



Informative Circular

No. TD **9491/2017**

Dated: 04.08.2017

PARISMOU

Concentrated Inspection Campaign on Safety of Navigation (SOLAS Ch.V)

From 1 September 2017 to 30 November 2017

The Paris Memorandum of Understanding (MoU) has announced that it will be conducting a concentrated inspection campaign (CIC) jointly with the Tokyo MoU with focus **on navigation safety, including Electronic Chart Display Information Systems (ECDIS)**. The Black Sea MoU is also expected to participate in same CIC campaign.

The inspection campaign will be held for three (3) months, commencing from **1st September 2017 and ending on 30th November 2017**. The campaign will target aspects of compliance provisions of SOLAS Chapter V **regardless of ship's type**.

Deficiencies found during the inspection will be recorded by the PSC officer and actions may vary from recording a deficiency and instructing the master to rectify it within a certain period, to detaining the ship until serious deficiencies have been rectified.

This CIC shall assure that:

- For ships of all types, **equipment shall conform with legal certificates**, and shall be accompanied with proper records
- Related equipment shall be accompanied with **valid type approval certificates**
- Relevant equipment shall receive **proper maintenance** and shall **function properly**
- The captain and officers in duty shall be **familiar with operation** of bridge equipment, especially ECDIS.

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Apart of the above, it has been seen that **ECDIS** had contributed much to maintain navigation safety and reduce navigation workload of seafarers since its application. It is not only provides conveniences for mariner all route planning, route monitoring, successive plotting of the vessel's position, etc., but also it provides appropriate alarms or indications with respect to the information displayed or malfunctions of the equipment. Therefore, the **CIC will focus on the installation and operation of ECDIS**, with concerns also on voyage arrangements and navigation equipment, including **AIS, VDR, BNWAS, signal lamps, etc.**

Port State Control officer shall be using a **standard questionnaire (last page of the present circular)** which lists areas to be covered during CIC. **Guidelines for each question** are also **attached** to help the Ship Owners/managers and Masters to ensure their vessels fulfill the CIC inspection requirements.

Ship Owners/managers and Masters of vessels trading in relevant MOU regions are advised to be guided by present circular and ensure compliance with the requirements.

Guidelines

Q.1 Is ship's navigation equipment in accordance with its applicable safety certificate (SEC, PSSC, CSSC)?

(01101 01103 01105 –S74/CI/R12)

The PSCO should confirm the **validity** of ship's SE certificate and verify by inspection if the navigation **equipment is actually fitted** in accordance with the **records** in following certificates:

1. Record of Equipment the Passenger Ship Safety Certificate (Form P) Section 5.
2. Record of Equipment the Cargo Ship Safety Equipment Certificate (Form E) Section 3.
3. Record of Equipment the Cargo Ship Safety Certificate (Form C) Section 5.

For **vessels below convention** size there is no requirements for a Record of Equipment, however SOLAS may require the carriage of certain navigation equipment for tonnages of less than 500 GT.

PSCO's task will further be to determine whether the ship is of an **acceptable standard** and be guided by any certificates or other documents issued by or on behalf of the flag state administration.

Q.2 Does the ECDIS have the appropriate up to date electronic charts for the intended voyage and is there a suitable back up arrangement?

(10116 –S74/CV/R19.2)

PSCO should check whether the **ECDIS on board is endorsed in the S/E supplement** or not, if endorsed, the following inspection should be carried out.

1. PSCO should check whether the **type approval** certificate of ECDIS is on board or not.
2. PSCO should check if the **chart information** in ECDIS is the **latest ENC/SENC standard edition**. The information should be appropriate for the **intended voyage and up to date**.
3. Some ECDIS equipment may operate in the Raster Chart Display System (**RCDS**) mode, and the chart information should be **RNC/SRNC**. When in RCDS mode, the **updated APC** should be equipped on board for reality use.
4. **Updated paper chart** folio for the entire planned voyage is the **acceptable back up arrangement**.

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5. PSCO should check if the ECDIS and back up system are capable of performing the **route planning and route monitoring**.
6. PSCO should check if the ECDIS is driven by **main power and emergency power**. If an **electronic device is used as back up** arrangement the **back up power supply should be separated from the ECDIS**, which means the power should be supplied by **separated switchboard** (the main power may be supplied by two systems but should distributed by different switchboards).

Q.3 Is there evidence that all watchkeeping officers comply with STCW requirements for ECDIS?

(01201 – STCW/A-II/1)

PSCO should check the qualification of officers on board in the ways specified as follows:

1. PSCO should check the **endorsement of ECDIS** operation restrictions in the **certificate of competence**.
2. PSCO should check the requirements on standard of competence of using ECDIS for **officers in charge of a navigational watch** on ships required to carry ECDIS. Every candidate for certification shall provide **evidence of having achieved the required standard of competence** in accordance with the methods for demonstrating competence and the criteria for evaluation competence listed in STCW/AII/1 (**general training and familiarization training evidence**).
3. **Training and assessment** in the use of ECDIS is **not required for those who serve exclusively on ships not fitted with ECDIS**, but these limitations shall be reflected in the endorsements issued to the seafarer concerned.

Q.4 Can watchkeeping Officers demonstrate familiarization with ECDIS?

(10133 15106 – STCW/A-VIII/2)

During the inspection, PSCO may require, check relevant records or ask for onsite **operation**, to make sure that the **watchkeeping personnel understand the functions and operation** of installations/equipment and are **familiar** with handling them.

1. PSCO should check if the officer is **capable of monitoring and adjusting information** which includes own position, sea area display, mode and

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- orientation, chart date displayed, route monitoring, user created information layers, contacts (when interfaced with AIS and/or radar tracking) and radar overlay functions (when interfaced).
2. PSCO should check if the officer is **able to set alarm parameters** for anti-grounding, proximity to contacts and special areas.
 3. PSCO should check the **officers' situational awareness** when using ECDIS including safe water and proximity of hazards, set and drift, chart data and scales election, suitability of route contact detection and management and integrity of sensors.
 4. PSCO should **check the familiarization** of officers for ECDIS **update procedure**.
 5. PSCO should check the officers' **route designing skill**.

Q.5 Can ship's VDR/SVDR record data fully?

(10114 – S74/CV/R18)

1. PSCO should check if the VDR/SVDR is **equipped in accordance with requirements of SOLAS** convention and its amendments.
2. PSCO should verify if the VDR/SVDR **annual performance test** is carried out. VDR/SVDR annual performance test may be carried out within 3 months before or after the anniversary date of SE certificate, as to be harmonized with requirements regarding surveys.
3. PSCO should check if the **power** of the VDR/SVDR is provided by the ship's **main source as well as emergency source** of electrical power.
4. PSCO should check the **number of alarms** shown on the VDR/SVDR **panel** and what do the alarms stand for (which could learn for the operation manual). If there is alarm indicated on the panel, PSCO can request officers to verify if concerned equipment is well connected to the VDR/SVDR.
5. PSCO should verify if the VDR/SVDR is **able to record data fully** according to the date of keel laid and the date the VDR/SVDR is installed to ship. PSCO can also refer to its annual performance test report.

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Q.6 Is second and/or third stage remote audible alarm of BNWAS recognized?

(10138 – S74/CV/R18/R19)

PSCO should check that:

1. If **means of activating** the reset function are only available in positions on the **bridge** giving **proper look out** and preferably adjacent to visual indications.
2. If **security protection** for BNWAS is properly kept. The means of selecting the **Operational mode** and the **duration of the Dormant Period (Td)** should be given safety protection so that **access** to these controls is for the **Master only**.
 - During normal navigating, for the **key control type**, the **key** shall be kept by **captain**,
 - For the **password type**, if the **password** is known by **Captain** only.
3. Considering different types of BNWAS, master and OOW shall be **familiar with different ways to initiate the reset function**.
4. PSCO should **check the operation** of BNWAS by OOW to confirm the system is in normal working condition. Once the BNWAS went into operation, the **second stage and/or the third stage remote audible alarm shall be activated when the first stage alarm had not been reset**.
5. The BNWAS should be **powered** from the ship's **main power supply**. The **malfunction indication** and all elements of the **Emergency Call** facility, if incorporated, should be **powered from the battery** maintained supply.

Q.7 Is the ship's Automatic Identification System transmitting correct particulars?

(10113 – S74/CV/R19.2.4)

1. PSCO should verify if AIS is subject to **annual test**. The AIS annual test should be in accordance with the survey requirements of the ship's applicable safety certificate and conducted within 3 months before or after each anniversary date of the Cargo Ship Safety Equipment Certificate.
2. PSCO should verify the **correctness of the ship static and dynamic information**, the substantial compliance with the practical condition of the ship.
 - a. **Static information** include: MMSI, Call Sign and name, IMO number, Length and beam, Type of ship and Location of position fixing antenna on the ship
 - b. **Dynamic information** include: Ship's position with accuracy indication and integrity status, Time in UCS, course over ground, Heading, Navigation status.

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- c. **Voyage related information** include: Ship's draught, Hazardous cargo (type), Destination and ETA.
3. PSCO should verify if **navigation information is input and updated** timely.
4. PSCO should check whether the operator can **display and consider incoming safety related messages and send safety related messages** as required.

Q.8 Does the passage plan, cover the whole voyage?

(10127 – S74/CV/R34, STCW/A-VIII/2)

PSCO should verify if the following aspects were taken into consideration:

- The **condition and state of the vessel**, its stability and its equipment, any operational limitations, its permissible draught at sea in fairways and in ports, its maneuvering data, including any restrictions
- Any **special characterizes of the cargo** (especially if hazardous) and its distribution, stowage and securing on board the vessel
- The provisions of a **competent and well rested crew** to undertake the voyage or passage
- Requirements for **up to date certificates and documents** concerning the vessel, its equipment, crew, passengers or cargo.

The following matters should be inspected:

- PSCO should verify if the voyage plan has been **made and approved by the captain** and if the voyage plan has been prepared covering the **entire voyage from berth to berth** and effectively executed.
- PSCO should verify if there is evidence that the plan **highlights areas** where specific fixes or fix frequencies would be expected.
- PSCO should verify if the passage plan **collects all relevant information** concerning the intended voyage and the passage plan is planned with adequate and **appropriate charts and other publications**.
- PSCO should verify if the passage plan is **clearly marked on charts**. For ships where an ECDIS is solely being used for navigation, **route planning and route monitoring in ECDIS should be checked**.
- PSCO should verify if any **changes** to the plan is made and **clearly marked and recorded** by officers engaged in navigational watch

Q.9 Does all crew know and respect the official working language as established and recorded in the ship's logbook?

(10136 – S74/CV/R14)

1. PSCO should verify if a working language is established and **recorded in the ship's log book**
2. PSCO should verify if **each seafarer** can understand and where appropriate, give orders and instructions and to report back in working language.
3. PSCO should verify if **senior officers** could conduct ship to shore communication in **English** (working language on bridge).
4. PSCO may check whether the **training manual**, the **fire safety operational booklet**, **muster list**, **garbage management plan**, **garbage placard**, **security plan**, noise notice board, etc. on board are written in the ship's working language.

The ship may be considered for **detention** if the crew were found **unable** to **communicate effectively** in working language.

Q.10 Is the crew familiar with the procedure of emergency operation of steering gear?

(10126 15106 – S74/CV/R26)

1. PSCO should verify if steering gear is **checked and tested** by ship's crew **before departure** by means of checking relevant **records**.
 - a. the **full movement of the rudder** according to the required capabilities of the steering gear
 - b. a **visual inspection** for the steering gear and its connecting linkage, and
 - c. the operation of the **means of communication** between the navigation bridge and steering gear compartment.
2. PSCO should check if there is evidence of the emergency steering gear **drills** which shall take place at least **every three months**. PSCO should also check if the drills include **direct control** within the steering gear compartment, the **communications procedure** with the navigation bridge and where applicable the operation of **alternative power supplies**.
3. PSCO should check if master and duty officers are **familiar** with the procedures for **changing from local steering gear control to remote** steering gear control.
4. PSCO should verify if there are simple **operating instructions with a block diagram** showing the **change over procedures** for remote steering gear control systems and steering gear power units **permanently displayed** on the navigation **bridge** and in the **steering compartment**.

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5. PSCO can request **crew to demonstrate each alarm** of steering gear.
6. PSCO can request crew to **demonstrate emergency steering operation** as to check the degree of familiarity.

Q.11 Are the exhibition of navigation lights/signal lights in accordance with the requirements of COLREG72?

(10109 – COLREG72/CIII)

The ship should be equipped with navigational/signal lights including **masthead light, sidelights, stern light, towing light, all round light, flashing light and maneuvering lights**, etc, as required by COLREG72, to indicate the state or nature of the ship.

A **masthead light**, sidelights and stern light installed on board a ship on or after 1 January 2009 not less than 50 m in length should be duplicated or be fitted with duplicate lamps.

A **daylight lamp**, or other means, should be equipped on ships of 150 GT and upwards and passenger ships irrespective of size constructed on or after 1 July 2012, using an energy source of electrical power not solely dependent upon ship's power supply.

PSCO should check:

1. If the navigational/signal lights are in **normal working condition**.
2. If the navigational/signal lights are supplied by main power and emergency power.

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Questionnaire

CONCENTRATED INSPECTION CAMPAIGN ON SAFETY OF NAVIGATION (SOLAS CH.V)

Inspection Authority:			
Ship Name:		Flag:	
IMO Number:		Classification Society:	
Date of inspection:		Inspection Port:	

No.	Item	Yes	No	N/A
Q.1*	Is ship's navigation equipment in accordance with its applicable safety certificate (SEC, PSSC, CSSC)? (01101 01103 01105 –S74/CI/R12)			
Q.2*	Does the ECDIS have the appropriate up to date electronic charts for the intended voyage and is there a suitable back up arrangement? (10116 –S74/CV/R19.2)			
Q.3	Is there evidence that all watchkeeping officers comply with STCW requirements for ECDIS? (01201 – STCW/A-II/1)			
Q.4*	Can watchkeeping Officers demonstrate familiarization with ECDIS? (10133 15106 – STCW/A-VIII/2)			
Q.5*	Can ship's VDR/SVDR record data fully? (10114 – S74/CV/R18)			
Q.6*	Is second and/or third stage remote audible alarm of BNWAS recognized? (10138 – S74/CV/R18/R19)			
Q.7	Is the ship's Automatic Identification System transmitting correct particulars? (10113 – S74/CV/R19.2.4)			
Q.8	Does the passage plan, cover the whole voyage? (10127 – S74/CV/R34, STCW/A-VIII/2)			
Q.9*	Does all crew know and respect the official working language as established and recorded in the ship's logbook? (10136 – S74/CV/R14)			
Q.10*	Is the crew familiar with the procedure of emergency operation of steering gear? (10126 15106 – S74/CV/R26)			
Q.11	Are the exhibition of navigation lights/signal lights in accordance with the requirements of COLREG72? (10109 – COLREG72/CIII)			
Q.12	Is the ship detained as a result of this CIC?			

Notes: If "No" is selected, for questions marked with "*" PSCO should use his/her professional judgment regarding the seriousness of the deficiency as to whether the ship may be considered for detention. The detail of any deficiencies including serious deficiencies, if any, should be appropriately entered on the PSC Report Form B.

Where there is box in the N/A column, then either box "Yes" or "No" should selected as appropriate.