**Joint Natural Resources Committee**

**Upstream Decommissioning Code of Practice and
Upstream Decommissioning Scope of Work**

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| **Name** | **Date of Issue** | **Version** | **Changes** |
| JR2018-009 | 10 April 2018 | 1 | Original |
| JR2019-007 | 3 September 2019 | 2 | Update to COP & SOW  |
| JNR2025-008 | 24 February 2025 | 3 | Appendix 1 Added – Lighthouse Mode |

**Joint Natural Resources Committee**

**Upstream Decommissioning Code of Practice (COP)**

The purpose of this COP is to:

1. clarify the roles of the Marine Warranty Surveyor (MWS), assured and underwriters in the performance and specification of a Marine Warranty survey;
2. establish agreed standards for the attending MWS when conducting a survey;
3. define the lines of communication between underwriters and the MWS;
4. establish agreed qualifications for the attending MWS when conducting a survey;
5. where applicable, outline the basic requirements for the Certificate(s) of Approval (COA).

**Nothing in this COP shall relieve any party of any legal obligations existing in the absence of this document and nothing contained in this COP shall take precedence over any provisions of the Policy.**

This Code of Practice has been produced to accompany the attached Joint Rig Committee Scope of Work (SOW). A tailored Project Specific Scope of Work (PSSOW) may be substituted with the explicit prior agreement of underwriter(s).

1. **The Role of the MWS**

1.1 The fundamental objective of the MWS is to make reasonable endeavours to ensure that the risks associated with the warranted operations to which a Marine Warranty Surveyor is appointed are reduced to an acceptable level, in accordance with best industry practice.

* 1. The MWS Company will ensure that any individual MWS appointed to sign a COA in accordance with the SOW:
		1. is appropriately accredited by the Society of Offshore Marine Warranty Surveyors (SOMWS); or
		2. can demonstrate competence by completing document JNRC MWS Information Form (JR2019-009 or latest version available in the Technical Documents tab of JNRC webpage ([www.lmalloyds.com/jointrig](http://www.lmalloyds.com/jointrig))) to the satisfaction of underwriters ;

prior to commencing the activities.

* 1. The Marine Warranty Surveyor will issue a COA for each critical operation as defined in the relevant scope of work, provided that they are satisfied, so far as possible, that the operations are conducted in accordance with:
		1. recognised codes of practice for design and operations;
		2. best industry practice appropriate for the vessel(s), equipment and location(s);
		3. vessel(s) and equipment being used within defined safe operating limits;
		4. current Marine Operations Manual. When an operation is conducted outside the Marine Operations Manual, this is subject to a formal management of change process, with senior leadership, technical authority and MWS approval
	2. Upon request the MWS shall propose an MWS plan to be agreed by the assured and underwriters which indicates, as a minimum, each activity, milestones, attendances and issuance of COA(s) for the project.
	3. Upon request the MWS will make available to underwriters:
		1. an opinion on the adequacy of the SOW – if there are any gaps or omissions this should be communicated to the Assured and the SOW updated accordingly;
		2. a schedule of actual and proposed site attendances;
		3. a schedule of COAs to be issued.
	4. The MWS will:
		1. advise underwriters when a confidentiality agreement with the assured is in place which would preclude the exchange of information or communication with underwriters;
		2. notify underwriters of any conflicts of interest. Examples of services that could present a conflict of interest with the Marine Warranty work, include:
			1. Marine or Design Consultant (or equivalent) involved in:
1. Design of project components to be used in a marine operation, the failure of which could compromise the integrity of a project asset (for example a lift beam or pad eye);
2. Primary analysis of structures, hulls or component parts thereof. Note: the Marine Warranty Surveyor is, however, expected to review a design by others where this has a direct bearing on the marine risk e.g. check of the strength of launch frames on a launch jacket, or assessment of a lift analysis of a deck;
3. The production of procedures, project standards, risk assessments and other management documentation which influences how a marine operation is conducted and which has a direct bearing on the risk of a particular marine operation e.g. loadout, launch, lift of a jacket.
	* + 1. Loss Adjuster
			2. Verification services associated with the operation
			3. Rig Mover
	1. The MWS will immediately advise underwriters, with a copy to the assured:
		1. if any COA is withheld, or a Non-Conformance Certificate issued. Reasons for this should be clearly stated. Examples include:
			1. failings of the documentation provided;
			2. failings in the preparations made;
			3. unacceptable change of circumstances which depart from the approved procedures and preparations;
			4. a proposed operation that is considered too dangerous to be considered as acceptable good practice from the outset or as preparations proceed, e.g. weather conditions deteriorate to the point where they exceed the limits for a defined safe operation as agreed by the MWS;
		2. if the assured fails to comply with any recommendations made by the MWS.
		3. of any proposed changes to relevant key personnel employed by the MWS company.
	2. The MWS shall inform underwriters of any:
		1. access restrictions to a site or work place of any item or activity to be warrantied;
		2. continued lack of information for a warrantied event that cannot or will not be resolved on site but which may prevent the eventual approval of an operation;
	3. The MWS shall agree suitable lead times for attendance at vessel / site and documentation release with the assured.

1.10 The MWS may use information available from verifiable resources to assist with the conduct of the Marine Warranty activities. Where such information is relied upon by the MWS, this should be clearly evidenced within the MWS Progress Report.

1. **Role of the Assured**
	1. The Assured must ensure that the selected MWS Company is suitably qualified to perform Marine Warranty activities in accordance with this COP and associated SOW (or PSSOW as applicable). Qualification of the MWS company shall be as per the MWS Good Practice Guideline (JR2019-010 or latest version available in the Technical Documents tab of JNRC webpage ([www.lmalloyds.com/jointrig](http://www.lmalloyds.com/jointrig))) or an equivalent process demonstrated by the assured to underwriters.
	2. Once appointed on the project, the MWS Company shall not be changed without the express and prior agreement of underwriters.
	3. The assured shall:
		1. provide the MWS with a point of contact for underwriters and an appropriate point of contact in the assured’s organisation to assist with the resolution of queries within 14 working days following the appointment of the MWS or prior to commencement of operations, whichever is sooner;
		2. provide underwriters with the contact details of the MWS within 14 working days following the appointment of the same;
		3. procure MWS participation at all relevant project management meetings, including the marine operations HAZOP / HAZID / SIMOP, contingency planning and assurance / testing plans, and at JSA (job safety analysis) meetings before the commencement of each marine operation;
		4. contract the MWS company directly (without the involvement of any contractor or intermediary) unless required to enable compliance with the law in the jurisdiction or government regulations;
		5. provide reasonable access and transportation facilities to the MWS to allow him to carry out the necessary work;
		6. formally acknowledge receipt of all recommendations from the MWS;
		7. maintain a record of compliance with and deviations from such recommendations;
		8. obtain written approval from the MWS for any such deviation(s).
		9. agree and comply with suitable lead times agreed with the MWS, in conjunction with item 1.10.
2. **Role of the Underwriter**
	1. The Panel of MWSs is to be agreed by underwriters in conjunction with the MWS Good Practice Guideline (JR2019-010 or latest version available in the Technical Documents tab of JNRC webpage ([www.lmalloyds.com/jointrig](http://www.lmalloyds.com/jointrig))).
	2. Other additions to the panel will need to demonstrate their capability / experience of similar projects and water depths, and to be agreed by underwriters.
	3. On each project, underwriters will specify whether a “kick off” meeting is required between underwriters, the assured and the MWS. The assured, underwriters and MWS shall agree key risk milestones and date(s) for a joint review of the project scope and development and the MWS SOW should be updated to reflect any agreed changes and disseminated.
	4. At the request of the MWS, underwriters will make available:
		1. relevant applicable policy terms and conditions including, in particular, any warranty provisions or conditions precedent;
		2. identity and contact details (including telephone, e–mail, fax and out of hours numbers) of the nominated underwriter to receive communications from the MWS.
3. **MWS Progress Report**
	1. Where requested, the MWS shall issue a monthly report to underwriters directly.
	2. The MWS’s report shall:
		1. include the name of the individual performing the survey;
		2. make, where necessary, recommendations which are required for the issuance of any COAs, expressed in writing in a clear and explicit manner and capable of verifiable implementation.
	3. The report shall include the following contents:
		1. Introduction (executive summary; report No.; project start date; project end date; and name of individual performing the survey);
		2. Progress (activities performed in the last period; and activities to be performed in the next period);
		3. Summary of documentation reviewed (table showing number of documents reviewed in the last period, number approved, number on hold and documents reviewed for information only. The document register can be attached showing document status as an appendix);
		4. Attendances (meetings (date, location, purpose); and surveys (date, vessels, location, MWS (name)); and site attendances (date, location, purpose); and all COAs issued since the previous report);
		5. Invoicing (progress against CTR (Cost, Time, Resource) sheets with value of work done to report date and latest estimate of expenditure to the end of activities together with a commentary on significant deviations from the original estimates; variation orders; and the total invoiced);
		6. Areas of concern (technical, project management and invoicing);
		7. Safety (incidents reported, lost time incidents, statistics, etc.).

**JNRC Upstream Decommissioning Scope of Work (SOW)**

This document contains the SOW intended to be used with the JNRC Upstream Decommissioning Warranty Endorsement (JR2019-007A).

Note that this document does not include the decommissioning of wells.

Attention is drawn to Appendix 1 of this document, which should be considered by Underwriters if the asset is to undergo a period of lighthouse mode operation prior to final decommissioning and removal from the field.

|  |  |  |  |
| --- | --- | --- | --- |
| **Activity** | **Review & Approve Procedures / Drawings / Design Calculations** | **Attend** | **Issue Certificate of Approval (COA)** |
| **1. General requirements** |
| * 1. Decommissioning procedures
 | X |  |  |
| * 1. Standards, codes and guidelines to be used on the project
 | X |  |  |
| * 1. Project organogram
 | X |  |  |
| * 1. Project schedule
 | X |  |  |
| * 1. Project QA/QC procedures
 | X |  |  |
| * 1. Management of change procedures
 | X |  |  |
| * 1. Project communication and interfaces
 | X |  |  |
| * 1. Metocean criteria, including limiting sea states for all marine operations
 | X |  |  |
| * 1. Weather forecasting procedures
 | X |  |  |
| * 1. Master document register
 | X |  |  |

| **Activity** | **Review & Approve Procedures / Drawings / Design Calculations** | **Attend** | **Issue Certificate of Approval (COA)** |
| --- | --- | --- | --- |
| **2. Decommissioning (leading potentially to being scrapped or put to alternative use)** |
| **Documentation** |  |  |  |
| Field history, structural modifications and latest survey reports. | X |  |  |
| Review field layout. | X |  |  |
| Weight and CoG report (including structural modifications, entrapped water estimate and marine fouling).  | X |  |  |
| Schedule of activities | X |  |  |
| Method of disposal (including disposal location). * To cover transportation and load-off at disposal site.
 | X |  |  |
| Environmental impact studies and pollution prevention plans (including OSPAR requirements if in North West Europe). | X |  |  |
| List any hazardous material on-board with ISO reference number. | X |  |  |
| Procedure if using explosives (risk assessment considering impact, reliability, quantity and certification). | X |  |  |
| For fixed structures:* Procedures for decommissioning including: Removal, lifting, toppling and abandonment arrangements.

*Note: Lifting gear and lifting equipment to be fully certified and inspection levels defined to ensure that serviceable equipment limits of use are defined. Otherwise equipment is to be rendered unserviceable.*For Floating Structures:* Procedure for decommissioning including: Disconnection of floating structure and its risers / umbilical’s / cables / mooring system / tow-away arrangements.
 | X |  |  |
| Station keeping of HLV/crane barge. | X |  |  |
| Transportation and sea fastening arrangements. | X |  |  |
| Towage Equipment Suitability Survey | X |  |  |
| * + Towing equipment certificates validity prior to tow
	+ Current towing equipment NDT inspection prior to tow (comment on adequacy & frequency)
	+ Towing wire certification validity prior to tow
	+ Towing arrangement (equipment & wire design & installation

Design of towing systems for anticipated environmental forces shall be in accordance with recognised industry standards (e.g. the relevant section(s) of ISO19901-6) |  |  |  |
| Transportation Vessel/ Loading & Unloading Equipment | X |  |  |
| * + Confirmation of suitability of Transportation Vessel
	+ Confirmation that the Transportation Vessel has a valid IACS Class certificate, and is class maintained (with no conditions of class)
	+ Valid loadline certificate
	+ Relevant valid ISM & SOLAS certification
	+ Verification of the adequacy and structural strength of the cribbing and sea fastenings
	+ Confirmation good working order of all operational equipment and machinery required for loading and unloading operations (including contingency items)
	+ Seaworthiness and water-tight integrity
 |  |  |  |
| Transportation Manual(s) including:* Bollard pull requirements
* Configuration of tugs
* Vessel strength
* Intact and damaged stability
* Voyage details
* Contact information
	+ Pre-voyage Tow Plan and Risk Assessment
	+ Route Planning (incl. sea room, safe havens and refuelling)
	+ Hazard identification
	+ Trim & stability - ability to withstand environmental forces (wind, wave, current
	+ Weather routing
	+ Confirm that the MODU has a valid Class certification without conditions of class(or agree all outstanding conditions of Class as not being material to the intended operations.)
	+ Valid loadline certificate
	+ Relevant valid ISM & SOLAS certification
	+ Fuel requirements (contingency)
	+ Communications (Reporting Protocols) & language restrictions
	+ Manning levels justified
	+ Riding crew (including Towmaster) competency proven and valid training records
* Navigational Aids (Navaids)
* Tow routes/passage plans and safe havens including:

Checking underkeel clearancesSide and overhead clearances for all movementsPlanned contingency movements Review of surveys of final and contingency locations | X | X(Check Compliance) |  |
| **Contingency Planning for Emergencies** | X |  |  |
| * + Bunkering
	+ Line parting, availability of spare tow line, rigged reconnection equipment and adequate sea room
	+ Emergency survival anchor and deployment method in event of tow failure close to shore
	+ Availability of additional vessels
	+ Tug equipment failure
	+ Engine failure
	+ Heavy weather/storm approach, including safe approach to shore/safe haven
	+ Grounding
	+ Collision
	+ Fire and explosion
	+ Damage stability
	+ Water ingress through valves
	+ Structural failure
	+ Key equipment breakdown (critical spares)
	+ Riding crew evacuation
 |  |  |  |
| Offloading / load-in procedure. | X |  |  |
| Extent of decommissioning to be defined:* Depth beneath seabed.
* Cutting lines to be defined on structure.
* Drill Cuttings: Extent of clearance to be defined.
* Full or partial platform removal, subsea equipment or pipeline.
* Site assessment; dumping location or shore reception facilities.
 | X |  |  |
| Installation Procedure of structure removal tools:* Cutting equipment and its support lines.
* Removal yokes, removal claws etc.
* Lifting balloon(s), reverse reeled, heave compensated crane etc. (for subsea pipelines and SURF decommissioning).
 | X |  |  |
| Installation Procedure and design of supporting structures:* Temporary transportation cradle or grillage (on the receiving barge/vessel deck).
* Temporary strengthening members (on the decommissioned structure) for lifting.
* Temporary stoppers.
 | X |  |  |
| Contingency procedures.  | X |  |  |
| Authorisation to proceed. | X |  |  |
| **Vessel surveys** |  |  |  |
| **Vessel suitability surveys** to be performed for HLV’s, barges, tugs and other vessels directly associated with decommissioning.Survey to include:* Certification (Classification and Statutory).
* Propulsion system.
* Towing equipment.
* Deck, machinery, bridge condition and operations including safety equipment.
* Lifting gear and cranes surveys.
 |  | X |  |
| Tug Suitability Survey | X | X |  |
| * + Tug (including manoeuvring tugs) suitability survey and approval
	+ Change of tug shall require reissue of certificate of approval
	+ Confirm valid Class certificate, with no outstanding conditions of class (or agree all outstanding conditions of Class as not being material to the intended operations.)
	+ Valid bollard pull test certificate
	+ Redundancy of systems
	+ Crew competency proven and valid training records
	+ Communications
 |  |  |  |
| **Site attendance** |  |  |  |
| Attend to establish condition of platform (stability, structural and environmental impact survey):* Security (manned/unmanned check for unauthorised entry).
* Structural condition.
* Fluids (fuel, lubes, hydraulic fluid, residual hydrocarbons etc.).
* Hazardous chemicals and substances (asbestos, cleaning chemicals, pipeline residues).
 |  | X |  |
| Attend to confirm platform safe to dismantle/abandon (gas free, structurally safe, cleaned, no products present, pipelines flushed, hydrocarbons purged from systems etc.). |  | X |  |
| Attend to check securing and sea fastening of all loose items. |  | X |  |
| Method of disposal (including disposal location). To cover transportation and load-off at disposal site. |  | X |  |
| Assess weather conditions | X | X |  |
| Attend critical offshore operations  |  | X |  |
| Attend for removal tool performance tests. |  | X |  |
| Attend the installation of transportation cradle or grillage on receiving barge/vessel. |  | X |  |
| Barge/vessel sea fastening and transportation. |  | X |  |
| **Attend and approve lifts** (for platforms, confirm disconnection of topsides to the supporting legs/jacket prior to lifting) |  | X | X |
| **Attend and approve sailaways.** |  | X | X |
| **Attend and approve offloading at disposal site (lift, skidding, drydocking)** |  | X | X |

**Key:**

X Denotes activity to be performed

**Appendix 1**

**Lighthouse Mode leading to decommissioning**

Lighthouse Mode is a condition of an FPSO, FSO, oil and gas platform or any other static unit (fixed or floating) where production has ceased and the unit is, effectively, in a state of care and maintenance. Such a mode is typically experienced upon cessation of production, where the field/asset reaches end of economic viability. Lighthouse Mode may eventually become applicable to Floating Offshore Wind Turbines (FOWT).

The purpose of Lighthouse Mode is typically to reduce costs until final decommissioning and scrapping (dismantling and recycling).

The objective of this Appendix is to obtain information such that insurers can assess the change in risk profile by entering Lighthouse Mode or the decommissioning phase.

Lighthouse Mode includes maintaining and operating the facility in a state of non-production while working to prepare for decommissioning and scrapping or re-use. Alternatively, it could be in a state of lay-up awaiting sale, refitting or re-purposing before commencing a new life.

Characteristics of Lighthouse Mode, making this condition different from that which insurers approved in the initial insurance contract when the unit was being installed, are as follows:

* Class may be suspended for the final 5 years, which would have been the final Special Survey Cycle. Class surveyors may still attend the vessel but as IVB (Independent Verification Body) surveyors, not Class surveyors and without the authority to impose Conditions of Class (CoC).
* Inspections are made using a light touch risk bases approach rather than a physical prescriptive survey.

Considerations on which insurers may want to act, due to the change in the risk profile, are as follows:

* The unit may experience delay in removal from operational location, prior to lifting onto a barge or heavy lift ship or towed to a recycling yard, and may experience further delay at the scrapping location. This extends the insurers potential liability of the unit while the risk to the unit may have increased. For instance, if, either on a barge or floating, the unit is stacked in an exposed anchorage or alongside an exposed breakwater for an extended period until scrapping. It may also be held at an intermediate port or anchorage before onward towage. Insurers are to be made aware if this is the case and presented with a plan for disposal within a schedule.
* The unit may not, necessarily, be gas free with tanks still containing hydrocarbon residues. This may present an additional hazard for the units.
* The unit will be either de-manned or down manned or both during different phases of the operation.

**De-manning:**

* De-manning would be the total evacuation of the unit thus mothballing expensive areas of the unit such as the accommodation, helicopter facilities and production area. Re-boarding arrangements must be made such as embarkation ladders on both the windward and leeward sides of the unit. When re-gaining access, safety equipment, gas monitoring devices, provisions and survival equipment should be provided.

**Down manning:**

* In this case only partial de-manning. However, sufficient staff are to be retained to ensure 24 hour cover for emergencies and essential operational requirements that are safety critical not only for daily operations but also future operations such as tows.
* Mooring integrity for floating units must be ensured with an inspection plan provided.
* A decision is to be made as to whether the unit is to remain connected to a well/subsea infrastructure or disconnected. This will govern the regulations applicable and influence the maintenance and manning plans.
* Critical safety items must be maintained and suitably powered. For instance, navigation lights, emergency generator with fuel, windlasses and fog horn.

With respect to the above considerations, when a unit enters Lighthouse Mode, the insurer should receive a document addressing the above factors laying out how the additional and change in risks will be mitigated. A list of questions to be contained in such a document may be as follows:

**Initial status:**

What is the present status of the unit?

Date of Last cargo?

Classification status including last Class Certificate?

Flag status?

Did the final operational Asset Life Extension study envisage a period of Lighthouse Mode, and for what duration?

Has the change of status been subject to assessment via the Owners/Operators Management of Change (MoC) process, and will this be routinely revisited for extended and changing period of lighthouse mode operation

Is unit still connected to sub-sea infrastructure by risers?

Describe the mode of mooring tension relative to normal operations and or storm setting, and what procedure and/or ability is there to adjust?

Provide schedule for decommissioning or disposal including:

* Date of cessation of production to commencing disconnection from field
* Date of Disconnection from field
* Date of Towage from field to /decommissioning /scrapping/decontamination facility
* Decontamination operation
* Towage from decontamination facility to recycling facility

What is the proposal regarding future ownership?

**Disconnection from field:**

Has a marine warranty surveyor MWS been appointed for the disconnection from the field and who is it?

Provide CoA for the following operations:

* Disconnection of the risers
* Disconnection of the mooring system

**For both tows and intermediate tows from field or secondary site:**

Has a MWS been appointed for the tow and who is it?

MWS to review the following documents:

* Weather forecasting and weather routing
* Passage plan (tow route and contingency route, if required)
* Tug(s) suitability survey (to carry out)
* Tow equipment suitability
* Emergency preparedness contingency planning
* Towage manual and procedures to include:

Intact and damage stability conditions

Numbers of persons onboard during decontamination

Status of cargo, cargo residues and other contaminates onboard

Contact details

Contingency plans and Port(s) of Refuge

Destination: Decontamination facility

Berthing location

Mooring arrangements

Expected duration at berth

MWS to provide a CoA for the tow.

Are the required local licenses/permissions in place?

**Arrival of tow:**

MWS to provide a CoA for the safe mooring alongside of the unit.

**Future intentions:**

What are the future intentions for the unit?

What is the name and address of the recycling facility or the final destination?

Is the yard an IMO authorised ship recycling facility?

Provide inventory of hazardous materials (IHM part II and III) approval and Ready for Recycling certificate

Identity of the buyer (usually the recycling yard)?

When does ownership transfer?

Where and when does delivery to the new owner take place ?

Confirm appropriate conventions/licenses/permissions have been obtained

**Appendix 2**

**Abbreviations:**

API American Petroleum Institute

BoP Blowout Preventer

BS British Standard

CoA Certificate of Approval

CoC Conditions of Class

CoG Centre of Gravity

COP Code of Practice

DP Dynamic Positioning

ESD Emergency Shut-Down valve

FoS Factor of Safety

FOWT Floating Offshore Wind Turbine

FPSO Floating Offshore Storage Oil

GPS Global Positioning System

HLV Heavy Lift Vessel

HSE Health and Safety Executive

IACS International Association of Classification Societies

IMO International Maritime Organisation

ISM International Ship Management (Certificate)

ISO International Standards Organisation

ISPS International Ship and Port Facility Security

IVB Independent Verification Body

JNRC Joint Natural Resources Committee

JSA Job Safety Analysis

MoC Management of Change

MODU Mobile Offshore Drilling Unit

MOU Mobile Offshore Unit

MWS Marine Warranty Surveyor

NDT Non Destructive Testing

OEM Original Equipment Manufacturer

OSPAR The Convention for the Protection of the Marine Environment of the North-East Atlantic

QA/QC Quality Assurance/ Quality Control

SOLAS Safety Of Life At Sea

SOW Scope of Work

SSA Site Specific Assessment

UV Ultra Violet