INSTALLATION	DATE(S)	INSPECTOR(S)

Persons interviewed	Position

Onshore A	**Maintenance basics**		
1. Confirm that the DH has an asset register / maintenance management system 2. Inspect a copy of the maintenance strategy document(s). 3. Describe how maintenance tasks are prioritised. Are the priorities for corrective maintenance any different to planned maintenance? How are priority ratings reviewed?			
RELEVANT LEGISLATION 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. MHSWR 5 Arrangements for effective planning, organisation, control, monitoring and review of preventive and protective measures.			
NON COMPLIANCE / MAJOR FAILING	ISOLATED FAILURE / INCOMPLETE SYSTEM	IN COMPLIANCE / OK	NOT TESTED / NO EVIDENCE

Duty Holder Response:

HSE Comments:

HSE Action:

Onshore B	**Communication between onshore support staff and offshore maintenance technicians**

1. How do the onshore technical authorities and support staff monitor the quality of offshore maintenance activities?
2. How are maintenance issues discussed between the offshore technicians / supervisors and the onshore support staff?
3. How often do onshore support engineers visit the installation?
4. How are 'front line' maintenance workers consulted in risk assessments, problem solving and devising maintenance work schedules and procedures?

RELEVANT LEGISLATION
MHSWR 5 Arrangements for effective planning, organisation, control, monitoring and review of preventive and protective measures
SCR Schedule 7 communication of findings to the management system

NON COMPLIANCE / MAJOR FAILING	ISOLATED FAILURE / INCOMPLETE SYSTEM	IN COMPLIANCE / OK	NOT TESTED / NO EVIDENCE

Duty Holder Response:

HSE Comments:

HSE Action:

Onshore C	**Competence assurane of maintenance technicians and their supervisors**

1. How does the duty holder assess the competence of their maintenance technicians and their supervisors? What level of competence / skills and experience do you feel are required to undertake the maintenance tasks that you define?
2. Describe the training given to staff promoted to maintenance supervisor level.
3. How is competence in the use of the maintenance management information system established and disseminated?

RELEVANT LEGISLATION
HSWA S2 (2) (c) requires the provision of such information, instruction, training and supervision SFAIRP safe
PUWER 8(1) Every employer shall ensure that all persons who use work equipment have adequate H&S information
PUWER 9(1) Every employer shall ensure that all persons who use work equipment have received adequate training

NON COMPLIANCE / MAJOR FAILING	ISOLATED FAILURE / INCOMPLETE SYSTEM	IN COMPLIANCE / OK	NOT TESTED / NO EVIDENCE

Duty Holder Response:

HSE Comments:

HSE Action:

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Onshore D	**Maintenance of safety critical elements (SCE)**

1. Demonstrate that the SCEs are documented along with their performance standards.
2. Request a copy of a planned maintenance work order for a sample SCE. Does the work order refer to the relevant performance standard? Does the work order contain acceptance criteria to enable the maintenance technician to know whether the performance standard has been met? If the work order does not contain an acceptance criteria, how does the onshore management monitor that their SCEs actually meet their performance standard?
3. What happens if the acceptance criteria is not met? Request a copy of the documentation describing the contingency action to follow should the SCE fail the acceptance criteria.

RELEVANT LEGISLATION PFEER 5 Assessment - establish appropriate performance standards SCR 2 (5) SCEs remain in good condition and repair PFEER 19 Suitability and condition of plant PUWER 5 Maintenance			
NON COMPLIANCE / MAJOR FAILING	ISOLATED FAILURE / INCOMPLETE SYSTEM	IN COMPLIANCE / OK	NOT TESTED / NO EVIDENCE

Duty Holder Response:

HSE Comments:

HSE Action:

Onshore E	**Supervision**

1. Who checks the quality of maintenance work? How is this done in practice (e.g. inspection of plant, checking maintenance records, discussion with technicians)
2. What feedback do you get from supervisors regarding the balance of time they spend out on the plant against dealing with paperwork? Do you think they spend enough time out on the plant with the technicians?
3. How do you know you have sufficient supervisory cover? Is it sufficient for all disciplines?
4. How do you monitor maintenance work undertaken by specialist contractors? (e.g. gas turbines, pedestal cranes etc)

RELEVANT LEGISLATION
HSWA S2 (2) (a) The provision and maintenance of plant and systems of work that are, SFAIRP safe
HSWA S2 (2) (c) requires the provision of such information, instruction, training and supervision SFAIRP safe

NON COMPLIANCE / MAJOR FAILING	ISOLATED FAILURE / INCOMPLETE SYSTEM	IN COMPLIANCE / OK	NOT TESTED / NO EVIDENCE

Duty Holder Response:

HSE Comments:

HSE Action:

Onshore F	**Recording of completed maintenance work**		
1. How do you assure yourself that the information recorded following maintenance work is of sufficient quality? 2. Is information on the 'as found' condition, or fault codes etc entered on the maintenance history record. How is this information used onshore? 3. Do you record the status of SCE performance standard tests? (e.g. pass / fail / remedied)			
RELEVANT LEGISLATION PUWER 5 (1) work equipment maintained in an efficient state, in efficient working order, and in good repair PUWER 5 (2) maintenance log kept up to date SCR Schedule 7 recording of information			
NON COMPLIANCE / MAJOR FAILING	ISOLATED FAILURE / INCOMPLETE SYSTEM	IN COMPLIANCE / OK	NOT TESTED / NO EVIDENCE

Duty Holder Response:

HSE Comments:

HSE Action:

Onshore G	**Backlogs**

1. How does the duty holder define a backlog?
2. Request a report describing the current position with regard to backlogs for SCE and non-SCE equipment.
3. What is the target for backlog reduction (i.e. amount and timescale)? Explain what measures are in place to achieve this?
4. What is the trigger point on backlogs to provide additional resource to reduce overdue maintenance?

RELEVANT LEGISLATION
MHSWR 3 - suitable and sufficient assessment of the risk
PUWER 5 – work equipment maintained in an efficient state, in efficient working order, and in good repair
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

NON COMPLIANCE / MAJOR FAILING	ISOLATED FAILURE / INCOMPLETE SYSTEM	IN COMPLIANCE / OK	NOT TESTED / NO EVIDENCE

Duty Holder Response:

HSE Comments:

HSE Action:

Onshore H	**Deferrals**

1. Request documentation describing how deferrals are authorised and justified. When is the technical authority consulted? Is the ICP informed?
2. If maintenance of an SCE is deferred, what steps are taken to identify and implement additional measures (e.g. increased inspection) to restore the integrity of the barriers weakened by the deferral?
3. When a deferral is approved, is that work item still referenced as a backlog?
4. Request documentation detailing the number of maintenance tasks currently deferred. What is the trigger point to reduce the number of deferrals?

RELEVANT LEGISLATION
MHSWR 3 - suitable and sufficient assessment of the risk
PUWER 5 – work equipment maintained in an efficient state, in efficient working order, and in good repair
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

NON COMPLIANCE / MAJOR FAILING	ISOLATED FAILURE / INCOMPLETE SYSTEM	IN COMPLIANCE / OK	NOT TESTED / NO EVIDENCE

Duty Holder Response:

HSE Comments:

HSE Action:

Onshore I	**Corrective maintenance**

1. Describe the procedure for determining whether a defect / anomaly is significant. At what point are the technical authorities consulted to decide how critical the defect is e.g. safety critical / production critical / not critical.
2. Are the risks to continued safe operation evaluated for their degrading effect on the major hazards. (e.g. contribution of faulty / passing valves) Is this risk assessment recorded?
3. If equipment is allowed to continue operation when it is known to be defective – e.g. a passing valve, describe the procedures in place to identify what other barriers and defences need to be put in place to compensate.

RELEVANT LEGISLATION MHSWR 3 - suitable and sufficient assessment of the risk PUWER 5 – work equipment maintained in an efficient state, in efficient working order, and in good repair 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			
NON COMPLIANCE / MAJOR FAILING	ISOLATED FAILURE / INCOMPLETE SYSTEM	IN COMPLIANCE / OK	NOT TESTED / NO EVIDENCE

Duty Holder Response:

HSE Comments:

HSE Action:

Onshore J	**Defined life repairs**

Often called ‘temporary’ repairs, such repairs should be subject to an engineering assessment and given a ‘defined life’ prior to implementation

1. Request a copy of the procedure describing how temporary repairs are justified, assessed and engineered. Challenge why the repairs cannot be carried out by conventional methods such as ‘like for like’ replacement.
2. Are all defined life repairs subject to approval from the relevant technical authority?
3. Is the ‘temporary’ repair assigned a defined life by the technical authority?
4. Is the defined life repair subject to a design review to establish the requirements specification and the basis for the design?
5. For SCEs, is the ICP consulted regarding the proposed method of repair and the length of defined life?
6. 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?
7. Has a work order been drawn up for the inspection and maintenance of the defined life repair?
8. Are any existing temporary repairs in operation beyond their defined life? Justify.

RELEVANT LEGISLATION
MHSWR 3 - suitable and sufficient assessment of the risk
MHSWR 5 Arrangements for effective planning, organisation, control, monitoring and review of preventive and protective measures.
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
PFEER 19 Suitability and condition of plant

NON COMPLIANCE / MAJOR FAILING	ISOLATED FAILURE / INCOMPLETE SYSTEM	IN COMPLIANCE / OK	NOT TESTED / NO EVIDENCE

Duty Holder Response:

HSE Comments:

HSE Action:

Onshore K	**Measuring the effectiveness of the maintenance system**

1. What information is routinely collected to measure performance? (e.g. backlog hours, number of deferrals, ratio of corrective maintenance to planned maintenance, resources)
2. What are your maintenance performance targets? How are these targets set and challenged?
3. Request a copy of the monthly maintenance performance report, showing backlog performance, targets and trends. Who is the reported circulated to? What are the significant trends?
4. How are the maintenance records analyzed?

RELEVANT LEGISLATION
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.
MHSWR 5 Arrangements for effective planning, organisation, control, monitoring and review of preventive and protective measures.

NON COMPLIANCE / MAJOR FAILING	ISOLATED FAILURE / INCOMPLETE SYSTEM	IN COMPLIANCE / OK	NOT TESTED / NO EVIDENCE

Duty Holder Response:

HSE Comments:

HSE Action:

Onshore L	**Measuring compliance with performance standards**		
1. Provide reports showing the status of your performance standards. Is any equipment currently in use that cannot meet its performance standard?			
RELEVANT LEGISLATION PUWER 5 (2) maintenance log kept up to date SCR Reg 6 & Schedule 7 record of findings and recommendations SCR Schedule 7 arrangements to communicate findings and recommendations to the duty holder			
NON COMPLIANCE / MAJOR FAILING	ISOLATED FAILURE / INCOMPLETE SYSTEM	IN COMPLIANCE / OK	NOT TESTED / NO EVIDENCE

Duty Holder Response:

HSE Comments:

HSE Action:

Onshore M	**Measuring the quality of maintenance work**

1. What checks do the technical authorities carry out to confirm that maintenance activities have been carried out correctly and in accordance with the work order? (e.g. are sample work orders inspected to confirm that they have been adequately completed with required data and history?)
2. Is the maintenance system subject to internal or external audit? Have non-conformances identified during audit been reviewed, corrective action taken and closed out?

RELEVANT LEGISLATION
The Safety Case Regulations (Reg 12) require an audit system that is adequate for ensuring that relevant statutory legal provisions, including the provisions relating to maintenance in PFEER and PUWER, are complied with. There is no specific legal requirement for technical audits of maintenance management, (other than verification of SCEs), but maintenance management systems audits are recognised good practice.

NON COMPLIANCE / MAJOR FAILING	ISOLATED FAILURE / INCOMPLETE SYSTEM	IN COMPLIANCE / OK	NOT TESTED / NO EVIDENCE

Duty Holder Response:

HSE Comments:

HSE Action:

Onshore N	**Verification**

1. For a sample SCE, provide evidence that the verification scheme defines the ICP's tasks in terms of the nature of examination, the frequency of examination, how results and recommendations are recorded, and how remedial action is recorded.
2. How are SCE performance standards reviewed? What triggers this review?
3. Describe how temporary equipment is evaluated as Safety Critical Elements. How is temporary equipment captured in the verification scheme? How do you ensure temporary equipment is maintained?

RELEVANT LEGISLATION
SCR Reg 19 requires a verification scheme to be put into effect to verify that SCEs are suitable, and that they remain in good repair and condition.
SCR Schedule 7 defines the requirements of the verification scheme
SCR Reg 20 requires the verification scheme to be periodically reviewed
SPC/TECH/OSD/25 gives guidance on temporary equipment

NON COMPLIANCE / MAJOR FAILING	ISOLATED FAILURE / INCOMPLETE SYSTEM	IN COMPLIANCE / OK	NOT TESTED / NO EVIDENCE

Duty Holder Response:

HSE Comments:

HSE Action:

Onshore O	**Review of ICP recommendations**		
1. Request a copy of the ICP's recommendations. How are the recommendations reviewed? 2. How are the ICP recommendations prioritised and actioned? Is remedial work scheduled into the planned maintenance system?			
RELEVANT LEGISLATION SCR Reg 6 & Schedule 7 record of findings and recommendations SCR Schedule 7 arrangements to communicate findings and recommendations to the duty holder			
NON COMPLIANCE / MAJOR FAILING	ISOLATED FAILURE / INCOMPLETE SYSTEM	IN COMPLIANCE / OK	NOT TESTED / NO EVIDENCE

Duty Holder Response:

HSE Comments:

HSE Action:

Onshore P	**Reporting to senior management on integrity status**

1. Request a copy of the statement of integrity produced by the technical authorities for senior management? Who is on the circulation list? How is the information assembled to produce this report?
2. How are recommendations made to senior management regarding the level of resources required to maintain integrity?
3. How are observations on the effectiveness of the maintenance system reported to senior management?
4. How frequently are the integrity strategies reviewed?

RELEVANT LEGISLATION
DCR 8 Suitable arrangements in place for maintaining the integrity of the installation
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.
MHSWR 5 Arrangements for effective planning, organisation, control, monitoring and review of preventive and protective measures.

NON COMPLIANCE / MAJOR FAILING	ISOLATED FAILURE / INCOMPLETE SYSTEM	IN COMPLIANCE / OK	NOT TESTED / NO EVIDENCE

Duty Holder Response:

HSE Comments:

HSE Action:

Onshore Q	**Key indicators for maintenance effectiveness**

1. What are your key indicators for reviewing the effectiveness of the maintenance system?
    - Ratio of planned to corrective maintenance
    - Status of performance standards have not been met
    - Resources
    - Backlogs
    - Deferrals
    - Uptime

RELEVANT LEGISLATION
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.
MHSWR 5 Arrangements for effective planning, organisation, control, monitoring and review of preventive and protective measures.

NON COMPLIANCE / MAJOR FAILING	ISOLATED FAILURE / INCOMPLETE SYSTEM	IN COMPLIANCE / OK	NOT TESTED / NO EVIDENCE

Duty Holder Response:

HSE Comments:

HSE Action: