

PROJECT SHEET

INEOS IRM 2018
INSPECTION, REPAIR AND MAINTENANCE (IRM)

BOSKALIS

Royal Boskalis Westminster is a leading global marine contractor and services provider. With safety as our core value, we offer a wide variety of specialist activities to the oil & gas and renewables sectors. These activities include marine installation and decommissioning, seabed intervention, marine transport and services, subsea services and marine survey. In addition, Boskalis is a global dredging contractor, provides towage and terminal services across the globe and delivers marine salvage solutions.

By understanding what drives our clients we are able to provide the solutions that enable them to meet their specific business goals. For this reason we are constantly looking for new ways to broaden and optimize our offering and are committed to expanding our proposition, supported by our financial strength.

With our committed professionals in engineering, project management and operations, 900 specialized vessels and an unprecedented breadth of activities in 90 countries across six continents we help our clients in the offshore industry push boundaries and create new horizons.

INTRODUCTION

Boskalis Subsea Services was contracted by INEOS E&P A/S for the 2018 Inspection, Repair and Maintenance (IRM) campaign, involving the preparation and execution of 20-off scopes on various assets.

Repair/Maintenance Scopes consisted of:

- Loading Hose Element Replacement on a Single Anchor Loading (SAL) System.
- Change out of Hose Handling Bridle and Chafing Chain on a SAL System.
- Installation of Roblon Quick Straps around Hose Buoyancy Modules of the SAL System.
- Replacement of Transponder Batteries on the Mooring Line Clump Weight (MLCW) and SAL Anchor Assembly.

FEATURES

Client	INEOS E&P A/S
Location	North Sea, Danish Sector
Period	16 th May 2018 – 29 th June 2018
Contractor	Boskalis Subsea Services



- A** BOKA Atlantis in transit
- B** BOKA Atlantis in-field
- C** Top view BOKA Atlantis mobilization in Esbjerg

- Installation of new 3-way jumper within a Subsea Production Tree.
- Continuity Cable installation on Sub-Sea Isolation Valve (SSIV).
- Excavation, Coating Removal at two pipeline locations.
- Re-design and installation of Cross Beams within Valve Station and Protection Cover (VAPC).
- Design and installation of new hatch for VAPC.
- Installation of new anodes on VAPC Ball Valve.
- Excavation and Anode replacement on Expansion Spool Anchors.



Inspection Scopes consisted of:

- Non-Destructive Testing (NDT) on Leg Sleeve Circumferential Welds.
- Detailed Visual Inspections (DVI) on Grout/Leg Connections.
- DVI on spacers installed in Well Head Caisson.
- Inspection of Oil Swivel & Grease Compensators on a Suction Anchor Assembly of the Single Anchor Loading (SAL) System.
- General Visual Inspections (GVI) of various elements on the SAL System.
- GVI, Continuity Measurements (CP), of various elements on a Subsea Production Tree and Water Injection Tree.
- Corrosion Inspection at two pipeline locations.
- Visual Inspections (CP measurements, GVI, Scour inspection, etc.) at Valve Station and Protection Cover (VAPC).
- Ultrasonic Testing (UT) of Cross Pins within the VAPC.

Boskalis Subsea Services mobilized their newly added Diving Support Vessel (DSV) BOKA Atlantis for the campaign and provided Saturation (SAT) Diving and Remote Operated Vehicle (ROV) services throughout the campaign.

The team on board, ensuring the successful execution of the campaign, consisted amongst others of an Offshore Construction Manager, Dive Superintendent, 3-man Project Engineering Team, Data Administration, a 5-man Inspection Team, Medic, SAT Dive Supervisors, Dive Technicians, 12-man SAT Diver Team, Standby SAT & Air Divers, 6-man Life Support Team, 6-man ROV Team, various Subcontractor Teams. This also included a Safety Officer, who was on board throughout the campaign. No lost time injuries were experienced during the campaign.



D Top view BOKA Atlantis working mode

E BOKA Atlantis in port of Esbjerg