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| Overview | This standard covers the competence to determine the operating conditions and methods for vessel engineering machinery and systems using manufacturer's recommendations, design parameters and the requirements of the voyage. Procedures are followed to produce operating instructions with clearly defined objectives and justification for any variations. Resources are identified, selected and recorded.  **Target Group**  This standard applies to those at a management level having responsibility for the planning and scheduling of Marine Engineering Systems on vessels of any type and of any registered power. |

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| **Performance criteria**  You must be able to: | 1. develop a plan taking into account the defined operating conditions, operating instructions and resources 2. correctly determine and define the machinery operating conditions and methods to meet the objectives of the company and vessel using manufacturer's recommendations 3. define the allowable variations outside the normal machinery running conditions, justify any variations made to manufacturers recommendations and determine the procedures required to run the machinery outside the authorised defined conditions 4. take account of changes in conditions resulting from machinery monitoring 5. communicate the operating conditions and methods to those responsible for implementation using organisational procedures and provide operating personnel with schedules which reflect their responsibility and known competence 6. define clearly the times and occasions when to seek assistance 7. accurately determine and justify resource requirements from operational objectives and plans and show that the agreed resources meet statutory, organisational and budgetary constraints 8. monitor and confirm that the plan and schedule is matched to the design parameters of the power installation and the requirements of the voyage |

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| Knowledge and understanding  You need to know and understand: | 1. the principles of operation and constructional detail of marine engineering systems, equipment and control systems 2. the normal operating parameters for vessel systems and equipment 3. the limiting values for the operation of equipment and systems outside normal parameters 4. the operational requirements of the vessel's voyage 5. how to identify and assess the competence of individuals 6. the delegation of responsibilities for operating the vessel's machinery and the level of supervision required by individuals 7. the statutory restrictions on the working hours of individuals 8. the use of internal communication systems and effective forms of communication. 9. the importance and use of records for commercial and legislative purposes. 10. how to evaluate and apply Statutory Regulations and guidelines, organisational instructions and guidance and vessel contingency plans |

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