MARINE WARRANTY SURVEY (Module 1 – Fundamentals)

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Presentation by JNRC & SOMWS

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What we'll cover today

Marine Risks
Why Marine Warranty
Insurance & Marine Warranty Clause
Marine Warranty Survey Development in the Insurance Market
What is Marine Warranty Survey
Role of the Marine Warranty Surveyor
MWS Selection and Appointment
Scope of Work of MWS (incl. JNRC COP/COW)
MWS Contractual Relationships
Appointment Process/Timing
Challenges

What can go wrong

Crane Collapse During Jacket Installation - Video









Marine Risks

- Jacket/topsides load-out from a yard
- Jacket/topsides transit to a field
- Jacket/topsides installation
- Monopile/transition/nacelle installation
- Offshore pipelay
- Subsea installation
- Offshore cable lay
- MODU wet tow and field location
- MODU dry tow and field location
- MOPU/FPSO tow and field location
- Offshore asset decommissioning
- Often performed in close proximity to existing operating facilities



All transient marine project risks involving high value equipment with potential for major damage or total loss and project delay if not completed with due engineering diligence

Why Marine Warranty

Requirement arises when:

- An assured has high value equipment which is subject to a marine risk, typically part of large and complex offshore construction project
- Insurance is sought for the equipment and project to transfer risk - Construction all Risks (CAR) policy and possible separate Marine Transit Insurance Policy
- Underwriter seeks additional comfort from an independent third party that the marine risks are being managed in accordance with acceptable standards
- Assurance that risk are being reduced to ALARP (*as low as reasonably practical*)

A **Warranty** is written into the policy wording, requiring the approval of some or all of the activities by a MWS as a condition of insurance cover.

Certificate of approval is issued for discrete activity.



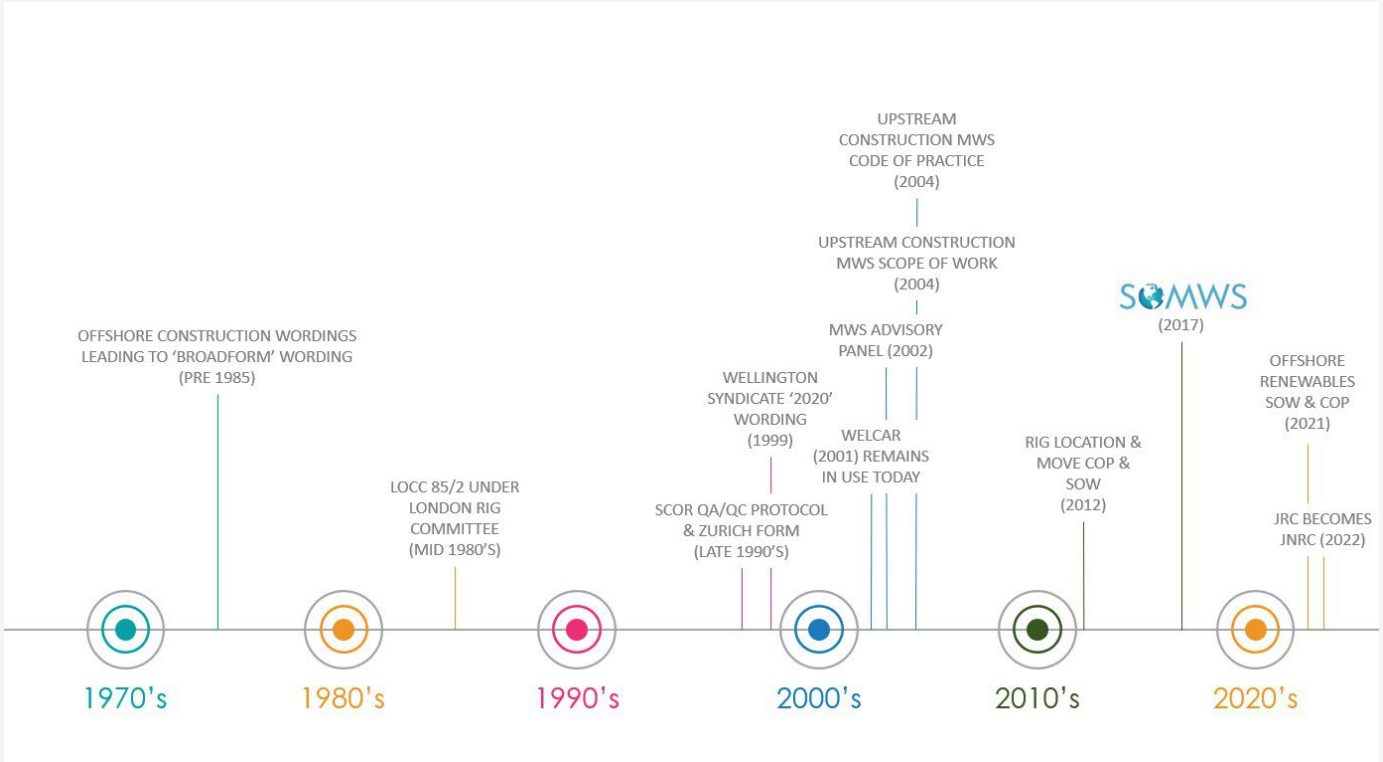


Insurance and Marine Warranty Clause

- A **Warranty** is a promissory (or promise), by which the **assured** (the insured party) agrees with the Insurer(s) the nature of work to be performed under the policy, the method by which the work will be performed and the minimum standards to which this work will be conducted.
- In the context of Offshore Construction, imposed by CAR insurers that the assured (Operator) employs an independent marine warranty surveyor on a project to provide independent analysis, inspection and approval for various defined construction activities
- Technical Documents - see example JR2019-006A Upstream Warranty Endorsement



MWS Development in the Insurance Market



Role of the Marine Warranty Surveyor

To act on behalf of the Insurer and the Assured to ensure the Marine Warranty clause is complied with.

- Compliance may mean ensuring that specific project marine operations are performed to recognized codes & standards and within acceptable risk levels which are tolerable to the insurance panel.

- This may further require the operation to be in compliance with national and international regulatory bodies requirements.

Ultimately the MWS is there to provide impartial review of the operation to ensure that the agreed warranties of the project are met, or where deviations exist, the deviation has been suitably presented as being mitigated.

This necessitates a process of transparent communication and presentation to the insurers to ensure that the risk or change in risk is understood and still at an acceptable level.

Why have a Marine Warranty Survey

Insurers require a expert independent 3rd party, providing technical oversight on a project to protect their interests, whilst at the same time providing 'value add' to the assured interests

Benefits through the appointment of a Marine Warranty Surveyor:

- Independence from the commercial and schedule drivers of the project
- Marine and Engineering technical expertise not held by underwriters, and acting on behalf of all underwriters
- Extensive marine operations experience gained over many similar prior projects
- Local representation with knowledge of the local sites/conditions
- Claims reduction
- Transparent, eyes on the ground providing statement of fact for the operation and its execution.
- To be able to understand the impact of events that do not follow the anticipated procedures ensuring that material change is presented to the appropriate stakeholders.

What is Marine Warranty Survey

Aim to ensure risks are being reduced to **ALARP** by:

- Application of appropriate standards
- Checking of designs, calcs and procedures to ensure compliance with standards or good practice
- Inspecting readiness of general & specialist vessels and equipment for an operation to begin – focus on mission critical equipment
- Assessing competence of marine crews to perform operation
- Suitable Operational Limits are in place in relation to the sensitivity of the operation.
- Monitoring the operation and suitability of actual and forecast weather conditions, *noting operations can be sensitive to weather and have fine tolerances.*
- That preparation and testing is carried out prior to commencement of the operation



MWS in '3'

- **Is it strong enough?**
- **Is it stable enough?**
- **Are the marine procedures adequate and safe?**

Role of the Marine Warranty Surveyor

- Once satisfied that the suitable engineering has been performed, procedures have been prepared and are understood, vessels and equipment are suitable, necessary preparations have been made and the prevailing weather is suitable to conduct the operation the MWS will provide an approval to the project for the specified operation to proceed.
- The MWS approval is granted via what is known as a **Certificate of Approval (COA)**.
- Following issuance of a COA the MWS may (depending on the type of operation) then remain at site and ensure that once commenced the operation is then performed in accordance with the approved procedures and within agreed limits.
- Prior to commencement, approval may be withdrawn if the preparation, operation or conditions deviate widely from that which is anticipated.
- However, once the operation has commenced the operation is either in compliance with the COA or it is not. If it is not then a Management of Change process must be initiated to agree deviations.
- Importantly**,** if MWS approval is not provided prior to the commencement of a scope defined operation, or such approval is latterly withdrawn, the Assured could be considered in **Breach** of the terms of their Marine Warranty. This may allow the Insurer to avoid payment of a claim against the policy in the event an incident occurred during the operation.

MWS Selection and Appointment

Which MWS Company

Selection and appointment:

- Insurance Slip will contain a short list of acceptable INDEPENDENT surveying companies – typically based on proven experience (task & region)
- See JR2019/010 – MWS Good Practice Guideline – *Pre Qualification*
- Assured preferably manages tender and appoints the MWS under contract
  - Can we passed to contractor/sub-contactor
  - Bid evaluation - ensure *technical valuation has equal merit to price*
- Early appointment is ideal, as can then influence design, although often only practical for large projects
- Tender based on a scope of work, and can be reimbursable, lump-sum or combination
  - Slip will typically allocate a contribution from the premium towards the MWS fee
- Some Assureds work with an MWS from early project stages , this has significant advantages in terms of early project input, and helps validate constructability

MWS Selection and Appointment

Which Surveyor

Individual skills and experience:

- Projects are multi-faceted, and MWS must be able to demonstrate a range of skills and experience:
  - Master Mariners – have held 'foreign going tickets' and have had command experience
  - Naval Architects – qualified to an appropriate professional qualification & level
  - Structural Engineers – qualified to an appropriate professional qualification & level
- Insurers increasingly look for SOMWS accreditation
  - Formed in 2017, with significant involvement and encouragement from market
  - Individual membership – demonstrates Surveyor ability in one or more of the following areas:
    - ✓ Oil & Gas Projects
    - ✓ Renewables Projects
    - ✓ Rigs (Moving, not location approvals)
    - ✓ Project Cargo

Scope of Work

- Scope will be highly project/activity dependant, albeit a commonality of task
- Generic scopes of work developed by Joint Rig Committee
- Used to develop a basis for tender, and then refined as project detail is developed
- Scope is nearly always a combination of ‘desk’ and ‘field’ work
- Final scope is agreed & approved between the Insurer (contract leader) and Assured, in consultation with MWS
- Scope can be influenced by:
  - extent of internal assurance measures employed by Assured
  - extent of class and regulatory body involvement
  - complexity, novelty or sensitivity of proposed operations
  - asset value, weight, size or project schedule criticality
  - assured previous insurance history, and Insurers claims experience on similar projects
- Assured may choose to increase scope of work to suit own needs, but must not remove a portion of previously endorsed scope within written agreement with Insurer. Failure to do so could render them in breach of their warrant

Scope of Work - Joint Natural Resources Committee

- Renamed April 2022 – formerly Joint Rig Committee
- Represents interests of insurers writing offshore energy & offshore renewables
- Survey & Engineering Sub-committee develops COP & SOW:
  - Rig Move – ISP, COP & SOW
  - Upstream Construction – COP & SOW
  - Upstream Decommissioning – COP & SOW
  - Offshore Renewables – COP & SOW
  - Lay-up/Reactivation – COP & SOW
  - Project Cargo
  - FUMA
  - Well Review (Separate specialist input)
  - Asset Value Guidelines
- Warranty endorsement available - see earlier slide
- Certificate of Approval (COA) template available for routine activities

Scope of Work - Joint Natural Resources Committee

Code of Practice

- Clarify the role of the Marine Warranty Surveyor
- Define the function Scope of Work
- Outline approval criteria for Marine Warranty Surveying activities
- Establish minimum standards for Marine Warranty Surveyor performance
- Define lines of **communication** between the Marine Warranty Surveyor, the Assured and Underwriters
- Outline the basic requirements for the Certificates of Approval (COA's)

Scope or Work

- For specific activity
- Define documents to review and approve
- Define activities to attend approve & attend & which need a COA
- As appropriate to refer to industry codes

Scope of Work - Typical Warranty Surveyor Activities

- Validation of project conceptual design basis & criteria.
- Review & Approval of marine operations procedures and associated engineering based on the agreed criteria and specifications.
- Attendance at marine related hazard identification meetings/Risk assessments, engineering meetings and procedural reviews.
- Inspection/audit of marine transportation, tow and construction vessels and critical equipment.
- Attendance on-site for pre-operational inspections and tests to ensure operational readiness.
- Attendance at site to approve and subsequently witness defined Marine Operations as required





It works best when….

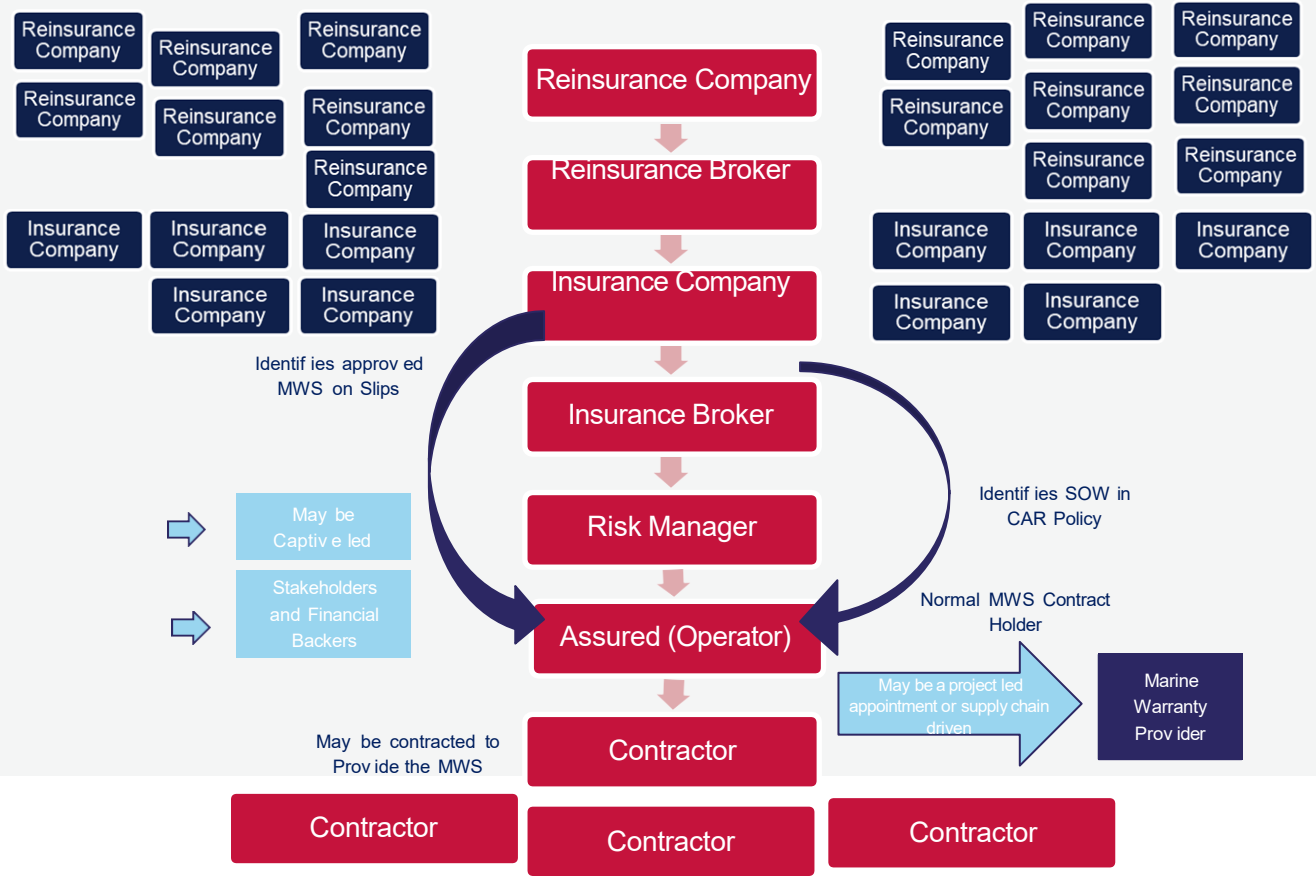
- MWS is engaged early – able to influence when design is still on paper, builds early trust with assured, and provides clarity of scope of work
- MWS has good mix of back office technical expertise/experience field personnel/local representation
- Kick-off meeting with all parties – establishes good open communications, that need to be present throughout engagement
- Documents for review are made available to schedule
- MWS is consulted when a managed changed impacts marine operations
- Attended HAZIDS – best place to challenge inadequate procedures, or poor assumptions
- Formal lessons learned documented from the project prior to MWS demobilisation

Role of MWS (*and Marine Advisor*) is increasingly important as technical marine experience has moved out of Operator's organisations

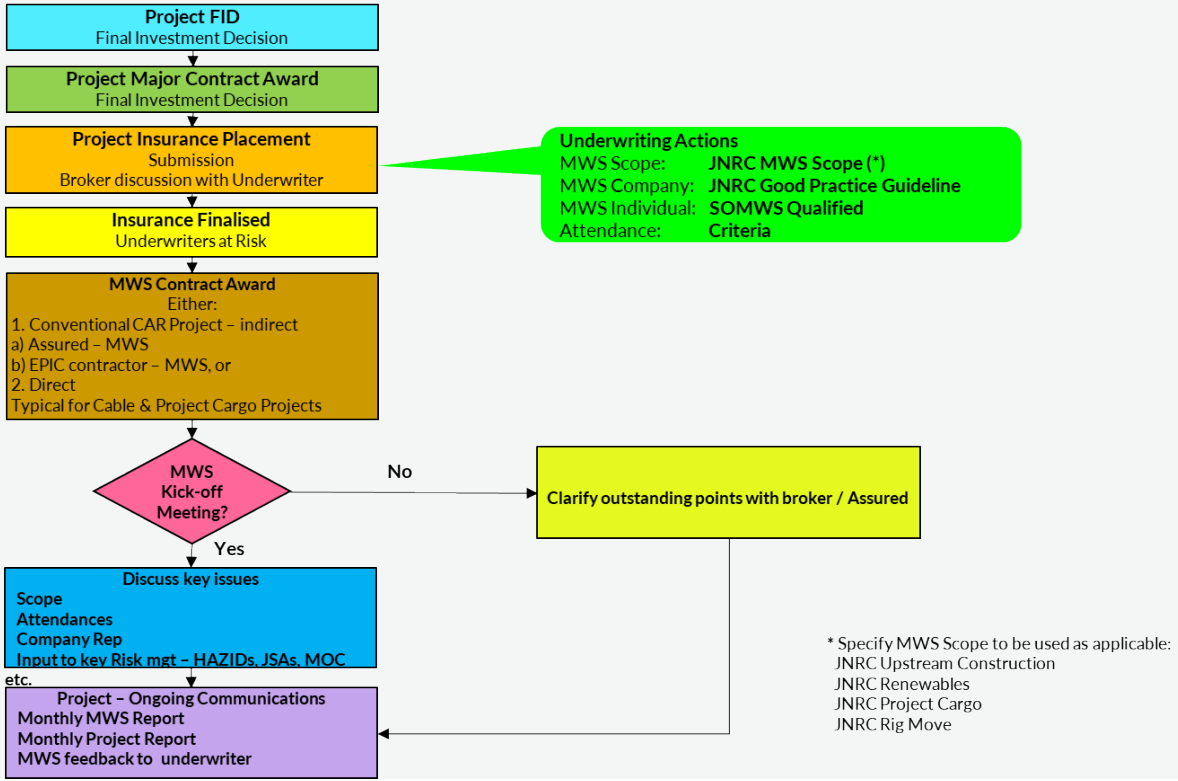
Crucial in areas where little experience in working to recognised industry standards

Should not to be seen as 'policing' a project, but a vital 3rd party expert offering appropriate challenge to assist in keeping operator/contractor operating within standard and agreed procedures

MWS Contractual Relationships

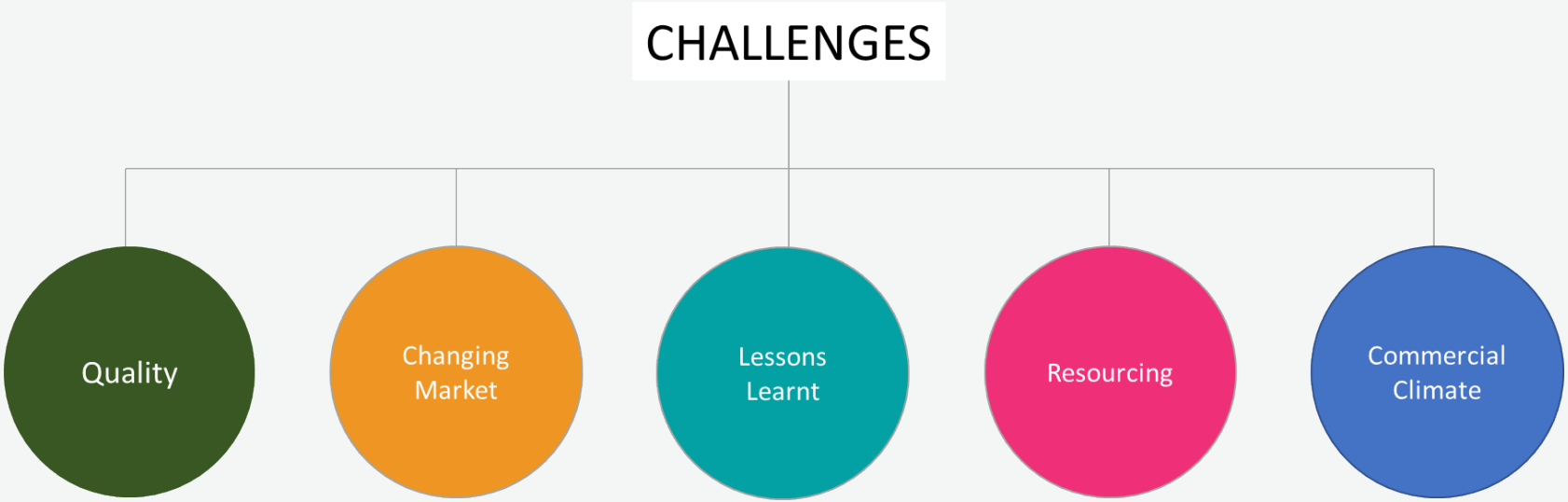


Appointment Process - ideal example



Challenges

Will be explored further in Module 2



Thank You & Questions