














ODL Maintenance Group Experience

CLIENT	PROJECT AND SCOPE
	<p>Sevan Marine Driller, Brazil</p> <ul style="list-style-type: none"> • Master Equipment List Build and Hierarchy • Criticality Study • Job Plan Development • PM Schedule and Routes • Data Loading (Maximo) • Spare Parts Analysis
	<p>OMV/Petrom, Romania</p> <p>Project on-site in Romania for the development of;</p> <ul style="list-style-type: none"> • Development of Maintenance Philosophies • Development of Maintenance Strategies • Spare Parts Evaluations • Job Plan Development • Maintenance Planning & Scheduling • SAP Implementation
	<p>Seadrill, Brazil</p> <p>ODL were contracted by Seadrill to implement a review and clean-up of Functional Location and Spare Parts information located in their IMF system for the West Polaris DrillShip. This Scope of Work also included the tagging of all Main Equipment on the vessel. Work implemented in Singapore, Brazil and ODL offices.</p>
	<p>Mobil Producing Nigeria (MPN)</p> <p>CMMS for the Mobil Producing Nigeria (MPN) East Area Projects EPC4A, for offshore facilities in Nigeria.</p> <p>The project consisted of Data Development and Validation of the Computerised Maintenance Management System (CMMS) Engineering Data Tables.</p> <p>The Scope of Work involved the following key elements:</p> <ul style="list-style-type: none"> • Development of the CMMS Tables using data sheets, drawings etc, furnished to us by ExxonMobil. • Development of Engineering Tables consisting of asset registers and asset characteristics for upload into the company's Maintenance Management System International Production Enterprise System (IPES / SAP). • Review of Spare Parts RSPL's (Recommended Spare Parts List's) and BOM's (Bill of Materials) for compliance and furnish ExxonMobil with a list of RSPL's and BOM's considered incomplete.
	<p>Mobil Producing Nigeria (MPN)</p> <p>RSPL's and BOM's for the Mobil Producing Nigeria (MPN) East Area Projects EPC4A, for offshore facilities in Nigeria.</p> <p>The project consisted of development of the Spare Parts RSPL's (Recommended Spare Part's List's) and BOM's (Bill of Materials).</p> <p>The Scope of Work involved the following key elements:</p> <ul style="list-style-type: none"> • Development of Spare Parts RSPL's (Recommended Spare Parts List's) for all major equipment. • Development of equipment BOM's (Bill of Materials) for all major equipment.








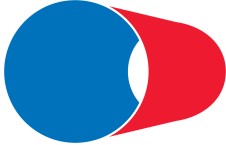


ODL Maintenance Group Experience

	<p>BP – Shah Deniz Gas Project, Azerbaijan</p> <ul style="list-style-type: none"> • Carry out points based Criticality Study, FMEA and RCM Studies, generic Strategy and Job Plan development • Master Equipment List, Location Hierarchy, CMMS Coding Structure builds • PM Schedule build • CMMS Control and Administration Procedures, Maintenance Management Procedures and Maintenance Technical Procedures • Spare Parts Cost Benefit Analysis • CMMS Data Load • Document Definition and Mapping Study
	<p>BP Clair Project, UK</p> <ul style="list-style-type: none"> • Carry out points based Criticality Study, FMEA and RCM Studies, generic Strategy and Job Plan development • Master Equipment List, Location Hierarchy, CMMS Coding Structure builds • PM Schedule build • Data Validation, Clean up and build for Engineering Data Warehouse • CMMS Control and Administration Procedures, Maintenance Management Procedures and various detailed Maintenance Technical Procedures. • CMMS Data Load
	<p>BP – Azeri Phase 1 Project, Azerbaijan</p> <ul style="list-style-type: none"> • Carry out points based Criticality Study, FMEA and RCM Studies, generic Strategy and Job Plan development • Master Equipment List, Location Hierarchy, CMMS Coding Structure builds • PM Schedule build • CMMS Control and Administration Procedures, Maintenance Management Procedures and Maintenance Technical Procedures. • Spare Parts Cost Benefit Analysis • CMMS Data Load
	<p>Husky Energy, SeaRose FPSO, Canada</p> <ul style="list-style-type: none"> • Points based Criticality Study and development of Maintenance Policies, Strategies and Job Plans • Master Equipment List, Location Hierarchy, CMMS Coding Structure builds • PM Schedule build • CMMS Data load
	<p>Shell Iran Soroosh and Nowrooz Field, Iran</p> <ul style="list-style-type: none"> • Maintenance Strategy Review update and amendment – Soroosh FSU • Maintenance support
	<p>North Atlantic Refining, Canada</p> <p>Provided Consultancy Services for CMMS workflow for Purchasing and Work Orders business process development.</p>











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	<p>BP ETAP, Everest and Lomond, UK</p> <ul style="list-style-type: none"> • Performance Standard and Written Scheme of Verification review to align current maintenance regime with performance standard requirements. • Data Transition support from Engarde CMMS to Maximo version 5.1 • Provide technical assistant and document control for ongoing data management at BP premises
	<p>Venture Production, UK Development of Asset Resource Forecasting database.</p>
	<p>BP Amoco, UK North Everest and Lomond Platforms. – RCM review of existing studies, amendment of maintenance Job Plans and update of CMMS. Northern North Sea Assets – CMMS equipment data review and update, report development and data configuration.</p>
	<p>Shell Urdaneta West Debottlenecking Plant, Venezuela RCM Analysis and PM routine development for Sulphur Recovery Unit and Gas Sweetening Unit.</p>
	<p>North Atlantic Refining, Newfoundland, Canada RCM Pilot Study for Come By Chance Refinery, CMMS review and update.</p>
 Pierce Production Company Limited	<p>Pierce Production/Statoil, UK Berge Hugin Maximo CMMS Implementation, data mapping and data transfer from existing RAST system to Maximo.</p>
	<p>Shell Iran Soroosh and Nowrooz Field Iran, Singapore</p> <ul style="list-style-type: none"> • Maintenance Strategy Review Development – Soroosh FSU • PM Routine Development • CMMS (Elipse) Data Load information
	<p>Caspian Pipeline Consortium (Moscow), Russia</p> <ul style="list-style-type: none"> • Implementation and configuration of Oracle server • Installation and minor customization of Maximo 4.1.1.CMMS Database • Carry out Criticality Assessment, RCM Studies and Maintenance Strategy Reviews • Complete Data Build including, Location Hierarchy, Job Plan Development and various Coding Structures • CMMS control and administration procedures, Maintenance Management Procedures and various detailed maintenance technical procedures • Maximo Training for Management, Technician and DBA • Spare Parts Criticality Review



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	<p>Hess – Scott Platform, UK</p> <p>Maintenance Development – Turnkey Project carrying out criticality assessments and PM routine development. Delivered documentation electronically for AHL to input into PM3 Maintenance system. Developed PM Schedule and suite of detailed Technical Maintenance Procedures for overhaul, removal replacements, calibrations etc of main platform equipment.</p> <p>Onshore Maintenance Support Services – Provided ongoing support for Scott Platform maintenance support updating project documentation to as built status.</p>
	<p>Hess, Denmark</p> <ul style="list-style-type: none"> • Carry out Criticality Assessment, RCM Studies and Maintenance Strategy Reviews • Complete data build including, location hierarchy, job plan development and various coding structures • CMMS control and administration procedures, Maintenance Management Procedures and various detailed maintenance technical procedures <p>Developed interfaces and hyperlinks between Maximo and Filenet Document Management System.</p>
	<p>Bluewater, UK</p> <p>Uisge Gorm, Glas Dowl and Bleo Holm FPSOs – Development, Data build and Customization of Maintenance Management System.</p>
	<p>Maersk Peregrino, Brazil</p> <p>Retained by Maersk FPSO for the development of;</p> <ul style="list-style-type: none"> • Criticality Studies • RCM Studies • Generic Studies • CMMS Databuild • Spare Parts
	<p>North Sea Production Company, UK</p> <p>MacCulloch FPSO -Customization, development and databuild of Maintenance Management System.</p>
	<p>Maersk – UK Curlew FPSO</p> <ul style="list-style-type: none"> • Customization, development and databuild of Maintenance Management System • CMMS equipment data review and update
	<p>Rowan Drilling, Canada</p> <p>Maximo Training workshops for Database Administrators and Operational Crews.</p>
	<p>Texaco, UK</p> <p>Review and update of Captain Field Maintenance Procedures in line with WSE Review.</p>









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<p>TOTAL FINA ELF</p>	<p>Total Fina Elf, UK Alwyn and Dunbar Platforms RCM Analysis of 23 Production and Safety systems and update of SAP R3 maintenance system to reflect RCM results.</p>
	<p>BP – Azeri Phases 2 Project, Sangachal Terminal Expansion and East and West Azeri Platforms, Azerbaijan</p> <ul style="list-style-type: none"> • Carry out points based Criticality Study, FMEA and RCM Studies, generic Strategy and Job Plan development • Master Equipment List, Location Hierarchy, CMMS Coding Structure builds • PM Schedule build • CMMS Control and Administration Procedures, Maintenance Management Procedures and Maintenance Technical Procedures • Spare Parts Cost Benefit Analysis • CMMS Data Load
	<p>BP – Azeri Phases 3 Project, Sangachal Expansion and Deepwater Gunashli Platform, Azerbaijan</p> <ul style="list-style-type: none"> • Carry out points based Criticality Study, FMEA and RCM Studies, generic Strategy and Job Plan Development • Master Equipment List, Location Hierarchy, CMMS Coding Structure builds • PM Schedule build • CMMS Control and Administration Procedures, Maintenance Management Procedures and Maintenance Technical Procedures • Spare Parts Cost Benefit Analysis • CMMS Data Load
	<p>BP – Baku – Tbilisi – Cheyan Pipeline Project, Azerbaijan/Georgia and Turkey</p> <ul style="list-style-type: none"> • Carry out points based Criticality Study, FMEA and RCM Studies, generic Strategy and Job Plan development • Master Equipment List, Location Hierarchy, CMMS Coding Structure builds • PM Schedule build • CMMS Control and Administration Procedures, Maintenance Management Procedures and Maintenance Technical Procedures • Spare Parts Cost Benefit Analysis • CMMS Data Load
	<p>BP – SCP Pipeline Project, Azerbaijan/Georgia and Turkey</p> <ul style="list-style-type: none"> • Carry out points based Criticality Study, FMEA and RCM Studies, generic Strategy and Job Plan development • Master Equipment List, Location Hierarchy, CMMS Coding Structure builds • PM Schedule build • CMMS Control and Administration Procedures, Maintenance Management Procedures and Maintenance Technical Procedures • Spare Parts Cost Benefit Analysis • CMMS Data Load











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	<p>BP, Angola Implementation and Support of Interim Maintenance Database for Plutonia FPSO in Angola prior to Maximo Go Live date</p>
	<p>Maersk Contractors, Norway</p> <ul style="list-style-type: none"> • Carry out Criticality Study, FMEA and RCM Studies, generic Strategy and Task List development • Asset Register, Functional Location Hierarchy, SAP Coding Structure builds • Schedule build • Data Validation, Clean up and build for Engineering Data Warehouse • SAP Data Load
	<p>Hess Thailand - Phu Horm</p> <ul style="list-style-type: none"> • Pre Operations Definition Study • Carry out Criticality Study, FMEA and RCM Studies, generic Strategy and Task List development • Asset Register, Functional Location Hierarchy, SAP Coding Structure builds • Schedule build • Data Validation, Clean up and build for Engineering Data Warehouse • SAP Data Load
	<p>Hess Indonesia - Ujung Pankah Phase 1</p> <ul style="list-style-type: none"> • Pre Operations Definition Study • Carry out Criticality Study, FMEA and RCM Studies, generic Strategy and Task List development • Asset Register, Functional Location Hierarchy, SAP Coding Structure builds • Schedule build • Data Validation, Clean up and build for Engineering Data Warehouse • SAP Data Load
	<p>Hess Indonesia - Ujung Pankah Phase 2</p> <ul style="list-style-type: none"> • Criticality Study, FMEA and RCM studies • Generic Strategy and Task List Development • Asset Register, Functional Location Hierarchy, SAP • Coding Structure • Data Validation • SAP Data Load
	<p>Sevan Marine - Hummingbird</p> <ul style="list-style-type: none"> • Master Equipment List, Location Hierarchy, CMMS Coding Structure Build • Equipment Criticality Study • PM Schedule • Data Validation, Clean-up • CMMS Control and Administration Procedures, Maintenance Management Procedures and Maintenance Technical Procedures









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	<p>Sevan Marine – Piranema</p> <ul style="list-style-type: none"> • Master Equipment List, Location Hierarchy, CMMS Coding Structure Build • Equipment Criticality Study • PM Schedule • Data Validation, Clean-up • CMMS Control and Administration Procedures, Maintenance Management Procedures and Maintenance Technical Procedures
	<p>Japan Vietnam Petroleum Company Ltd – Rang Dong Field</p> <ul style="list-style-type: none"> • Equipment Criticality Study • Job Plan Development • PM Schedule • CMMS Data Loading
	<p>Gulf of Suez Petroleum Company – Badri Rehabilitation Project</p> <ul style="list-style-type: none"> • Master Equipment List, Location Hierarchy, CMMS Coding Structure Build • Equipment Criticality Study • PM Schedule • Data Validation, Clean-up
	<p>BP Egypt, Saqqara</p> <ul style="list-style-type: none"> • Critically Assessment of all equipment identified on the MEL • Development of Maintenance Plans, based upon Criticality for Input to Maximo • Selection of Operational Spares, based upon equipment criticality from Vendors recommendations
	<p>BP, Trinidad and Tobago</p> <p>Development of Maintenance Procedures for all onshore and offshore installations and facilities.</p>
	<p>BP, Trinidad and Tobago</p> <ul style="list-style-type: none"> • Collation of all Spares Data • Implement Critical Spares Analysis • On Approval submit for procurement
	<p>BP, Georgia</p> <p>Development of Preservation Maintenance and full Maintenance review for western Route Pipeline. Maintenance review, hierarchy build and CMMS development for SCP PIPELINES and Kodiana.</p>
	<p>Hess, Equatorial Guinea</p> <p>Implementing Maintenance Review of Procedures and Job Plans for Senje Ceiba FPSO.</p> <p>Consisted of Validating Asset Register against As-Built PID's, Review and Update of Maintenance Routines and preparation of new data for upload to CMMS.</p>




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	<p>BP Amarillo, US</p> <ul style="list-style-type: none"> • CMMS Build • Inventory and Job Plan development for Amarillo Refinery
	<p>Chevron, Angola, Cabinda Development</p> <p>Development of</p> <ul style="list-style-type: none"> • Asset Register • Maintenance Job Plans • Spare Parts
	<p>Chevron Blind Faith, US (GOM)</p> <p>Development of Job Plans and Procedures for Blind Faith development in the Gulf of Mexico.</p>
	<p>Chevron, Kuwait</p> <p>Development of Job Plane and Surveillance Check Lists for the Wafra Sub Centre Facility in Kuwait.</p>
	<p>Talisman, UK</p> <p>Modification and upgrade Projects – Close-out Support:</p> <p>Maintenance reviews and CMMS (Maximo) updates for Flotta-Catdiment Area and Mid – North – Sea assets.</p>
	<p>Dubai Petroleum, UAE</p> <p>Following a number of Maintenance Strategy Reviews and SAP to Maximo migration, ODL were awarded a contract by DPC to implement;</p> <ul style="list-style-type: none"> • Extensive PMR Review • Review of Location Hierarchy within Maximo • Review of Failure Codings • Review and Refinement of Safety Critical Equipment • Review of all Job Plan Man hour durations • Review, Reconstruction, and Alignment of Routes, PMs and PM Sequencing • Review and Development (if required) of Maintenance Management Procedures, Philosophies and Strategies <p>This project was implemented both onsite in Dubai and ODL offices.</p>



ODL Maintenance Group Experience

	<p>ZADCO, Abu Dhabi</p> <p>ODL were retained by ZADCO in Abu Dhabi to implement a Maintenance Strategy Review of its Offshore Installations. The overall Scope of Work for this project consisted of;</p> <ul style="list-style-type: none">• Review and Revision of Maintenance Policy and Procedures• Review and Update of Equipment Generic Maintenance Strategies• Review and Update of Equipment Specific Application of Maintenance Strategy• Modifications to existing Maximo Asset Configurations• Review and Update to Maintenance and Inspection Plans• Review and Update to the Asset Specification Data for Unit Level Tags• Review, Revise and Update the Tag Failure Coding and Standardise as per ISO 14224 <p>This major Maintenance Review was implemented onsite in Abu Dhabi and offshore by a dedicated ODL Maintenance Review Team.</p>
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