

## KP3 Offshore Marine Template

INSTALLATION	DATE(S)	INSPECTOR(S)

Persons interviewed	Position

Offshore B	<b>Communication between onshore support staff and offshore maintenance technicians</b>		
<p>1. Who are the marine technical authorities, discipline engineers and onshore support team for your installation?</p> <p>2. How often do you have contact with them? How often do you meet them on the installation?</p> <p>3. Are you satisfied that you are getting adequate support in the marine area?</p>			
<b>RELEVANT LEGISLATION</b> (a) MHSWR 5 Arrangements for effective planning, organisation, control, monitoring and review of preventive and protective measures			
<b>NON COMPLIANCE/ MAJOR FAILING</b>	<b>ISOLATED FAILURE/ INCOMPLETE SYSTEM</b>	<b>IN COMPLIANCE / OK</b>	<b>NOT TESTED/NO EVIDENCE</b>

**Response / comments**

Offshore C	<b>Competence of maintenance technicians and their supervisors</b>		
<ol style="list-style-type: none"> <li>1. Supervisors - tell me about the training you received once you were promoted to maintenance supervisor level?</li> <li>2. Is there a company requirement for maritime certification?</li> <li>3. Technicians - suggest you probe competence by asking a few questions on practical subjects relating to safety critical work.</li> <li>4. Tell me about the training you've had on the maintenance management system (eg. SAP, Maximo, etc). Is the maintenance management system reliable and easy to use?</li> <li>5. Has it recently been changed, is the new system user friendly?</li> </ol>			
<p>RELEVANT LEGISLATION</p> <p>(a) HSWA S2(2)(a) requires the provision of such information, instruction, training and supervision SFAIRP safe</p> <p>(b) PUWER 8(1) Every employer shall ensure that all persons who use work equipment have adequate H&amp;S information</p> <p>(c) PUWER 9(1) Every employer shall ensure that all persons who use work equipment have received adequate training</p>			
<b>NON COMPLIANCE/ MAJOR FAILING</b>	<b>ISOLATED FAILURE/ INCOMPLETE SYSTEM</b>	<b>IN COMPLIANCE / OK</b>	<b>NOT TESTED/NO EVIDENCE</b>

**Response / comments:**

Offshore D	<b>Maintenance of safety critical elements (SCE)</b>		
<ol style="list-style-type: none"> <li>1. How were the SCEs agreed, has the ICP expressed concern over missing or invalid SCEs, is the ICP/Class Society happy with the SCE list, particularly in the marine area?</li> <li>2. Does the maintenance work order for a SCE contain a statement of or reference to the relevant SCE performance standard?</li> <li>3. Does the work order describe any tests to be conducted prior to re-commissioning, to demonstrate that the relevant performance standards has been met?</li> <li>4. How is the result of this test recorded (eg. pass/fail/remedied)?</li> <li>5. What do you do if the test doesn't meet the acceptance criteria?</li> </ol>			
<p><b>RELEVANT LEGISLATION</b></p> <ul style="list-style-type: none"> <li>(a) PFEER 5 Assessment - establish appropriate performance standards</li> <li>(b) SCR 2 (7A) SCEs remain in good repair and condition</li> <li>(c) PFEER 19 Suitability and condition of plant</li> <li>(d) PUWER 5 Maintenance</li> </ul>			
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**Response / comments:**

Offshore E	<b>Supervision</b>		
<p>1. Who confirms that maintenance tasks have been completed in accordance with the instructions on the work order? How is this done in practice (visual inspection of plant, inspection of maintenance records, discussion with technicians)?</p> <p>2. Supervisors - how much time do you spend out on deck or in the machinery spaces? Do you feel it's enough?</p> <p>3. How do you monitor maintenance work undertaken by specialist contractors (eg. mooring windlasses or propulsion motors)?</p>			
<p><b>RELEVANT LEGISLATION</b></p> <p>(a) HSWA S2(2)(a) The provision and maintenance of plant and systems of work that are, SFAIRP safe</p> <p>(b) HSWA S2(2)(c) requires the provision of such information, instruction, training and supervision SFAIRP safe</p>			
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**Response / comments:**

Offshore F	<b>Recording of completed maintenance work</b>		
<ol style="list-style-type: none"> <li>1. On completion of a maintenance task, who enters the data onto the maintenance software to record that the tasks have been completed?</li> <li>2. Is there a template to assist in the capture of all of the required data (eg. fault codes, 'as found' condition of the plant, etc)?</li> <li>3. Does anybody check the quality of data recorded?</li> <li>4. Is the maintenance recording system every audited by the beach, when was the last time, what were the findings?</li> <li>5. Is the status of a performance standard test recorded (pass/fail/remedied)?</li> </ol>			
<p>RELEVANT LEGISLATION</p> <p>(a) PUWER 5(1) work equipment maintained in an efficient state, in efficient working order, and in good repair</p> <p>(b) PUWER 5(2) maintenance log kept up to date</p>			
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**Response / comments:**

Offshore G	<b>Backlogs</b>		
<ol style="list-style-type: none"> <li>1. Do you have access to any reports on the level of backlog? What's the current position? Is the backlog getting better or worse?</li> <li>2. How are you made aware that there is a backlog in the completion of maintenance and in particular to that related to marine SCEs?</li> <li>3. How is the backlog being addressed? Have any additional resources been allocated (eg. campaign teams, etc)?</li> <li>4. What proportion of your time is spent on maritime corrective maintenance as opposed to planned maintenance?</li> </ol>			
<p>RELEVANT LEGISLATION</p> <p>(a) MHSWR 3 - suitable and sufficient assessment of the risk</p> <p>(b) PUWER 5 - work equipment maintained in an efficient state, in efficient working order, and in good repair</p> <p>(c) PUWER 6(2)(a) Every employer shall ensure that work equipment exposed to conditions causing deterioration which is liable to result in dangerous situations is inspected at suitable intervals</p>			
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**Response / comments:**

Offshore H	<b>Deferrals</b>		
<ol style="list-style-type: none"> <li>1. How are deferrals authorised and justified? When is the onshore support team (eg. technical authorities) consulted?</li> <li>2. Are you aware of any deferred or delayed maintenance tasks?</li> <li>3. If maintenance of an SCE is deferred, is any assessment done to identify and implement additional measures (eg. increased inspection) to restore the integrity of the barriers weakened by the deferral?</li> <li>4. Can you think of an example where maintenance has been deferred and other actions have been put in place to ensure that safety is maintained, eg. to the main propulsion or power generation systems?</li> <li>5. What is the current level of deferrals? Is this getting better or worse?</li> <li>6. Are you keeping up to speed with the maintenance system or do you have to defer too many risks?</li> </ol>			
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**Response / comments:**

Offshore I	<b>Corrective maintenance</b>		
<ol style="list-style-type: none"> <li>1. When defects and anomalies are identified, who decides if they're significant? When would the onshore support team be consulted?</li> <li>2. How are the risks to continued safe operation evaluated for their degrading effect on the major hazards (eg. passing of safety critical shipside valves making it impossible to maintain some of the sea water systems)? How is this decision recorded?</li> <li>3. Do you feel that you have enough technicians to cope with corrective maintenance? Have you every been asked?</li> </ol>			
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**Response / comments:**

Offshore J	<b>Defined life repairs</b>		
<ol style="list-style-type: none"> <li>1. Defined life or temporary repairs occur when the replacement part is not to the original specification (ie. not a 'like for like' repair). What is the procedure for justifying and approving temporary repair? Who would be consulted onshore? Is anyone consulted to approve a temporary repair?</li> <li>2. Can you think of an example where the wrong part was fitted as the correct one was not available, who decided that it should be done?</li> <li>3. Is the 'temporary' repair assigned a defined life? Is a work order generated on the maintenance scheduling software to record the defined life and to schedule when the temporary repair should be replaced with a conventional repair?</li> <li>4. Is a work order devised for the inspection and maintenance of the defined life repair?</li> <li>5. Request a copy of the temporary repairs register or the means by which temporary repairs are recorded.</li> </ol>			
<b>RELEVANT LEGISLATION</b> (a) MHSWR 3 - suitable and sufficient assessment of the risk (b) MHSWR 5 Arrangements for effective planning, organisation, control, monitoring and review of preventive and protective measures (c) PUWER 6(2)(a) Every employer shall ensure that work equipment exposed to conditions causing deterioration which is liable to result in dangerous situations is inspected at suitable intervals (d) PFEER 19 Suitability and condition of plant			
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**Response / comments:**

Offshore K	<b>Measuring the effectiveness of the maintenance system</b>		
<p>1. What information do you get to see regarding the performance of maintenance activities? Provide a sample report.</p> <p>2. How do you know that the overall maintenance system is effective, who if anyone measures it and informs you, are you aware of any concerns?</p>			
<p>RELEVANT LEGISLATION</p> <p>(a) HSWA S2(2)(a) The provision and maintenance of plant and systems of work that are, so far as is reasonably practicable, safe and without risks to health</p> <p>(b) MHSWR 5 Arrangements for effective planning, organisation, control, monitoring and review of preventive and protective measures</p>			
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**Response / comments:**

Offshore	<b>System test of SCE</b>		
1. Describe the outcome of system tests carried out.			
RELEVANT LEGISLATION (a) SCR 2 (7A) SCEs remain in good repair and condition (b) PFEER 19 Suitability and condition of plant			
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Please refer to the document KP3 Maritime Testing.doc that lists some possible realistic maritime system tests.

Offshore	<b>Condition of plant</b>		
1. Describe the physical condition of the plant, in particular the state of the deck equipment and the machinery spaces within the pontoons.			
RELEVANT LEGISLATION (a) SCR 2 (7A) SCEs remain in good repair and condition (b) PFEER 19 Suitability and condition of plant (c) PUWER 5 Maintenance			
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Offshore	<b>Examples of Best Practice</b>		
1. Describe examples of best practice where appropriate.			
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