Mechanically Connected Pipelines- Joint Industry Project (JIP)

To bring significant cost benefit to the Industry, DNV GL is motivated to facilitate technology qualification using DNV-RP-A203; and thereby develop best practice guidance for the Industry on mechanical connector application for deep-water field developments.

Benefits:
- Reduced offshore installation time
- Installation with smaller installation vessels
- Standardize connected pipeline systems
- On-shore prefabricated joints for better project control
- Increased fatigue resistant joints
- Recoverable, re-usable and repairable systems
- Simplified installation for large diameter clad lined and non-clad pipelines

Project Attributes:
- Review test activity performed, identify gaps and develop qualification program in a quick turn around Phase-1 of the JIP (3 Month target)
- Perform Technology feasibility study and Qualification within 1 year of the JIP launch
- Join DNV GL experts in developing Connected pipeline guidance

Value Delivered:
- Significantly reduce CAPEX expenditure with lower contract lead times, faster installation and the possibility for utilizing locally sourced contractors with smaller installation vessels
- Application of connected pipelines for your immediate project needs (2018-2019) by utilizing existing test data for a faster JIP qualification program
- Faster Project schedule with standardized on-shore prefabricated joints
- Increase feasibility of large export line projects with simplified installation of large diameter pipelines; feasibility of deep-water projects with faster installation while maximizing the available weather window

For the current qualification program GMC Deepwater connectors are considered due to available test data
JIP Roadmap

JIP Phase I and Phase II: Qualification Program for GMC Connector (Contingent on in-kind test data/details for DNV GL evaluation)

**Phase I: Planning**

**Overall Scope:** Evaluate Connector Qualification Basis (TQ Basis: performance targets); Perform Technology and Threat Assessment, Review existing test data (GMC) for suitability and crediting purposes AND develop JIP qualification plan (TQ Plan).

**Deliverable:** Technology Gap Report (Current Status of test data and creditability; and what needs to be done).

Qualification Plan (TQ Plan) for Phase-2

**Fee:** $35,000 USD/ Participant

**GOAL**

1) Understand the status (quality and validity) of GMC test data; identify if any data could be used for crediting towards a JIP Qualification process.
2) Develop JIP Qualification plan (for execution in Phase II)
3) Target Phase I Time frame: 3 Months

**Phase II: TQ Program Execution**

**Overall Scope:** Activity according to TQ Plan developed in Phase I; Additional study as determined by the steering Committee (e.g. Global performance assessment).

**Deliverable:** Qualification/ Feasibility Statement (Contingent on JIP Qualification of the connectors according to criteria set in qualification basis)

**Fee:** TBD.

**GOAL**

1) Provide participants with the GMC Connector qualification/ feasibility statement for immediate application.
2) Target mid-2018 completion of qualification program

**Subsequent Phases: Guidance**

**JIP Subsequent Phases: Additional Connector types and Vendors (to facilitate DNV GL to develop guideline for connected pipelines)**

- TQ Program/ feasibility study for other connector Vendors
- Develop feasibility/ acceptance criteria- Design through Installation Guideline Report Development

**GOAL**

Understand and Evaluate/ Develop all parameters/ criteria for a stand-alone Connected pipeline assessment Guideline

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