|  |  |
| --- | --- |
| Overview | This standard covers the competence required to keep an engineering watch by taking over, handing over and keeping watch.  It includes taking over and handing over the watch to other officers, carrying out defined watch-keeping duties to maintain operation of the machinery and safety of the engine-room and the vessel.  **Target Group**  This standard applies to individuals at an operational level in charge of a watch in manned engine-rooms and those designated to perform duties in a periodically unmanned engine room on vessels of any type and of any registered power. |

|  |  |
| --- | --- |
| **Performance criteria**  You must be able to: | 1. take over, maintain and handover the watch in accordance with internationally accepted principles and procedures and established safety rules and regulations 2. establish the condition of the machinery on assuming the watch and confirm the vessel requirements 3. communicate clearly and concisely any duties to be carried out to any engine-room personnel 4. execute bridge orders promptly 5. monitor the engineering machinery, equipment and systems to maintain the requirements of the vessel in accordance with manufacturer’s recommendations and accepted principles and procedures 6. respond correctly to engine room malfunctions and emergencies, identify, take action and report malfunctions and deviations promptly to maintain safe operation 7. ensure that all measures are taken to ensure safety of personnel and the vessel and protection of the environment from pollution 8. maintain the machinery space log-book and other records fully and accurately to cover the movements and activities relating to the engineering systems |

|  |  |
| --- | --- |
| Knowledge and understanding  You need to know and understand: | 1. the duties in taking over and accepting and handing over a watch 2. the statutory requirements and internationally agreed principles and procedures for keeping an engineering watch:   K2.1 at sea  K2.2 during restricted visibility  K2.3 in coastal and congested waters  K2.4 at anchor  K2.5 in port   1. the start up and shut down of main and auxiliary machinery and systems 2. the monitoring and adjustment of running machinery to maintain the requirements of the vessel 3. the alarm and emergency shutdown system including:   K5.1 fire extinguishing gas alarms and earth faults  K5.2 how to deal with alarms and multiple alarms  K5.3 identification of priority of alarms  K5.4 recognition of conditions requiring immediate assistance   1. maintenance of the machinery space log-book and the significance of the readings. 2. the function and importance of Engineroom Log Book and other records such as oil record book 3. the initial action as Officer of the Watch in the event of malfunction or failure of equipment, main engine failure or steering gear failure and initial damage assessment and control 4. the changeover routines for systems from remote/automatic to local control as required in normal operation 5. the contingency plans and action to take as Officer of the Watch in the event of fire or accident, particularly oil systemsthe measures, precautions and procedures to avoid pollution of the marine environment, to include :   K11.1 restricted areas  K11 2 oily water separator  K11.3 oil record book  K11.4 disposal of pollutants  K11.5 SOPEP manual   1. the use of internal communication systems, communicating with engineroom and bridge personnel and effective forms of communication 2. the importance and use of records for commercial and legislative purposes 3. the application of Statutory Regulations and guidelines, organisational instructions and guidance and vessel contingency plans |

|  |  |
| --- | --- |
| **Developed by** | Maritime Skills Alliance |
| **Version number** | 2 |
| Date approved | January 2012 |
| Indicative review date | December 2016 |
| Validity | Current |
| Status | Original |
| Originating organisation | Skills for Justice |
| Original URN | MSA C03 |
| Relevant occupations | Engineer |
| Suite | Maritime |
| Key words | engineering watch; taking over; handing over; keeping watch; |