cranking or by other means permitted by the flag State. These means are required to be such as to enable the diesel-driven power source to be started at least six times within a period of 30 minutes and at least twice within the first 10 minutes. Any service fuel tank is required to contain sufficient fuel to enable the pump to run on full load for at least three hours and sufficient reserves of fuel is to be available outside the machinery space to enable the pump to be run on full load for an additional 15 hours.[40]

### Preparations

Ships should ensure that:

- The emergency fire pump can produce at least two jets of water at or above the required pressure; and
- The source of power to the emergency fire pump is outside the machinery space.

  If driven by an electric motor, the emergency fire pump can be supplied with electrical power from the emergency switchboard;

  If driven by a diesel engine, the emergency fire pump can be readily started by the means provided and there is sufficient fuel available to enable the emergency fire pump to be run.

### Inspection

Ships should be prepared to show the PSCO:

- Demonstration that the emergency fire pump can be started by the means available and delivers at least two jets of water at or above the required pressure; and
- Location of the source of power to the emergency fire pump is outside the machinery space.

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

#### Additional requirements

Masters should check the applicability of the question to the ship based on the applicability of the requirements for emergency fire pumps. If the ship is not required to have an emergency fire pump (e.g. passenger ships of 1,000 gross tonnage and upwards), the PSCO should record the answer as "N/A".

[40] FSS Code, chapter 12/2.2.2

## "Where a fire drill and/or abandon ship drill was witnessed, was it found to be satisfactory?"

This question addresses the requirement for abandon ship drills and fire drills on board ships.

Requirements related to abandon ship drills and fire drills are set out in SOLAS regulation III/19.

Every crew member is required to participate in at least one abandon ship drill and one fire drill every month.[41] Drills are required to take place within 24 hours of the ship leaving a port if more than 25% of the crew have not participated in abandon ship and fire drills on board that particular ship in the previous month.[42]

*Abandon ship drills*

Each abandon ship drill is required to include:

- Summoning of passengers and crew to muster stations with the alarm followed by a drill announcement on the public address or other communication system and ensuring that they are made aware of the order to abandon ship;
- Reporting to stations and preparing for the duties described in the muster list;
- Checking that passengers and crew are suitably dressed;
- Checking that lifejackets are correctly donned;
- Lowering of at least one lifeboat after any necessary preparation for launching;
- Starting and operating the lifeboat engine;
- Operation of davits used for launching liferafts;
- A mock search and rescue of passengers trapped in their staterooms; and
- Instruction in the use of radio life-saving appliances.[43]

*Fire drills*

Each fire drill is required to include:

- Reporting to stations and preparing for the duties described in the muster list;
- Starting of a fire pump, using at least the two required jets of water to show that the system is in proper working order;
- Checking of firemen's outfits and other personal rescue equipment;
- Checking of relevant communication equipment;
- Checking the operation of watertight doors, fire doors, fire dampers and main inlets and outlets of ventilation systems in the drill area; and
- Checking the necessary arrangements for subsequent abandoning of the ship.[44]

[41] SOLAS regulation III/19.3.2
[42] SOLAS regulation III/19.3.2
[43] SOLAS regulation III/19.3.4.1
[44] SOLAS regulation III/19.3.5.2

*Records*

Dates of abandon ship drills and fire drills held are to be recorded in a log-book prescribed by the flag State.[45] If a drill is not held at the appointed time, an entry is to be made in the log-book stating the circumstances and the extent of the drill held.[46]

*Additional requirements for passenger ships*

Abandon ship drills and fire drills are required to take place weekly. The entire crew need not be involved in every drill, but each crew member is required to participate in an abandon ship drill and a fire drill each month. Passengers are required to be strongly encouraged to attend these drills.[47]

Fire drills are required to have regard to the notification of passengers and movement of passengers to assembly stations and embarkation decks.[48]

### Preparations

Ships should ensure that:

- Abandon ship drills and fire drills are being conducted at the required intervals by the crew; and
- Crew are familiar with their duties and responsibilities during abandon ship and fire-fighting emergencies, including the proper use of life-saving and fire-fighting equipment on the ship.

### Inspection

Ships should be prepared to show the PSCO:

- An abandon ship drill or fire drill; and
- Records of the abandon ship drills and fire drills conducted on board the ship.

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

[45] SOLAS regulation III/19.5
[46] SOLAS regulation III/19.5
[47] SOLAS regulation III/30.2
[48] SOLAS regulation II-2/15.3.1

## "For the above checked emergency equipment, are the relevant crews familiar with the operation?"

This question addresses all the different emergency equipment covered by the CIC:

- Public address system;
- Water level detectors and associated alarms;
- Steering gear and associated alarms;
- Emergency generator and accumulator battery; and
- Emergency fire pump.

It may also address the life-saving and fire-fighting equipment addressed by Question 9.

Requirements for familiarization of relevant personnel are set out in STCW regulation I/14 and section 6 of the ISM Code.

On being assigned to a ship, personnel are required to be familiarized with their specific duties and with all ship arrangements, installations, equipment, procedures and ship characteristics that are relevant to their routine or emergency duties.[49]

Companies are required to establish procedures to ensure that new personnel and personnel transferred to new assignments are given proper familiarization with their duties.[50]

### Preparations

Ships should ensure that:

- All crew members are familiarized with their specific duties and with all ship arrangements, installations, equipment, procedures and ship characteristics that are relevant to their routine or emergency duties; and

- Crew with specific duties and responsibilities related to the emergency equipment covered by the CIC are familiar with its operation and relevant procedures.

### Inspection

Ships should be prepared to show the PSCO:

- A demonstration of the operation of the emergency equipment (if not covered under other questions covered by the CIC) by the relevant personnel; and

- Records kept on board of the familiarization given to new crew members upon joining the ship.

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

[49] STCW regulation I/14.1.5

[50] ISM Code, section 6.3

Paris MoU on Port State Control

# Press release

ASIA-PACIFIC PSC TOKYO MOU

26 July 2019

## LAUNCH OF JOINT CONCENTRATED INSPECTION CAMPAIGN ON EMERGENCY SYSTEMS AND PROCEDURES

**The Member Authorities of the Tokyo and the Paris Memoranda of Understanding (MoU) on Port State Control will launch a joint Concentrated Inspection Campaign (CIC) on Emergency Systems and Procedures.**

The purpose of the CIC on Emergency Systems and Procedures is to ensure that:

- ships are capable of responding appropriately and promptly to emergency situations in order to preserve human lives, protect the marine environment and minimize damages to ships;
- necessary measures are taken by responsible stakeholders, such as shipping companies and ship managers having a direct influence on the safety of ships and by raising their awareness of the importance of ship emergency systems;
- emergency systems installed on board can be properly operated and effectively managed in any emergency situations; and
- master and crew of the ship understand their assigned roles and duties in case of emergency and enhance their familiarity with the situations so that they can act immediately when circumstances arise.

This inspection campaign will be held for three months, commencing from 1 September 2019 and ending 30 November 2019. The campaign will target compliance on all vessels, regardless of type, and will examine specific areas related to the campaign in conjunction with the regular Port State Control inspection.

A ship will be subject to only one inspection under this CIC during the period of the campaign.

Port State Control Officers (PSCOs) will use a list of 11 questions to assess that equipment provided onboard complies with the relevant convention, the master and officers are qualified and familiar with operations relating to shipboard emergency

systems and that equipment is properly maintained and functioning.

Ships often operate in isolation and are engaged in long sea voyages where shore assistance for on-board emergencies may not be available. Therefore, the preparedness of emergency equipment, such as emergency power sources and fire pumps of ships, and the ability of the crew in responding to emergency situations, are critical factors in saving human lives, protecting the marine environment and minimizing damage to ships.

Both Secretary Hideo Kubota and Secretary-General Luc Smulders stated that "For many years, the number of deficiencies of the Emergency Systems has remained in the top five categories. The joint CIC on Emergency Systems and Procedures will not only raise safety awareness among the crew on safety related issues but will also enhance crew familiarisation with the emergency safety systems and procedures, contributing to the prevention of marine accidents in the oceans."

If deficiencies are found, actions by the port State may vary from recording a deficiency and instructing the master to rectify it within a certain period of time to detaining the ship until the serious deficiencies have been rectified. In the case of detention, publication in the monthly detention lists of the Tokyo and Paris MoU websites will take place.

It is expected that the Tokyo and Paris MoUs will carry out approximately 10,000 inspections during the CIC.

The results of the campaign will be analysed and findings will be presented to the governing bodies of the both MoUs for submission to the IMO.

| Paris MOU | Tokyo MOU |
|---|---|
| Mr. Luc Smulders<br>Secretary-General<br>Paris MoU on Port State Control<br>PO Box 16191<br>2500 BD The Hague<br>The Netherlands<br>Tel: +31-70-4561508<br><br>E-mail: secretariat@parismou.org<br>Web-site: www.parismou.org | Mr. Hideo KUBOTA<br>Secretary, Tokyo MOU Secretariat<br>Ascend Shimbashi 8F<br>6-19-19, Shimbashi,<br>Minato-ku, Tokyo<br>Japan 105-0004<br>Tel: +81-3-3433 0621<br>Fax: +81-3-3433 0624<br>E-mail: secretariat@tokyo-mou.org<br>Web-site: www.tokyo-mou.org |

*Notes to editors:*

| Paris MOU | Tokyo MOU |
|---|---|
| Regional Port State Control was initiated in 1982 when fourteen European countries agreed to coordinate their port State inspection effort under a voluntary agreement known as the Paris Memorandum of Understanding on Port State Control (Paris MOU). Currently 27 countries are member of the Paris MOU. The European Commission, although not a signatory to the Paris MOU, is also a member of the Committee.<br><br>The Paris MoU is supported by a central database THETIS hosted and operated by the European Maritime Safety Agency in Lisbon. Inspection results are available for search and daily updating by MoU Members. Inspection results can be consulted on the Paris MoU public website and are published on the Equasis public website.<br><br>The Secretariat of the MoU is provided by the Netherlands Ministry of Infrastructure and Water Management and located in The Hague. | The Memorandum of Understanding on Port State Control in the Asia-Pacific Region, known as the Tokyo MOU, was signed among eighteen maritime Authorities in the region on 1 December 1993 and came into operation on 1 April 1994. Currently, the Memorandum has 20 full members, namely: Australia, Canada, Chile, China, Fiji, Hong Kong (China), Indonesia, Japan, Republic of Korea, Malaysia, the Marshall Islands, New Zealand, Papua New Guinea, Peru, the Philippines, the Russian Federation, Singapore, Thailand, Vanuatu and Vietnam.<br><br>The Secretariat of the Memorandum is located in Tokyo, Japan. The PSC database system, the Asia-Pacific Computerized Information System (APCIS), was established. The APCIS centre is located in Moscow, under the auspices of the Ministry of Transport of the Russian Federation. |

Port State Control is a check on visiting foreign ships to verify their compliance with international rules on safety, pollution prevention and seafarers living and working conditions. It is a means of enforcing compliance in cases where the owner and flag State have failed in their responsibility to implement or ensure compliance. The port State can require deficiencies to be corrected, and detain the ship for this purpose if necessary. It is therefore also a port State's defence against visiting substandard shipping.

MEMORANDUM OF UNDERSTANDING
ON PORT STATE CONTROL
IN THE ASIA-PACIFIC REGION

CONCENTRATED INSPECTION CAMPAIGN
ON EMERGENCY SYSTEMS AND PROCEDURES
01/09/2019 to 30/11/2019

| CIC on Emergency Systems and Procedures | | | |
|---|---|---|---|
| **Inspection Authority** | | | |
| **Ship Name** | | **IMO Number** | |
| **Date of Inspection** | | **Inspection Port** | |

QUESTIONS 1 TO 10 ANSWERED WITH A "NO" MUST BE ACCOMPANIED BY A RELEVANT DEFICIENCY ON THE REPORT OF INSPECTION.

| No. | Question | Yes | No | N/A |
|---|---|---|---|---|
| | **Documentation** | | | |
| 1 | Is the damage control plan readily available on board? | ☐ | ☐ | ☐ |
| | **Operating of Emergency system** | | | |
| 2* | Is the public address system capable of broadcasting emergency announcements? | ☐ | ☐ | ☐ |
| 3* | For ships with water level detectors installed, is the system and alarm arrangements operational? | ☐ | ☐ | ☐ |
| 4* | Is the steering gear system and its related emergency alarms operational? | ☐ | ☐ | ☐ |
| 5 | Does the muster list specify details in accordance with the requirements of SOLAS 1996-1998 Amendment, Chapter III, Regulation 37? | ☐ | ☐ | ☐ |
| 6* | Does the emergency source of electrical power supply its power correctly to essential equipment for safety in an emergency? | ☐ | ☐ | ☐ |
| 7a* | Where the emergency source of electrical power is a generator, is it in correct operational condition? | ☐ | ☐ | ☐ |
| 7b* | Where the emergency source of electrical power is an accumulator battery, are the batteries and its switchboard in good condition? | ☐ | ☐ | ☐ |
| 8* | Is the emergency fire pump in full operational condition? | ☐ | ☐ | ☐ |
| | **Crew familiarization with emergency systems** | | | |
| 9* | Where a fire drill and/or abandon ship drill was witnessed, was it found to be satisfactory? | ☐ | ☐ | ☐ |
| 10* | For the above checked emergency equipment, are the relevant crews familiar with the operation? | ☐ | ☐ | |
| 11 | Has the ship been detained, as a result of the Inspection Campaign? | ☐ | ☐ | |

NOTE
1. If "NO" is selected, for question marked an "*", the ship may be considered for detention.
2. Where there is no box in the N/A column, then either box "Yes" or "No" should be selected as appropriate.