

CLIENT

SECTOR

ASSET

DATE

DURATION

OBJECTIVE

SERVICES

GLOBAL OPERATOR

UPSTREAM OIL & GAS, UKCS

LATE LIFE FPSO

2020–2021

8 MONTHS

DECISION SUPPORT ON PRIORITISATION AND OPTIMISATION OF REPAIR ORDER PLAN FOR ASSET LIFE EXTENSION

SOFTWARE AS A SERVICE (REFLEX) FOR REPAIR ORDER PLAN OPTIMISATION, CONSULTANCY

REFLEX tool demonstrates life extension of asset by 5-10 years

PROJECT OVERVIEW

Life extension project for a North Sea FPSO. The client was up against business and operational constraints, backlogs and deferrals were increasing with KPIs and daily performance measures impacting assurance and company risk profile. Imrandd's consultants were engaged to develop a coherent plan to tackle the backlog of repair orders and enable the continuation of safe, profitable and sustainable operations for the remaining life of the asset.

THE CHALLENGE

Poor anomaly management and repair order backlog had built up over many years impacting scope execution. The scope of repair orders was too large to prioritise manually as well as a myriad constrained resources including bed space, man hours, deferrals, overdue dates and covid-19 restrictions.

THE SOLUTION

Where current planning and optimisation software zeroes in on a single critical path based on project risk management and schedule compliance, REFLEX's optimisation engine drives a more holistic approach to the competing variables.

With REFLEX's optimising capability, our consultants can run multiple scenarios to organise activities and find the optimum route through any complex project.

Our output provided senior management with a robust plan extending the operational life by ten years. In addition a detailed case was created to provide information allowing for fundamental decision-making on budgeting, additional risk and resourcing shortfalls.

BENEFITS

- ▶ Asset life extension supported until 2035
- ▶ Client has confidence in a fully prioritised repair order plan
- ▶ Clear visualisation of different resourcing scenarios
- ▶ Visibility of upcoming scopes to aid risk management
- ▶ Full details of regret scopes to aid deferrals

CONCLUSION

Imrandd's team of expert consultants introduced REFLEX to address the specific challenges. An improvement plan was developed, and activities optimised. The net result provided detailed data technically supporting the extension of the life of the asset to 2035.

Imrandd's findings and visual outputs were used to demonstrate to the HSE that a prioritised and risk-assessed programme of works addressing safety critical backlog was in place and functioning.

With our licensed solution, REFLEX can be run on a regular basis providing continual assurance that safety critical life extension activities remain optimal and achievable throughout all the assets future phases.