

PARIS MOU AND TOKYO MOU CIC 2023 ON FIRE SAFETY

Paris and Tokyo MoU have announced a joint Concentrated Inspection Campaign (CIC) that will be held from September 1 until November 31 2023, focused on FIRE SAFETY, since many related deficiencies have been found in recent years. The purpose of this CIC is to ensure that:

- The integrity of fire safety measures onboard is maintained in accordance with applicable rules
- Relevant equipment is always readily available for operation
- Crew are familiar with established requirements regarding fire safety and ISM Code.

PSC Officers will use a pre-defined questionnaire with 10 questions to assess that:

- Information and equipment provided onboard complies with the relevant requirements
- Master and Officers are familiar with operations relating to fire safety, both from a technical and operational aspect
- Ships and their equipment are maintained in such a way as to ensure safe operations.

It is worth mentioning that the Top detainable deficiencies related to fire safety are the following:

- Fire dampers
- Oil accumulation in engine room, oil-soaked insulation, fuel leaks and excessive oil in the bilge
- Fire doors/openings in fire-resisting divisions
- Fire detection systems
- Fixed fire-extinguishing installations
- Means of control (opening, pumps) in machinery spaces
- Crew performance during fire drills

	Questions	Yes	No
1*	<p>Are the emergency escape routes maintained in a safe condition? (07120/04103)</p> <ul style="list-style-type: none"> • Ensure that all escape routes from the accommodation, machinery spaces and any other spaces onboard are properly identified, marked, accessible, in a safe condition, and clear of obstacles. • Persons onboard can safely and swiftly escape to the lifeboats and life raft embarkation deck. • In case external doors are locked (for security reasons), ensure rapid means of opening doors from inside are provided and functional. • If applicable, securing devices of emergency exit hatches to open deck, are operational and of a type to be opened from both sides. • Main and emergency lighting is operational. For an 18-hour period, emergency lighting shall be supplied in all service and accommodation alleyways, stairways and exits, personnel lift cars, and personnel lift trunks. • Emergency lighting and marking of escape routes for Passenger Ships: In addition to emergency lighting, the means of escape, including stairways and exits, shall be marked by lighting or photoluminescent strip indicators placed no more than 300 mm above the deck at all points of the escape route, including angles and intersections. 		
2*	<p>Are the fire doors maintained in good working condition? (07105)</p>		

- Ensure all fire doors (accommodation, machinery spaces, storage areas, etc.) are free of obstructions, corrosion, wastage modifications, gaps (between door & frame) and with approved methods to hold the door open where it is required to be self-closing.
- Ensure that all doors' components (lock mechanism, strike plate, outer skin, frame, etc.) are undamaged and functioning normally.
- Consult the Fire Control Plan to identify which of the doors are fire doors and their characteristics (e.g., fire resistance equivalent to that of the division in which they are fitted and to the bulkheads in which they are fitted, and provision of self-closing arrangements).
- Verify that all fire door control panel indicators, if provided on the continuously manned central control station, are functional.
- Randomly test fire doors for local operation.
- Randomly test remotely controlled fire doors for proper release (ensure that announcement is made on ship's PA system before the test to inform all to stand clear).
- Check if self-closing fire doors are properly lashed in open position by means of wedges, ropes, or hold-back hooks (especially fire doors in the stairwells or engine room and on the escape trunks).
- Ensure doors close and latch properly (often times, latches may not engage properly due to crew tuning the closing piston to prevent doors slamming).
- Check that the doors fitted in boundary bulkheads of machinery spaces of category A are reasonably gastight and self-closing.
- Check that modification and/or repair of fire doors, if any, has been accepted by ship's Administration.
- Check, as far as practicable, that fire doors have the appropriate fire resistance for the bulkhead in which they are fitted – Class A or B.
- Release mechanism for Cargo Ships: Doors required to be self-closing shall not be fitted with hold-back hooks. However, hold-back arrangements fitted with remote release devices of the fail-safe type may be utilized.
- **Note:** Fire doors not required to be self-closing by any SOLAS requirement can be fitted with a hold-back hook, even they have self-closing devices.
- **Release mechanism for Passenger Ships:** Fire doors in main vertical zone bulkheads, galley boundaries and stairway enclosures other than power-operated watertight doors and those which are normally locked, shall be self-closing and capable of release locally from both sides as well as remotely from the continuous manned central control station. Fire doors' closed position indication to be provided at the central control station.

3*

Have the fixed fire detection and fire alarm systems, been periodically tested in accordance with the requirements of the Administration? (07106)

- Verify the system is fully operational without indicating any faults.
- Ensure information about the spaces covered and the location of the sections is displayed adjacent to each indicating unit
- Ensure all zones and detectors are active.
- Confirm that systems' inspections and tests have been carried out at intervals defined in ship's PMS.
- Check that the following components of fixed fire detection and alarm systems, including those covering cargo and machinery spaces, have been periodically tested in accordance with the Administration requirements:
 - Fixed detection and fire alarm control panel indicators.
 - Detectors and manual call points.
 - Emergency power supply switchover.

	<ul style="list-style-type: none"> • Check for faults and/or alarms of general fire detection and fire alarm panel and repeaters. • Check detectors and manual call points for damage, obstructions or being painted over. • Verify test records for the Fire Detection and Alarm Systems. • The test shall be conducted by means of: <ul style="list-style-type: none"> ○ equipment producing hot air at the appropriate temperature ○ smoke or aerosol particles having the appropriate range of density or particle size, or other phenomena associated with incipient fires to which the detector is designed to respond. • Maintenance, testing and inspections shall be carried out based on IMO guidelines. 		
4*	<p>Are the ventilation closing appliances capable of being closed? (07116)</p> <p><i>(Ventilation closing appliances are the means of closing fitted at the inlet or outlet of a ventilation system such as fire flaps, louvers, etc.)</i></p> <ul style="list-style-type: none"> • Check the proper operation of ventilation closing appliances, and that there is no presence of holes or severe deterioration. Their operation must not be obstructed by equipment, stores or cargo. • Ensure that each closing device for ventilation inlet or outlet is properly marked with its required position of either open or closed while in port and conducting cargo operations. • Prior to arrival, crosscheck all ventilation closing appliances (skylights, etc.) proper closing and verify no light passes through. • Check if ventilation closing appliances indicate whether the shutoff is open or closed. The means of closing shall be easily accessible as well as prominently and permanently marked. • The main inlets and outlets of all ventilation systems shall be capable of being closed from outside the spaces being ventilated. • Exception (Passenger ship ≤36 passengers, cargo ships and tankers): Divisions between control stations (emergency generators) and open decks may have air intake openings without means for closure, unless a fixed gas fire-fighting system is fitted. (SOLAS II-2/9.2.2.4 (Passenger); 9.2.3.3 (Cargo ships); 9.2.4.2 (Tankers)). • Battery room ventilators are to be fitted with a means of closing whenever: <ul style="list-style-type: none"> ○ The battery room does not open directly onto an exposed deck. ○ The battery room is fitted with a fixed gas fire-extinguishing system. ○ Where a battery room ventilator is fitted with a closing device, then a warning notice stating, for example “This closing device is to be kept open and only closed in the event of fire or other emergency – Explosive gas”, must be provided at the closing device to mitigate the possibility of inadvertent closing. ○ The structural fire protection, including fire resisting divisions and protection of openings and penetrations in these divisions, shall be kept in good order. 		
5*	<p>Are the means of control for power ventilation of machinery spaces operable from two grouped positions? (07116)</p> <ul style="list-style-type: none"> • Check operational status of control for power ventilation of machinery spaces. • Check both position systems. • Apart from functionality, check that there are not any closing prevention means to ventilation systems. 		

- Means of control shall be provided for stopping ventilating fans. Controls for the power ventilation serving machinery spaces shall be grouped so as to be operable from 2 positions, one of which being outside such spaces. If applicable, check that the means provided for stopping the power ventilation of machinery spaces are entirely separate from ventilation of other spaces.

6*

Can each fire pump deliver at least the two required jets of water? (07113)

- Ensure that during last tests of fire pumps, the relevant performance data (applied pressure) indicated optimum performance of the pump.
- The capacity of the required designated fire pumps must not have degraded. Check the pressure produced at the pump under working conditions.
- Each of the required fire pumps (other than any emergency pump) shall have a capacity:
 - no less than 80% of the total required capacity divided by the minimum number of required fire pumps
 - in any case, not less than 25 m³/h and each such pump shall in any event be capable of delivering at least the 2 required jets of water.
- These fire pumps shall be capable of supplying the fire main system under the required conditions. Where more pumps than the minimum of required pumps are installed, such additional pumps shall have a capacity of at least 25 m³/h and be capable of delivering at least the 2 streams of water required. More than 2 streams of water may be required of specific ships.
- Sanitary, ballast, bilge or general service pumps may be accepted as fire pumps. Consult the approved fire-fighting arrangements and/or ship's fire control plan to confirm those pumps that are accepted as fire pumps.

7*

Are the means of control provided in a position outside the machinery space for stopping ventilation and oil transfer equipment operational? (07114)

- Check the operational status of the remote means of stopping ventilation and oil transfer.
- Quick closing valves to be free from closing preventive means, fully operational, not blocked, modified or leaking.
- Ensure they have been regularly tested as per ship's PMS.
- Crew must be conversant in activating the stopping procedure and then reset the system to open position as required.
- Check permanent means for proper operation of preventive closing valves.
- The means of controls must be accessible, not blocked and ready for use.
- Verify, while the crew is demonstrating the test, that the ventilation and oil transfer pumps are either stopped or their appropriate circuit breaker tripped.
- Means of control shall be provided for stopping forced and induced draught fans, oil fuel transfer pumps, oil fuel unit pumps, lubricating oil service pumps, thermal oil circulating pumps and oil separators (purifiers).
- Means of control shall be provided for:
 - opening and closure of skylights, closure of openings in funnels which normally allow exhaust ventilation, and closure of ventilator dampers
 - permitting the release of smoke
 - closing power-operated doors or actuating release mechanism on doors other than power-operated watertight doors
 - stopping ventilating fans, and
 - stopping forced and induced draught fans, oil fuel transfer pumps, oil

	fuel unit pumps and other similar fuel pumps.		
8*	<p>Is the room for the fixed gas fire extinguishing medium used only for this purpose? (07109)</p> <ul style="list-style-type: none"> • All items irrelevant to fire extinguishing system to be removed from the area. • Detailed check of access control in the fixed gas extinguishing room. • Operational step by step activation guidance to be posted next to activation control panel (for local activation). • When the fire-extinguishing medium is stored outside a protected space, it shall be stored in a room located behind the forward collision bulkhead and used for no other purposes (Exception: Sample extraction smoke detection system control panel can be located in the storage room if the system uses CO2 discharge pipes). • If the CO2 system discharge pipes are used for the sample extraction smoke detection system, the control panel can be located in the CO2 room provided that an indicating unit is located on the Bridge. 		
9*	<p>Are the valves used in the fire main line operational? (07110)</p> <ul style="list-style-type: none"> • Ensure the functional condition of the valves (Isolation, Expansion and Fire hydrant) and test it prior arrival at Port. • SMS related maintenance and inspection records to be available for review. • Ensure the line is free of temporary repairs. • Verify, by a sample functional test, that the isolating valve(s) installed to separate the section of the fire main within the machinery space (containing the main fire pump or pumps) from the rest of the fire main, are in good working condition. • For Tankers, verify by a sample functional test, that the isolation valves fitted in the fire main at poop front and on the tank deck are in good working condition. • Verify, by a sample functional test, that hydrant valves are in good working condition. When the fire main line is pressurized, no leakage should be observed from the hydrant once the valve is completely shut. 		
10*	<p>Where a fire drill was witnessed, was it found to be satisfactory? (04109/07125)</p> <ul style="list-style-type: none"> • Ensure that a Fire drill takes place prior to arrival to Port of call - ask the Master to take photos and send them to Office along with an evaluation. • Ensure that each crew member is aware and comprehends the duties and actions expected during the drill. Verify that crew can communicate, receive, and carry out instructions efficiently. • Check fireman outfits and related equipment - crew to be familiar with their use. • Check that firefighter radios and accessories (headset etc.) are in good condition and that fire party can communicate effectively during drills. • Ensure that the Master is in control of the emergency and the information flow comes from one central command location. • Crew members shall be trained to be familiar with the arrangements of the ship as well as the location and operation of any fire-fighting systems and appliances that they may be called upon to use. • Check records of the previous Fire drills. • Each fire drill shall include: 		

	<ul style="list-style-type: none"> ○ reporting to stations and preparing for the duties described in 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 fireman's outfit 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 abandonment of the ship. 		
	If “No” is ticked for questions marked with an asterisk “*”, the ship may be considered for detention.		
Additional Checkpoints (recommended to be checked)			
	Is the Water Mist System in Engine Room fully operational and set on auto mode? Are there any detectors covered or obstructed?		
	Is the water sprinkler system working satisfactorily? Is the system free of any leakage or clogged nozzle?		
	<p>Are Engine Spaces completely free of flammable liquids leaks?</p> <ul style="list-style-type: none"> ● Ensure that thorough inspection of engine spaces is undertaken by C/O and 2nd Engineer verifying absence of leaks. 		
	<p>Have all maintenance logs been properly completed?</p> <ul style="list-style-type: none"> ● Ensure that all SMS maintenance forms and required logs are properly completed/updated. 		
	<p>Has the maintenance of the equipment been completed in accordance with the PMS?</p> <ul style="list-style-type: none"> ● Ensure that ship’s PMS is up-to-date. ● Check outstanding jobs - verify that the Company’s procedures for deferring any planned maintenance task have been followed. ● Ensure that maintenance records are available for all tasks that have been closed-out (as applicable). 		

It is strongly advised:

- Companies, Officers and crew onboard to be effectively prepared to address this CIC successfully.
- Fire training manuals onboard to be ship specific.
- Superintendents to focus on onboard training during visits.
- Additional fire emergency drills to be conducted.
- Responsible Officer(s) to be familiar with fire doors class and location as per ship’s Fire Control Plan.
- Responsible Officer(s) to crosscheck all self-closing mechanisms prior to arrival.