

CLIENT	GLOBAL OPERATOR
SECTOR	UPSTREAM OIL & GAS, UKCS
ASSET	LATE LIFE FPSO
DATE	2016 – PRESENT
DURATION	ONGOING
OBJECTIVE	PROVISION OF ASSET INTEGRITY MANAGEMENT SERVICES AND DATA ANALYTICS
SERVICES	INTEGRITY MANAGEMENT CONSULTANCY, LATE LIFE STRATEGY, EXACT



Cutting-edge integrity management solutions – maximising operational efficiencies and reducing costs

PROJECT OVERVIEW

A global operator operating two North Sea FPSO units in the UKCS was keen to rationalise and improve the way integrity management (IM) was performed on those installations. Imrandd was awarded its first IM contract with the operator in 2016.

The client already had a strong understanding of risk, the condition of their assets and overall asset management. However, like many late-life asset owners, they had a growing backlog of inspection data, making effective prioritisation of tasks a constant battle.

THE CHALLENGE

Many IM processes were carried out manually, placing additional strain on the client's in-house integrity team to effectively rationalise and focus on critical areas and anomalies. Backlog was a concern and resources were stretched.

THE SOLUTION

Imrandd proposed that the amount of immediate work to tackle the priorities would require support with sound and collaborative engineering judgement and tools designed to enable the prioritisation and rationalisation of the inspection backlog.

The Imrandd team understands that data quality can have a significant impact on operational and business decisions. When the contract commenced, there was a large quantity of legacy data and over 1,000 unassessed anomalies.

Imrandd specialises in a data-driven approach, establishing degradation rates using existing inspection data, providing an enhanced understanding of corrosion rates and degradation patterns to drive optimisation. We began by defining the risk-based inspection methodologies, prioritisation of ensuring higher-risk issues.

BENEFITS

- ▶ Reduced 2 years unassessed anomaly backlog in 12 months
- ▶ Accurately cleansed, corrected and interpreted the legacy data sets
- ▶ Mapped and predicted degradation, failure patterns and hot spots
- ▶ Delivered actionable insights, refocus inspection efforts and prioritise risk
- ▶ Saved considerable OPEX through innovative engineering and IM processes

CONCLUSION

Imrandd's asset integrity management approach has enabled our client to build an effective, focused IM strategy providing the operator with a significantly improved understanding of their potential risks. The process has freed up onshore engineering and operations teams from daily firefighting to guide the inspection teams in a more effective and targeted way. Inspection enactment is more attentive and as a result potential issues are caught early, before equipment failure or unplanned shutdowns.



Actionable insights turning data to information during early project phases led to significant savings and an accelerated ROI



Saved the client \$700,000 through non-intrusive inspection of the FPSO slops tank, in turn deferring a three-month shutdown



Championed the introduction of advanced analytics software EXACT in partnership with the Net Zero Technology Centre