**03.09.01 PURPOSE**

This procedure is only applicable if the Vessel is running in UMS mode.

Before operation with periodically unmanned engine room is practised, the procedures laid down in this chapter shall be complied with.

This procedure is established to provide proper guidelines for the safe operation of the machinery during the unmanned period, and to ensure that it is executed in compliance with latest flag state regulations for the operation with periodically unmanned engine room.

**03.09.02 RESPONSIBILITY**

It is the responsibility of the Chief Engineer to implement this procedure and to instruct and supervise the engine officers and ratings involved in the UMS operation underway. They must at all times be fully acquainted with the relevant information material which shall contain information relating to operation, maintenance, fault location, repair, emergency operation etc.

**03.09.03 WORK PERFORMANCE**

**Instructions**

Operating instructions for the monitoring and remote control installations shall be available on board. These instructions shall describe the normal routines for taking over manoeuvring, manoeuvring responsibility and supervision responsibility to and from the bridge, the engine room and any other check point (bridge wings, emergency manoeuvring stand), these instructions shall furthermore include measures to be followed in the case of an alarm.

**Transfer of Watch Responsibility from Engine Room to Bridge**

Before an unmanned period the duty engineer must certify that all machinery, pumps, alarms etc. are in the correct mode / condition for the unmanned period.

An inspection round must be performed in order to verify that all is in order before conditions are changed to unmanned engine room.

The deck officer on duty should be informed that the engine plant is ready for unmanned operation.

The deck officer on duty should be informed where the duty engineer can be reached during the unmanned period, when outside cabin and mess rooms.

The engineer on duty must at any time be staying at a place where he can be called from the bridge, also in the event of power failure.

The engineer on duty is selected on duty engineer panel in engine control room. The engineer on duty is indicated on alarm panels in accommodation (in most vessels).

**Operations**

The duty engineer shall ensure that the main propulsion plant and auxiliary systems are kept under constant surveillance, inspections are made of the machinery and steering gear spaces at suitable intervals and appropriate action is taken to remedy any malfunction discovered.

**Alarms During UMS Period**

Any alarms occurring during the unmanned period are now transferred to the bridge and to the cabin of the duty engineer and alarm panels in mess/day room.

The duty engineer acknowledges receipt of the alarm on the alarm panel, and then goes to the engine room.

Upon arrival in the engine room, the alarm signal is acknowledge on the alarm panel.

During this confirmation the bridge get informed that the engineer has arrived to the engine room. If the alarm has not been acknowledged within a pre-set time, an alarm will be released on the bridge, at chief engineer's panel and in public rooms.

Before entering the engine room during the unmanned period, the duty engineer shall activate the "Dead Man Alarm System". The system has a timer, and if this system has not been reset or turned off before the timer expires, an alarm will automatically be released on the bridge.

If "Dead Man Alarm System" is not fitted, the bridge shall be informed before entering the engine room.

The duty engineer must inform the bridge if he intent to carry out any routine inspection/work in the engine room including expected duration of same. No critical jobs, may be carried out by the duty engineer alone during UMS mode. Upon return to the engine control room or the accommodation the bridge must be notified that work has completed and whether the unmanned period are continue.

**Bridge Notification**

The duty engineer should bear in mind that changes in speed resulting from machinery malfunction or loss of steering may imperil the safety of the Vessel and life at sea. The bridge should be immediately notified in the event of fire, of impending actions in machinery spaces that may cause reduction in Vessel's speed, imminent steering failure, stoppage of the vessel's propulsion system or any alteration in the generation of electric power or similar threat to safety. This notification, where possible should be accomplished before changes are made in order to afford the bridge the maximum available time to take whatever actions are possible to avoid a potential marine casualty.

**03.09.04 DOCUMENTATION AND FILING**

The running of machinery is documented in the Engine Logbook. The Chief Engineer shall ensure that **UMS Checklist** is duly completed as applicable and records of checks made in Engine Log Book with indication of results of checks.

This procedure refers to following forms and checklists:

* UMS Checklist