# JR2019-004 Initial Screening Process

## Mobile Offshore Unit Location & Move Procedure Robustness Assessment

| Name | Date of issue | Version | Changes |
|---|---|---|---|
| JR2016/011 | 20 December 2016 | 1 | |
| JR 2019-004 | 03 September 2019 | 2 | Update to Guidance Notes |

# Initial Screening Process (ISP) (JR2019-004)

## Mobile Offshore Unit Location & Move Procedure Robustness Assessment

This document has been prepared to assist the Underwriter when in discussion with broker and assured to gain a better understanding of the robustness of approach taken with regards to MOU Location & Move Assessment. Questions posed below, whilst reasonably generic, cover the three key areas of expected controls (barriers) of procedure (process), people and plant. Guidance Notes are provided to further assist in reviewing and assessing the adequacy of response. The document is intended as an initial guide only, and should not necessarily be seen as a substitute or alternative to engagement and review by a Marine Warranty Surveyor. However appropriate technical interpretation of answers should allow the Underwriter to either proceed with confidence with the assureds approach to MOU Location & Move Assessment as stated, or provide justification for adopting an additional layer of assurance by invoking the need for warranted MOU Location and Move approval.

| | Jack-Up Location Approval | Wet Tows of Jack-Up Rigs | Wet Tows of MOUs (excl. Jack-Ups) | Dry Tows & HLV Transportation of MOUs | Transits Under Own Power (excl. Self-Propelled Drill Ships) |
|---|---|---|---|---|---|
| **Procedure** ***(Appropriate procedures in-place, consistently applied, and subject to audit)*** | 1. Are there 'in-house' Jack-Up Location Approval procedures? – *provide copy*<br>2. Is Location Approval mandatory for all rig moves?<br>3. Is Location Approval subject to audit? – *provide copy of last audit* | 1. Are there 'in-house' Jack-Up Rig Move procedures? – *provide copy*<br>2. Is Rig Move approval mandatory for all moves?<br>3. Are Rig Moves subject to audit? – *provide copy of last audit* | 1. Are there 'in-house' Wet Tow procedures? – *provide copy*<br>2. Is Wet Tow approval mandatory for all moves?<br>3. Are Wet Tows subject to audit? – *provide copy of last audit* | 1. Are there 'in-house' Dry Tow procedures? – *provide copy*<br>2. Is Dry Tow approval mandatory for all moves?<br>3. Are Dry Tows subject to audit? – *provide copy of last audit* | 1. Are there 'in-house' Transit procedures? – *provide copy*<br>2. Is Transit approval mandatory for all moves?<br>3. Are Transits subject to audit? – *provide copy of last audit* |
| **People** ***(Competent persons in a well-supported organization, with clarity of accountability and responsibility)*** | 1. Provide details of company *(Rig Operator)* Marine Department.<br>2. Who approves the Rig Location, and is a COA issued by an MWS? | 1. Provide details of company *(Rig Operator)* Marine Department<br>2. Who approves the individual Rig Move plan/procedure, and is COA issued by a MWS?<br>3. Who has overall responsibility for a Rig Move? | 1. Provide details of company *(MOU Operator)* Marine Department<br>2. Who approves the individual Wet Tow plan/procedure, and is COA issued by a MWS?<br>3. Who has overall responsibility for a Wet Tow? | 1. Provide details of company *(MOU Operator)* Marine Department & HLV Contractor<br>2. Who approves the individual Dry Tow Plan and is COA issued by a MWS?<br>3. Who has overall responsibility for a Dry Tow? | 1. Provide details of company *('Subject Vessel' Operator)* Marine Department<br>2. Who approves the individual Transit and is COA issued by a MWS?<br>3. Who has overall responsibility for a Transit? |
| **Plant** ***(Fit for purpose, third party verified equipment, operating in an environment of managed modifications)*** | 1. Is the rig (s) fit for purpose?<br>2. Date of last 3rd party condition survey performed? – *provide copy*<br>3. Are all post original construction modifications reflected in the Jack-Up Marine Operating Manual? – *provide copy* | 1. Is the rig (s) fit for purpose?<br>2. Is the tow vessel (s) fit for purpose?<br>3. Date of last 3rd party condition survey performed on both of above? – *provide copies*<br>4. Are all post original construction modifications reflected in the Jack-Up Marine Operating Manual – *provide copy* | 1. Confirm that MOU is fit for purpose?<br>2. Is the Wet Tow vessel (s) fit for purpose?<br>3. Date of last third party condition survey performed on both of above? – *provide copies*<br>4. Are all post original construction modifications reflected in the MOU Marine Operating Manual? – *provide copy* | 1. Confirm that MOU is fit for purpose?<br>2. Is the Dry Tow vessel (s) fit for purpose?<br>3. Date of last third party condition survey performed on both of above? – *provide copies*<br>4. Are all post original construction modifications reflected in the MOU Marine Operating Manual? – *provide copy* | 1. Confirm that 'Subject Vessel' is fit for purpose?<br>2. Date of last third party condition survey performed on the 'Subject Vessel'? – *provide copy*<br>3. Are all post original construction modifications reflected in the 'Subject Vessel' Marine Operating Manual? – *provide copy* |

# Guidance Notes – Look for Evidence of:

# Jack-Up Location Approval

**Procedure**

1. Procedures (and other operational documentation such as drawings) that are controlled, subject to regular update, and are maintained 'as-built'
2. Procedures being part of a wider Marine Operations Manual, and should reflect the fleet diversity and regional operating, geophysical & geotechnical conditions
3. Operations are conducted in compliance with procedures and Marine Operations Manual at all time
4. When an operation is conducted outside of approved procedures/Marine Operations Manual, this is subject to a formal management of change process, with senior leadership, technical authority and MWS approval
5. Is the Location Approval procedure compliant with the current ISO 19905-1 or SNAME T&RB 5-5
6. Omni-directional storm metocean environmental return period definition for the site location (50 yr) or with justification of use of directional or seasonal criteria
7. Clear differentiation between location inherent hazards – metocean, tropical revolving storm areas, wind speeds of 70 knots of greater, soils data (adequacy & interpretation)
8. Defined criteria for requirement of a Site Specific Assessment (SSA) vs Jack-Up Suitability Assessment only (metocean, geotechnical & geophysical)
9. Guidance for acceptance of validity of soils data & requirements for site specific soils boring data. *Ref. INSAFE JIP Improved Guidelines for the Prediction of Geotechnical Performance of Spudcan Foundations During Installation and Removal of Jack-Up Units*
10. Defined minimum requirements when Jack-Up Suitability Assessment only, i.e. at least a leg penetration assessment with air gap sufficiency verification and spare leg length (minimum 1.5 m/5ft) reserve above top of jack-house) for environmental extremes
11. Clear & conservative requirements for a pre-load plan in the event soils data shows risk of rapid settlement, leg runs or punch through
12. Minimum requirements in the event that geotechnical borehole information is not available, for example consideration may be given to information from within a 1 mile radius of proposed location if supported by an unobstructed shallow seismic tie back line to a known bore hole, but unacceptable if the tie back line shows the existence of channelling variation of geophysical or acoustic properties or other discontinuities
13. Use of data and actual performance from previous rig at location - *if applicable*
14. Regular audit programmes, where procedural adherence is verified, with feedback loops for continuous improvement based on audit outcomes and other third party loss learning opportunities
15. When locating near active pipelines and wells, procedure in place for shutting in wells, depressuring & identifying pipeline locations

**People**

1. Operator organization chart, identifying responsible person(s) for location approval activity, and/or contractual arrangements with expert third parties
2. Extent of involvement by Operator in the engineering of SSA/Jack-Up Suitability Assessment
3. Extent of involvement of MWS in the planning & engineering of SSA/Jack-Up Suitability Assessment
4. Are roles of Location Approver, MWS, Rig Mover, OIM & Barge Master clearly defined and independent of each other for Location Approval (or otherwise justified)
5. Verification of competence and clarity of responsibility of key roles associated with location approval

**Plant**

1. Rig(s) are classed by an IACS member society, and that classification is valid (for duration of the contract/insurance policy) with no conditions of class
2. Third party condition survey being current, and with no open action items
3. Rig modifications carefully controlled throughout operational life, and accurately documented - see *Procedure 1.* above
4. Sufficient rig pre-load capacity (with safety margin) for all planned locations
5. The rig (or rig of similar design) operating in that region, and in similar water depths with similar soil conditions and with a recognised industry standard location approval (e.g. the relevant section(s) of ISO 19905-1).

## Wet Tows of Jack-Up Rigs (Jacking Down/Wet Tow/Jacking Up)

**Procedure**

1. Procedures (and other operational documentation such as drawings) that are controlled, subject to regular update, and are maintained 'as-built'
2. Procedures being part of a wider Marine Operations Manual, and should reflect the fleet diversity and regional operating, geophysical & geo-technical conditions
3. Operations are conducted in compliance with procedures and Marine Operations Manual at all times
4. When an operation is conducted outside of approved procedures/Marine Operations Manual, this is subject to a formal management of change process, with senior leadership, technical authority and MWS approval
5. Exception and qualification criteria where approval for move is not required
6. Defined return period for limiting sea-states for the tow route (typically 10 years, can be less for operations taking no more than 7 days, including contingency). *Ref: a recognised industry standard (e.g. Table 3-1 of DNVGL-ST-N001)*
7. Clear differentiation between tow route inherent hazards
8. Bespoke Voyage Plan, that reflects the hazards of the specific move
9. Voyage Contingency Plans
10. Use of marine transport design/operation tools such as 'Marin SafeTrans' or similar - not typically applicable *for short tows*
11. Jacking Down, Voyage & Jacking-Up Plans to have clear 'hold' points, and unambiguous requirements as to how deviation from the plan is to be managed and approved
12. Maximum air gap for pre-load defined (typically 1.5m/(5 ft) for good soils, 0 m/ft for poor soils or poor data combined with sequential pre-load)
13. Pre-load plan that considers difficult locations, and provides a clear response to possibility of rapid settlement, leg runs and punch through. *Ref: a recognised industry standard (e.g. Appendix A of DNVGL-ST-N002)*
14. Contingency Plans & Emergency Response Plans
15. Jacking-Up Contingency Plans - that includes for clear guidance and the minimum expected requirements for 'punch through' risk mitigation
16. Regular audit programmes, where procedural adherence is verified, with feedback loops for continuous improvement based on audit outcomes and other third party loss learning opportunities.
17. When locating near active pipelines and wells, procedure in place for shutting in wells, depressuring & identifying pipeline locations

**People**

1. Operator organization chart, identifying responsible person(s) for marine activity, and/or contractual arrangements with expert third parties
2. Extent of involvement by Operator in move plan & approval
3. Extent of involvement of MWS in move plan & approval
4. Verification of competence and clarity of responsibility of key roles associated with approval and tow, including hand-over points
5. Are roles of Location Approver, MWS, Rig Mover, OIM & Barge Master clearly defined and independent of each other for Rig Moves (or otherwise justified)
6. 'Non-essentials' removed for non-field moves - *not of direct property insurer interest, but a good indicator of safety culture - but question 'dead-tows' (i.e. no riding crew)*

**Plant**

1. Rig(s) are classed by an IACS member society, and that classification is valid (for duration of the contract/insurance policy) with no conditions of class, and as necessary formal class exemption for tow duration
2. Third party condition survey being current, and with no open action items
3. Rig modifications carefully controlled throughout operational life, and accurately documented - see *Procedures* above
4. Condition survey for tow vessel (s) being current, and to a defined standard, for example OVIQ by OCIMF inspector or similar

# Wet Tows of MOUs

**Applicable for Semi-Submersibles & Submersible MODUs/Drill Ships/Tender Rigs (excluding jack-ups)**

**Procedure**

1. Procedures (and other operational documentation such as drawings) that are controlled, subject to regular update, and are maintained 'as-built'
2. Procedures being part of a wider Marine Operations Manual, and should reflect the fleet diversity and regional operating conditions
3. Operations are conducted in compliance with procedures and Marine Operations Manual at all times
4. When an operations is conducted outside of approved procedures/Marine Operations Manual, this is subject to a formal management of change process, with senior leadership, technical authority and MWS approval
5. Exception and qualification criteria where approval for tow is not required
6. Defined return period for limiting sea-states for the tow route (10 year)
7. Clear differentiation between tow route inherent hazards
8. Bespoke Voyage Plan, that reflects the hazards of the specific move
9. Use of marine transport design/operation tools such as 'Marin SafeTrans' or similar
10. Voyage Plan to have clear 'hold' points, and unambiguous requirements as to how deviation from the plan is to be managed and approved
11. Contingency Plans & Emergency Response Plans
12. Regular audit programmes, where procedural adherence is verified, with feedback loops for continuous improvement based on audit outcomes and other third party loss learning opportunities.

**People**

1. Operator organization chart, identifying responsible person(s) for marine activity, and/or contractual arrangements with expert third parties
2. Extent of involvement by Operator in move plan & approval
3. Extent of involvement of MWS in move plan & approval
4. Verification of competence and clarity of responsibility of key roles associated with approval and tow, including hand-over points
5. Are roles of MWS, Equipment Mover, OIM & Barge Master clearly defined and independent of each other for Wet Tows (or otherwise justified)
7. 'Non-essentials' removed for tow - *not of direct property insurer interest, but a good indicator of safety culture- but question 'dead-tows' (i.e. no riding crew)*

**Plant**

1. 'Subject Equipment ' classed by an IACS member society, and that classification is valid (for duration of the contract/insurance policy) with no conditions of class, and as necessary formal class exemption for tow duration
2. Third party condition survey being current, and with no open action items
3. 'Subject Equipment ' modifications carefully controlled throughout operational life, and accurately documented - see *Procedures* above
4. Condition survey for tow vessel (s) being current, and to a defined standard, for example OVIQ by OCIMF inspector or similar

## Dry Tows of MOUs

**Applicable for Barge and Heavy Lift Vessel Transportation of Jack-Up Rigs/Semi-Submersibles & Submersible MODUs & other MOUs of similar configuration**
*Note: If Dry Tow of a Jack-Up Rig, then Guidance Notes that impact Jacking Down and Jacking Up under Wet Tows of Jack-Up Rigs as applicable*

**Procedure**

1. Procedures (and other operational documentation such as drawings) that are controlled, subject to regular update, and are maintained 'as-built'
2. Procedures being part of a wider Marine Operations Manual, and should reflect the fleet diversity and regional operating conditions
3. Operations are conducted in compliance with procedures and Marine Operations Manual at all times
4. When an operations is conducted outside of approved procedures/Marine Operations Manual, this is subject to a formal management of change process, with senior leadership, technical authority and MWS approval
5. Cargo Securing Procedures/Manual includes Motion Analysis, Stability Analysis, Leg Bending Calculations (for Jack-Ups), Cribbing and Seafastening calculation

6. Exception and qualification criteria where approval for tow is not required
7. Defined return period for limiting sea-states for the tow route (typically 10 years, can be less for operations taking no more than 7 days, including contingency). *Ref: a recognised industry standard (e.g. Table 3-1 of DNVGL-ST-N001)*
8. Clear differentiation between tow route inherent hazards
9. Bespoke Voyage Plan, that reflects the hazards of the specific move
10. Use of marine transport design/operation tools such as 'Marin SafeTrans' or similar

11. Voyage Plan to have clear 'hold' points, and unambiguous requirements as to how deviation from the plan is to be managed and approved
12. Loading and discharge locations suitable for operations with sufficient shelter and water depth from weather conditions
13. Contingency Plans & Emergency Response Plans
14. Regular audit programmes, where procedural adherence is verified, with feedback loops for continuous improvement based on audit outcomes and other third party loss learning opportunities.

**People**

1. Operator organization chart, identifying responsible person(s) for marine activity, and/or contractual arrangements with expert third parties
2. Extent of involvement by Operator in move plan & approval
3. Extent of involvement of MWS in move plan & approval
4. Verification of competence and clarity of responsibility of key roles associated with approval and tow, including hand-over points
5. Are roles of MWS, MOU Mover, OIM & Barge Master clearly defined and independent of each other for Dry Tows (or otherwise justified)
6. 'Non-essentials' removed for tow - *not of direct property insurer interest, but a good indicator of safety culture*

**Plant**

1. MOU classed by an IACS member society, and that classification is valid (for duration of the contract/insurance policy) with no conditions of class and as necessary formal class exemption for tow duration
2. HLV classed by an IACS member society, and that the classification is valid (for duration of the contract/insurance policy) with no conditions of class
3. Third party condition survey being current, and with no open action items
4. 'Subject Equipment' modifications carefully controlled throughout operational life, and accurately documented in all appropriate procedures and manuals - see *Procedures* above
5. Condition survey for tow vessel (s) being current, and to a defined standard, for example OVIQ by OCIMF inspector or similar
6. MOU is structurally adequate to survive the journey

## Transits Under Own Power

**Applicable for Lift Barges/Semi-Submersible & Submersible MOUs and Tender Rigs (other than in respect of Self-Propelled Drill Ships)**

**Procedure**

1. Procedures (and other operational documentation such as drawings) that are controlled, subject to regular update, and are maintained 'as-built'
2. Procedures being part of a wider Marine Operations Manual, and should reflect the fleet diversity and regional operating conditions
3. Exception and qualification criteria where approval for transit is not required
4. Defined return period for limiting sea-states for the transit operation (typically 10 years, can be less for operations taking no more than 7 days, including contingency). *Ref: a recognised industry standard (e.g. Table 3-1 of DNVGL-ST-N001)*

5. Clear differentiation between transit route inherent hazards
6. Bespoke Voyage Plan, that reflects the hazards of the specific transit
7. Voyage Plan to have clear 'hold' points, and unambiguous requirements as to how deviation from the plan is to be managed and approved
8. Contingency Plans & Emergency Response Plans
9. Regular audit programmes, where procedural adherence is verified, with feedback loops for continuous improvement based on audit outcomes and other third party loss learning opportunities.

**People**

1. Operator organization chart, identifying responsible person(s) for marine activity, and/or contractual arrangements with expert third parties
2. Extent of involvement by Operator in Transit Plan & approval
3. Extent of involvement of MWS in Transit Plan & approval
4. Verification of competence and clarity of responsibility of key roles associated with approval and tow, including hand-over points
5. Are roles of MWS, Equipment Mover, OIM & Master clearly defined and independent of each other for Transits (or otherwise justified)
6. 'Non-essentials' removed for transit - *not of direct property insurer interest, but a good indicator of safety culture*

**Plant**

1. 'Subject Vessel' classed by an IACS member society, and that classification is valid (for duration of the contract/insurance policy) with no conditions of class
2. Third party condition survey being current, and with no open action items
3. 'Subject Vessel' modifications carefully controlled throughout operational life, and accurately documented - see *Procedures* above

**Abbreviations**

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|---|---|
| 'As-built' | A reference to status of documents, for example Marine Operating Manuals revised to reflect all modifications after original design & construction |
| COA | Certificate of Approval |
| IACS | International Association of Classification Societies |
| ISO | International Organization for Standardization |
| ISP | Initial Screening Process |
| 'Marin SafeTrans' | example of an integrated design and operational software tool to plan and execute marine operations safely and efficiently |
| MOU | Mobile Offshore Units |
| MWS | Marine Warranty Surveyor |
| HLV | Heavy Lift Vessel |
| OCIMF | Oil Companies International Marine Forum |
| OIM | Offshore Installation Manager |
| OVIQ | Offshore Vessel Inspection Questionnaire |
| SNAME | Society of Naval Architects and Marine Engineers |
| SSA | Site Specific Assessment |