





Sarens Louis & Sarens Jan	
General description and dimensions:	The Sarens barges Louis & Jan shall be used for the transportation of the jackets. These barges are identical in terms of main dimensions: <ul style="list-style-type: none"> • Length 100m • Width 33 m • Max. draught 6.056 m • Gross tonnage 15.492 t (Louis) / 16.031t (Jan) • Propulsion N/A • Deck load 25 t/m² (Louis) / 15t/m² (Jan)
Call sign:	n/a
MMSI:	n/a
Onshore Representative:	Name - Various [Redacted] [Redacted] [Redacted] aowf.marinecoordination@vattenfall.com [Redacted]




EDT Hercules	
General description and dimensions:	DP II MULTI-PURPOSE SUPPORT VESSEL (MPSV) <ul style="list-style-type: none"> • Gross Tonnage 4964 • Net Tonnage 1490 • Deadweight 3625.2 t • Length Overall 88.8 m • Breadth Moulded 19.0 m • Depth to Main Deck 8.0 m • Draft 6.6 m • Freeboard max draft 1.4 m
Call sign:	5.B.A.M.4
MMSI:	9491422 / 210776000
Onshore Representative:	Name - Various [Redacted] [Redacted] [Redacted] aowf.marinecoordination@vattenfall.com [Redacted]
	

Union Bear	
General description and dimensions:	Oceangoing Anchor Handling ASD Tug <ul style="list-style-type: none"> • Length overall 73.50 m • Breadth moulded 16.40 m • Depth moulded 8.00 m • Max draught 6.90 m • Gross tonnage 2590 GRT
Call sign:	ORRV
MMSI:	9185932 / 205694000
Onshore Representative:	Name - Various [Redacted] [Redacted] [Redacted] aowf.marinecoordination@vattenfall.com [Redacted]
	

Union Boxer	
General description and dimensions:	Anchor Handling ASD Tug <ul style="list-style-type: none"> • Length overall 40.65 m • Breadth moulded 12.70 m • Depth moulded 6.90 m • Max draught 6.30 m • Min draught 5.50 m • Air draught 22.10 m • Design draught 5.86 m • Gross tonnage 810 T
Call sign:	O.R.P.S
MMSI:	9537537 / 205575000
Onshore Representative:	Name - Various [Redacted] [Redacted] [Redacted] aowf.marinecoordination@vattenfall.com [Redacted]
	

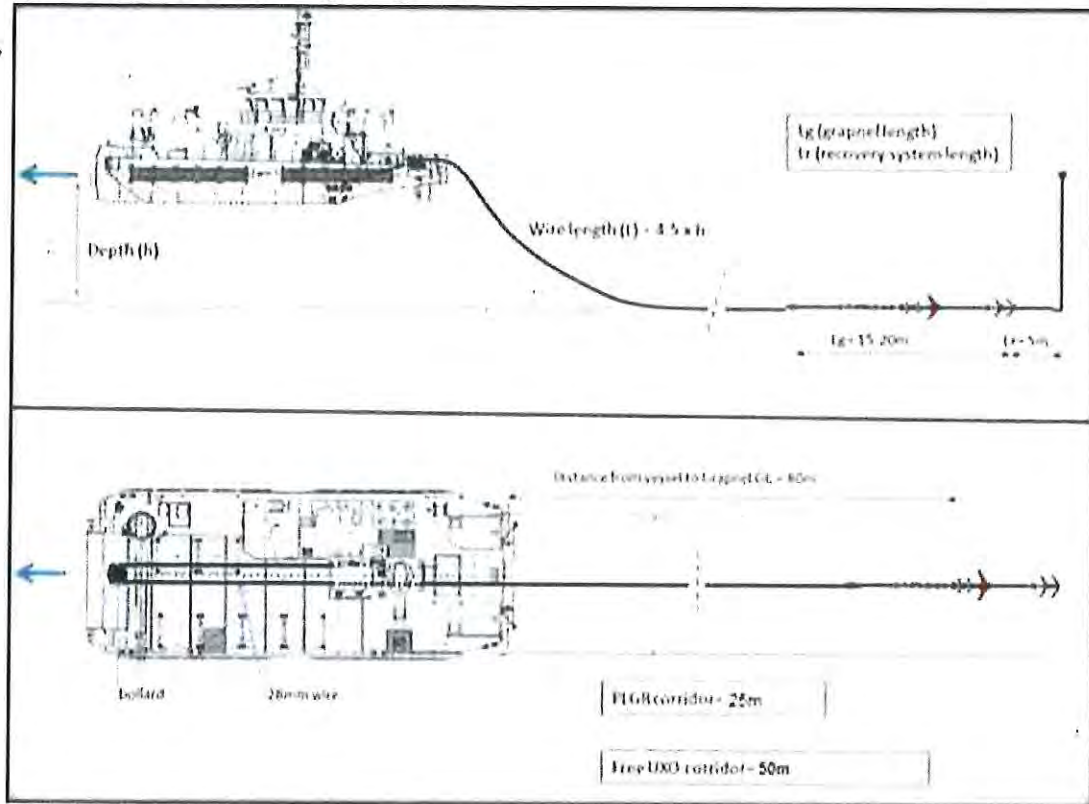
Union Lynx	
General description and dimensions:	Oceangoing Anchor handling tug AHIII <ul style="list-style-type: none">• Length overall 73.50 m• Breadth moulded 16.40 m• Depth moulded 8.00 m• Max draught 6.90 m• Gross tonnage 2590 GRT
Call sign:	ORRW
MMSI:	9178410 / 205695000
Onshore Representative:	Name - Various [Redacted] [Redacted] [Redacted] aowf.marinecoordination@vattenfall.com [Redacted]
	

Union Fighter	
General description and dimensions:	Oceangoing Anchor Handling ASD Tug <ul style="list-style-type: none"> • Length overall 40.65 m • Breadth moulded 12.70 m • Depth moulded 6.90 m • Max draught 6.30 m • Design draught 5.86 m • Gross tonnage 810 GRT
Call sign:	ORPP
MMSI:	9537525 / 205566000
Onshore Representative:	Name - Various [Redacted] [Redacted] [Redacted] aowf.marinecoordination@vattenfall.com [Redacted]
	

b. Campaign Two: Pre-Lay Grapnel Run

Campaign Name:	Pre-Lay Grapnel Run
Contractor(s):	Boskalis
Contract purpose:	Ground preparation for offshore export and inter-array cable installation works.
Area:	Development Area only
Deployment Dates:	Proposed to commence on or after 11 th January 2018, weather dependent.
Deployment Vessel(s):	<ul style="list-style-type: none"> • Anchor Handling Vessel (AHV) – Dutch Power • Guard Vessel – Isla-B
Equipment:	<ul style="list-style-type: none"> • Grapnel: Rennie welded. A spare will be kept on site. • PLGR train arrangement: Sliding prongs, flat fish, grapnel, Gifford Assembly large type, ground chain. • Winch: vessel's winch outfitted with a running line tension meter (RLTM), which is directly interfaced with the on-board survey system. The winch wire (24/26/28 mm) connected to the PLGR train arrangement by means of a ball-bearing swivel. • Crane: for grapnel train deployment.

Figure 2. Typical PLGR towing configuration



Activity Coordinates

Location ID	Locations of Cable Installation	Latitude	Longitude	Depth (mLAT)	Details of activity	Details of activity
Turbine 1	AWF 01	57° 13.420' N	2° 0.758' W	-19.86	TBC*	TBC*
Turbine 2	AWF 02	57° 13.703' N	2° 0.132' W	-23.02		
Turbine 3	AWF 03	57° 14.010' N	1° 59.371' W	-27.29		
Turbine 4	AWF 04	57° 14.405' N	1° 58.551' W	-29.73		
Turbine 5	AWF 05	57° 12.948' N	2° 0.671' W	-21.75		
Turbine 6	AWF 06	57° 13.203' N	2° 0.013' W	-25.38		
Turbine 7	AWF 07	57° 13.465' N	1° 59.274' W	-29.51		
Turbine 8	AWF 08	57° 13.809' N	1° 58.450' W	-31.51		
Turbine 9	AWF 09	57° 12.476' N	2° 0.627' W	-23.50		
Turbine 10	AWF 10	57° 12.704' N	1° 59.921' W	-27.30		
Turbine 11	AWF 11	57° 12.960' N	1° 59.151' W	-31.54		

Transition Pit	Transition Pit	57° 12.993' N	2° 3.484' W	2.29		
Export Cable	Export Cable	57° 12.399' N	2° 2.666' W	-8.3		
Export Cable	Export Cable	57° 12.390' N	2° 1.474' W	-18.137		
Export Cable	Export Cable	57° 12.473' N	2° 0.641' W	-23.659		

* Please note, installation activities & progress will be weather dependant. Progress will be notified via activity specific NTMs.

Vessel Details

Dutch Power	
General description and dimensions:	Shallow draft anchor handling tugboat/ Anchor Handling Tug Dimensions: <ul style="list-style-type: none"> • Gross tonnage 254 t • Nett tonnage 76 t • Length overall 31.10 m • Beam overall 9.5 m • Draught ½ L 3.1 m • Draught aft 2.60 m
Call sign:	PBTZ
MMSI:	9547879 / 246607000
Onshore Representative:	Name - Various [Redacted] [Redacted] aowf.marinecoordination@vattenfall.com [Redacted]



3. Completed Operations

No offshore works have been carried out on the EOWDC site this week.

Activity Coordinates

Location ID	WTG ID	Latitude	Longitude	Details of activity, e.g. Suction Bucket Completed	Details of activity, e.g. WTG installed
Turbine 1	AWF 01	57° 13.420' N	2° 0.758' W	1 st phase of scour protection installation completed	
Turbine 2	AWF 02	57° 13.703' N	2° 0.132' W	As above	
Turbine 3	AWF 03	57° 14.010' N	1° 59.371' W	As above	
Turbine 4	AWF 04	57° 14.405' N	1° 58.551' W	As above	
Turbine 5	AWF 05	57° 12.948' N	2° 0.671' W	As above	
Turbine 6	AWF 06	57° 13.203' N	2° 0.013' W	As above	
Turbine 7	AWF 07	57° 13.465' N	1° 59.274' W	As above	
Turbine 8	AWF 08	57° 13.809' N	1° 58.450' W	As above	
Turbine 9	AWF 09	57° 12.476' N	2° 0.627' W	As above	
Turbine 10	AWF 10	57° 12.704' N	1° 59.921' W	As above	
Turbine 11	AWF 11	57° 12.960' N	1° 59.151' W	As above	

Field overview of installation sequence

