OCEANA SUBSEA
WORK HISTORY SNAPSHOT

2010 – Present

Year	Location	Vessel	ROV	Workscope
2010	North Sea	Siem Ruby	Quantum	Post trench Survey

Project Description: This project took place in the German sector of the North Sea. The project was to complete various tasks as directed by the end client (VSMC – Now VBMS). This was a defining moment in the German offshore wind sector as it was the very first offshore wind location in Germany (Alpha Ventus).
The ROV was mobilised on board the Siem Ruby in order to complete several tasks in shallow water (up to 35mts). The tasks were as follows;

- Complete all array cable burial tasks (some parts of the cables was not fully buried during trenching operations)
- Complete a full pre burial ROV survey
- Complete a full post burial survey
- Ensure all cable contenary into the monopile had the correct bend radius

The above tasks required a verity of sensors and ROV tooling in order to complete the project to a satisfactory standard
The tooling and sensors added to the overall ROV spread were as follows;

- 6" Vortex dredge unit for cable burial scope
- Bathy, Gemini sonar, TSS 440, multiplexor, DVL, FOG, Multibeam heads, USBL beacons and full recording suite.

2010	Irish Sea	Normand Mermaid	XLS	Touch Down Monitoring and Survey Construction

Project Description: This project took place in the UK sector off the coast of Barrow in Furnace at the Walney offshore wind farm phase 1. The project was again for VSMC (Now VBMS). At the time this was one of the larger offshore wind sites. The project involved installation of the larger export cables from the Normand Mermaid and to complete the touch down monitoring for the project team. The scope also included post survey and additional remedial tasks.
The project was also completed in shallow water (less than 25 mts) and involved the following tasks:

- Pre and post lay survey
- Touch Down Monitoring
- Remedial works where required

The above tasks required a verity of sensors and ROV tooling in order to complete the project to a satisfactory standard
The tooling and sensors added to the overall ROV spread were as follows;

- 6" Vortex dredge unit for cable burial scope
- Bathy, Gemini Sonar, TSS 440, multiplexor, DVL, FOG, Multibeam heads, USBL beacons and full recording suite.
- Various hydraulic cutting equipment

OCEANA SUBSEA
WORK HISTORY SNAPSHOT

2010 – Present

Year	Location	Vessel	ROV	Workscope
2011	Irish Sea	MPR3	Explorer 2	Construction Support

Project Description: The project was mobilised in Barrow in Furness and was completed at the Walney Offshore Wind farm phase 2. This project was for VBMS (now VBMS). This project involved inflating a bung on each array cable at each mono-pile location. At each end of the array cable an inflatable rubber bung was installed, this was used as a way of stopping the seawater getting inside up the J-Tube and in turn inside the mono-plile (Walney is located in a very tidal location).
This project was also completed in shallow water (less than 25 mts) and involved the following tasks:

- Locate the bung at the J-Tube
- Inflate with surface fed oil compressor via an ROV hot stab
- Remedial works where required

The above tasks required a verity of sensors and ROV tooling in order to complete the project to a satisfactory standard
The tooling and sensors added to the overall ROV spread were as follows;

- Gemini Sonar, Tritech sonar, Gyro and hot stab

2011	Baltic	Vos	Cougar XT	Pre Mono-plie installation Survey

Project Description: The location for this project was in the Baltic region. It was mobilised in Demark in order to complete the pre installation surveys at the Anholt wind farm. The client for this project was a company called Pangeo. They have innovative technology that provides a 3D model of the Seabed and can penetrate 40mts below the mudline. This technology is used instead of coring to see if there are any challenges that might affect mono-pile installation and cause refusals. This project was completed in a water depth of 40 mts. The ROV had a single task. This was to remove the rigging from the Acoustic Corer. On completion of the scan of the location the rigging was reattached by the ROV. The equipment used was as follows:

- Gemini Sonar, ROV sonar and dual heavy duty 5 function manipulator skid.

2011	North Sea	CS Sovereign	Panther XT	Touch Down Monitoring and Survey Construction

Project Description: Our project this time was located in the Southern Sector of the North Sea. It mobilised in Belgium the ROV we utilised to complete touch down monitoring from the lay vessel CS Sovereign. We also used a Cougar XT as back up on this project. The ROV systems had several sensors on board to assist with the touch down monitoring activities. This was also a shallow water operation with a significant layback. The ROVs were mobilised on board the client vessel (Global Marine – Now Prysmian)

- Touch down monitoring
- Tasks as directed by the client

Sensors and tolling utilised through the duration of this project.

- 4” vortex dredge unit
- Bathy, Gemini Sonar, ROVIN, multiplexor, DVL, FOG, USBL beacons and full recording suite.

OCEANA SUBSEA
WORK HISTORY SNAPSHOT

Year	Location	Vessel	ROV	Workscope
2012-13	Baltic	Toisa Wave	Panther XT	Touch Down Monitoring & Construction Support

Project Description: The project was mobilised in The Netherlands and was completed during the installation phase of the Anholt Offshore wind. This project was for VBMS (now VBMS). This project involved utilising 2 x Panther XT Plus ROVs and associated sensors to complete the touch down monitoring tasks.
This project was also completed in shallow water (less than 40 mts) and involved the following tasks:

- Locate and monitor the touch down point for the array cables
- Position at points where required
- Additional works where required

The above tasks required a verity of sensors and ROV tooling in order to complete the project to a satisfactory standard
The tooling and sensors added to the overall ROV spread were as follows;

- Bathy, Gemini Sonar, ROVIN, multiplexor, DVL, FOG, USBL beacons and full recording suite.
- Use of Manipulators to position and recover beacons

2012-13	North Sea	Innovator	Schilling HD	Installation of Tripods

Project Description: The location for this project was in the German sector of the North Sea. It was mobilised in Germany in order to assist the installation at the Bard 1 offshore wind farm. The client for this project was a company called Hochtief, who are a large German construction company. The ROVs (we also had a Cougar XT on board for a short period) were used to position the tripod base for the transition piece of the offshore wind turbine. This project was completed in a water depth of 30 - 40 mts.

The additional equipment used for this task

- Gemini Sonar, ROV sonar, 5 and 7 function manipulators

2014	Tunisia	Petro Saudi Discoverer	Explorer 06	Drill Support

Project Description: This project was mobilised in 2014 and ran for 8 months and involved drill support activities in Tunisia on board the Petro Saudi Discoverer. The water depth was in the region of 150-200 mts. There was a significant amount of tooling equipment used through the course of this project. The client for this project was a large company in Tunisia called SAROST

Sensors and tolling utilised through the duration of this project.

- ROV sonar, Gyro, USBL beacons, recording equipment
- Class 1-4 torque tools, Smart valve pack, FLOT, LVOT, skid, AXVX, ring change out tool, hub cleaning tool, low pressure jetter, hydraulic cutting equipment

OCEANA SUBSEA
WORK HISTORY SNAPSHOT

Year	Location	Vessel	ROV	Workscope
2010-15	Egypt	Sarabeo 4	Explorer 05	Drill Support

Project Description: This project was a long duration project that involved drill support activities in Egypt on board the Sarabeo 4. The water depth was in the region of 400 mts. There was a significant amount of tooling equipment used through the course of this project. The client for this project was completed for the Egyptian ENI arm called Petrobel.

Sensors and tolling utilised through the duration of this project.

- ROV sonar, Gyro, USBL beacons, recording equipment
- Class 1-4 torque tools, Smart valve pack, FLOT, LVOT, skid, AXVX, ring change out tool, hub cleaning tool, low pressure jetter, cutting equipment

The initial ROV supplied for this project was a 100 HP ROV. In 2014 The client decided that they wanted an larger HP system (against our advice), however, we supplied a 125 HP ROV as per their request. This was completed by loading a second ROV on a supply vessel and mobilising offshore on the drilling rig during operations. This was completed without any downtime and without any impact on the drilling activities.

2015	North Sea	Kommador	Explorer 6	Pipeline Survey

Project Description: This project took place in 2015 and involved supplying the complete ROV and survey service which included personnel and equipment to complete a full pipeline survey. The ROV was mobilised on board the client vessel Kommador which is owned by Gardline. The project was completed in various water depths between 25mts and 45mts. The equipment supplied included the following;

- USBL Beacons, ROV Multiplexor, Multibeam, Bathy Alt, Blueview, camera booms, survey gyro, visualsoft system, TSS 440

2017	Tunisia	Asso Ventuno	Triton XL	Decommissioning activities

Project Description: This project took place in early 2017 and was mobilised in the port of SFAX in Tunisia. The project involved removal and cementing of a 30" conductor that was left from a drilling campaign. OSL developed a brand new cutting tool in order to cut the conductor which was fed from the ROV hydraulics. This was a 2 in 1 tool that is interchangeable between a disc cutter and a diamond wire cutter. This new technology was produced to reduce additional surface fed equipment and lowering costs (both of equipment and extra personnel). The project also involved removal of the conductor after it had been cut. OSL produced all the engineering for the lifting and removal of the cut conductor. The project was for SAROST with the end client being Cooper Energy in Australia. The project took place in 80 mts of water.

Sensors and tolling utilised through the duration of this project.

- ROV sonar, Blueview, USBL beacons, recording equipment
- 2 in 1 hydraulic cutting tool, additional hydraulic cutting equipment, 4" dredger
- Lifting equipment

OCEANA SUBSEA
WORK HISTORY SNAPSHOT

Year	Location	Vessel	ROV	Workscope
2017	Tunisia	Maridive	Triton XL	IRM on Wellhead

Project Description: This project again took place in Tunisia. It was mobilised in the port of SFAX and involved several companies. OSL client was SAROST, however, the end client was Shell Tunisia with their technical authority being Wood Group in Aberdeen. This project was only short in duration, however, it was highly demanding. The project itself involved the removal of fishing net from a leaking wellhead. On completion of the removal of the fishing net the ROV had to complete cleaning and jetting activities prior to completing torque tool operations at specific times on the R1D wellhead, this involved using specific torque tool equipment. The project required a significant amount of tooling to be mobilised to the region within a very short space of time.

Sensors and tolling utilised through the duration of this project.

- ROV sonar, Blueview sonar, USBL beacons, recording equipment
- Class 1-4 torque tools, Smart valve pack, high pressure jetter, hydraulic cleaning brushes

While the actual duration of the project was short the OSL management team were involved for several weeks prior to the start of the project attending meetings and preparing documentation in country and in Aberdeen. The OSL management team supported SAROST by also running the HIRA.

2017	Irish Sea	Stemat 82	Triton XL	Repair of Export cable

Project Description: The project was mobilised in Barrow in Furness and took place in the Ormond offshore wind farm. The water depth in this location was in the region of 25 mts. The client was VBMS, the ROV was mobilised on board the lay vessel Stemat 82. The project involved deburial, cutting an existing damaged export cable before installing a new piece of cable. This was a new innovative way of completing a project as it was completed prior to the complete failure of the export cable, essentially preventative maintenance.

Sensors and tolling utilised through the duration of this project.

- ROV sonar, Blueview, USBL beacons, recording equipment
- 2 in 1 hydraulic cutting tool, additional hydraulic cutting equipment

2017-2018	Baltic Sea	Adhémar de Saint-Venant	Triton XL	Installation of substations

Project Description: This project was awarded in March 2017. Oceana Subsea worked with Jan de Nul in order to provide engineering support and ROV expertise to assist with this installation of the 2 x offshore substations. This project was particularly demanding as the ROV launch point was on a different side from where the installation of the sub stations were taking place. This meant flying under the vessel is shallow water (30mts), this is not often done by ROV operating companies.

Sensors and tolling utilised through the duration of this project.

- ROV sonar, Blueview, USBL beacons, recording equipment
- Hydraulic drills, Torque tools, manipulator saw, water jetting equipment, 4” Dredge unit

OCEANA SUBSEA

WORK HISTORY SNAPSHOT

Year	Location	Vessel	ROV	Workscope
2018 - ongoing	North Sea	Adhémar de Saint-Venant	Triton XL	Survey Support

Project Description: A continuation of the project above but a different workscope. The ROV and vessel was reconfigured to accommodate a trenching spread. The ROV had to fitted with a survey multiplexor. It also had to be reconfigured to accommodate single mode fibre slip rings, this was completed onsite.

Sensors and tolling utilised through the duration of this project.

- ROV sonar, Blueview, USBL beacons, recording equipment, Smart track cable tracker, Gyro, Multibeam
- Manipulator saw, water jetting equipment, 4" dredger

2018 - ongoing	North Sea	Edda Fjord	Triton XL	Installation of anode clamps

Project Description: OSL have been contracted to engineer a solution which will assist the installation of 250 kg clamps on to subsea tripods. OSL have manufactured a bespoke tool that will allow the ROV to handle the clamp and weight of 250kgs. Together with the ROV the tool will provide not only the mechanical solution but the buoyancy solution.

- ROV sonar, Blueview, USBL beacons, recording equipment
- water jetting equipment, Wi-Fi video tell unit, soft line cutter, hard line cutter
- OSL bespoke lifting tool for insertion of clamp on to tripods.