

Songa Equinox Cat-D Drilling Rigs Maintenance Engineering



Operator/ Client: Songa Offshore
Project/ Location: Equinox CAT-D Drilling Rig/ South Korea and Norway
Scope of Services: Maintenance Engineering

Project at a glance:

Songa Offshore is an International Midwater Drilling Contractor with a strong presence in the harsh environment North Atlantic basin. Songa Offshore currently operates a fleet of five rigs. Its fleet is growing and it will soon be a dominant contractor in Norway where it will soon hold position as Statoil's largest drilling services provider.

Statoil has awarded Songa Offshore for the supply of four new build cat-D semi-submersible rigs. The four drilling rigs constructed by DSME in Korea are specially designed for harsh North Sea environment to meet Statoil requirements.

Aramis was awarded the Maintenance Engineering Services by Songa Offshore. The project's planning Milestones are:

- ME Services Contract award to Aramis: January 2014
- ME Services completion: March 2015



Aramis' scope of work

▲ Detailed Asset Register

- Development of the Asset Register Methodology including guidelines and templates.
- Development of the Rig Asset register using AMS Database software including key attributes, parent-child links and failure structure in accordance with OREDA 2009.
- Develop CMMS load files.

▲ Detailed Inventory Database

- Conduct the processing of all 5 years operations spares.
- Development of the Inventory Database Methodology including guidelines such as naming convention.
- Develop the Spare Parts Interchangeability Lists.
- Development of the Inventory Database including key attributes and used to identify duplicates parts.
- Definition of min/max stocks Levels

▲ Tag Criticality Ranking

- Definition and processing of tag criticality ranking in the database.

▲ Safety Critical Element Study

- Identification of SCE Tags and assignment of relevant DSHA Number.
- Definition of Performance standards, assurance task and frequency for all SCE.

▲ Generic Maintenance Strategies and Services Books

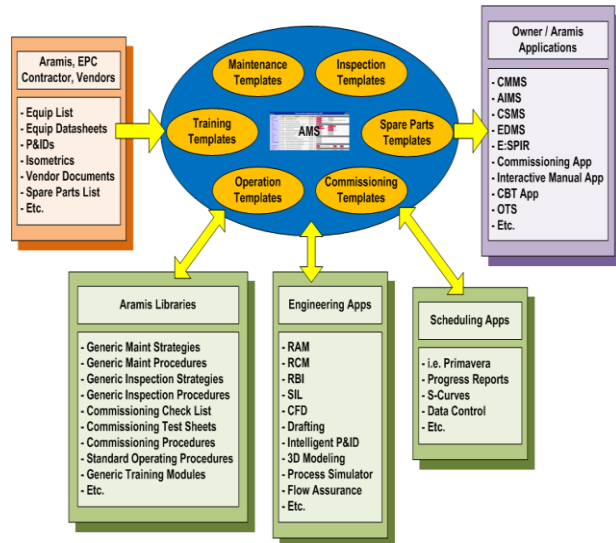
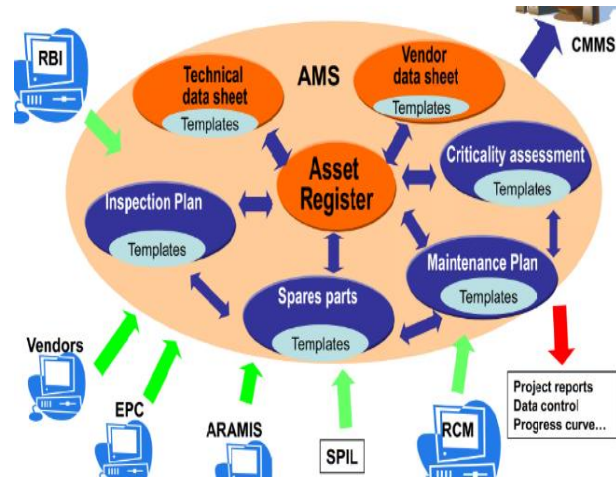
- Development of a GMS Methodology.
- Development of Generic maintenance strategies for each Equipment Class & Equipment Type, including FMEA studies.
- Development of Service books to cover short frequency maintenance.

▲ Generic and Specific Job Plans

- Development of user-friendly formatting generic job plans suitable for majority of Equipment of the same Class.
- Development of Specific Job Plans for all tags where the Generic one cannot be used.
- Optimization of the planned maintenance program by merging Job Plans.
- Development of a five year overall maintenance schedule.

▲ Review After Sail Off

- Review of all documentation and data in order to integrate the "As-Built documentation" changes.



Asset Register	Engineering Data	Vendor Data	Commissioning	Criticality	Job Plan	Inventory	PM Jobs	Inspection Plan	Library
Asset Register	Engineering Data	Vendor Data	Commissioning	Criticality	Job Plan	Inventory	PM Jobs	Inspection Plan	Library
Use	System	Description	Class	Subclass	Pa	St	Tag	Pa	St
MCP	05	DRILLING	ANALYSER	DISPATCH	PA	1			
MCP	05	WELDEHEADS	ANALYSER	DISPATCH	PA	1			
MCP	04	FLUORIDES AND MANIPOLIS	ANALYSER	DISPATCH	PA	1			
MCP	04	GAS/CONDENSATE SEPARATOR	ANALYSER	DISPATCH	PA	1			
MCP	02	GAS IDENTIFICATION	BATTERY	DISPATCH	EL	1			
MCP	04	GAS COMPRESSOR TRAIN "A"	CONTROL	DISPATCH	EL	1			
MCP	04	GAS COMPRESSOR TRAIN "B"	CONTROL	DISPATCH	EL	1			
MCP	06	GAS WELTERING	COMPRESSOR	DISPATCH	PA	1			
MCP	06	GAS IMPROV IMPROV	COMPRESSOR	DISPATCH	PA	1			
MCP	06	CONDENSATE IDENTIFICATION TRAIN A	COMPRESSOR	DISPATCH	PA	1			
MCP	06	CONDENSATE IDENTIFICATION TRAIN B	COMPRESSOR	DISPATCH	PA	1			
MCP	06	CONDENSATE WELTERING	COMPRESSOR	DISPATCH	PA	1			
MCP	06	CONDENSATE IMPROV IMPROV	COMPRESSOR	DISPATCH	PA	1			
MCP	06	CONDENSATE STRATEGIZATION	COMPRESSOR	DISPATCH	PA	1			
MCP	04	SEPARATOR SYSTEM	COMPRESSOR	DISPATCH	PA	1			
MCP	04	PRODUCED WATER TREATMENT	COMPRESSOR	DISPATCH	PA	1			
MCP	04	WATERBORING SYSTEMS UNIT	COMPRESSOR	DISPATCH	PA	1			
MCP	06	PLANT CONTROL SYSTEMS	DISPATCH	DISPATCH	PA	1			
MCP	06	COMPUTER CONTROL SYSTEMS	DISPATCH	DISPATCH	PA	1			
MCP	06	PLATFORM ALARMS	DISPATCH	DISPATCH	PA	1			
MCP	06	TRAC	DISPATCH	DISPATCH	PA	1			
MCP	06	SERVICE WATER	DISPATCH	DISPATCH	PA	1			
MCP	06	POTABLE WATER	DISPATCH	DISPATCH	PA	1			
MCP	03	DEED FIREWATER SYSTEM	DISPATCH	DISPATCH	PA	1			