

Ørsted - East Coast Operational Assets

Notice to Mariners

Period of Notice: June 2023

Version: 5

Table of Contents

1	Introduction	3
1.1	Subsea Cables.....	4
1.2	Wind Farm Positional Data	4
2	Key Contacts.....	5
3	Notice to Mariners Summary:.....	6
4	Race Bank – Notice to Mariners	7
4.1	Lighting and Marking Status.....	7
4.2	Other Operations.....	7
4.2.1	Main Bearing Exchange	7
5	Westermost Rough – Notice to Mariners	8
5.1	Lighting and Marking Status.....	8
5.2	Other Operations.....	8
5.2.1	Blade LEP campaign.....	8
5.2.2	WMR Main Bearing Exchange	9
5.2.3	Dropped Anchor and Winch Wire recovery.....	10
6	Lincs – Notice to Mariners.....	11
6.1	Lighting and Marking Status.....	11
6.2	Other Operations.....	11
6.2.1	WTG Oil exchange.....	11
6.2.2	Emergent Generator Exchange	12
7	Gunfleet Sands – Notice to Mariners	13
7.1	Lighting and Marking Status.....	13
7.2	Other Operations.....	13
7.2.1	GFS LEP Campaign.....	13
7.3	Cable exposure	14
8	Hornsea One – Notice to Mariners.....	14
8.1	Lighting and Marking Status.....	14
8.2	Other Operations.....	16

8.2.1	Statutory Inspections Above Water.....	16
8.2.2	Cable Stabilisation campaign.....	16
8.2.3	Unmanned Survey Vessel Operations	18
8.2.4	Main Bearing Exchange	19
9	Hornsea Two – Notice to Mariners.....	20
9.1	Lighting and Marking Status.....	20
9.2	Other Operations.....	20
9.2.1	Statutory Inspections Above Water.....	20
9.2.2	Blade Drone Inspections	20

1 Introduction

Ørsted is an offshore wind farm owner and operator with ten operational wind farms in UK waters. Of these ten, the following offshore wind farms are located off the East Coast of England:

- Gunfleet Sands
- Westermost Rough
- Race Bank
- Lincs
- Hornsea One
- Hornsea Two

The purpose of this monthly Notice to Mariners (NtM) is to ensure that mariners are aware of any non-routine operations across the East Coast assets that could pose a risk to other sea users. Safety is paramount to Ørsted and this notice should assist in ensuring that both mariners and the Ørsted operational team can operate safely offshore. This NtM will provide:

- A regular, clear and consistent overview of non-routine operations
- Updates relating to lighting and marking
- Key contact details
- Access to detailed site information and figures



- Clarity on when Safety Zones and recommended safe separation distances are in force or requested

This Notice to Mariners *will not provide*:

- Information relating to routine maintenance carried out by Crew Transfer Vessels (CTV) or Service Operation Vessels (SOV).
- Any information relating to export cables
- Any information relating to offshore wind farms currently in development, construction or not operated by Ørsted

Subsea Cables

Subsea cables are installed across each offshore wind farm and are marked on the KIS ORCA charts referenced in Section 1.2. Please note the following advice from NP 100 The Mariners Handbook “Every care should be taken to avoid anchoring, trawling, fishing, dredging, drilling, or carrying out any other activity in the vicinity of cables which might damage them.” This warning is repeated on all admiralty charts.

Wind Farm Positional Data

KIS ORCA Awareness Charts (including the layout and coordinates) and Fishing Plotter Files of the offshore assets referenced in this NtM can be found via the KIS ORCA website: <https://kis-orca.org/downloads/> Should mariners require further information or any data in a format that can be used in a plotter or other device, please contact the Company Fisheries Liaison Officer, listed in Section 2 below.

2 Key Contacts

For further information on any of the activities listed within this notice, please use the contact details listed below.

Site	Ørsted Mailbox/ Offshore Coordination	Fisheries Industry Representative
Race Bank	Phone: 07826 943808 Email: rowoffshorec@orsted.com	Ady Woods Phone: 07468 898948 Email: firwoods@hotmail.com
Westermost Rough	Phone: 07867 674941 Email: wmroffshorec@orsted.com	Guy Pasco Phone: 07880 362082 Email: guy@seascopefisheries.co.uk
Lincs	Phone: 07766443319 Email: lincsoffshorec@orsted.com	Ady Woods Phone: 07468 898948 Email: firwoods@hotmail.com
Gunfleet Sands		Merlin Jackson Phone: 07989 520484 Email: merlinjackson@btinternet.com
Hornsea One	Phone: 07775005465 Email: HOWoffshoreC@orsted.com	Nick Garside Phone: 07538 827013 Email: nick.garside@live.co.uk
Hornsea Two	Phone: 07775005465 Email: HOW02offshoreC@orsted.com	Nick Garside Phone: 07538 827013 Email: nick.garside@live.co.uk

Company Fisheries Liaison Officer

The Ørsted Company Fisheries Liaison Officer can be contacted using the details below:

Lee Thompson

Email: LEETH@orsted.com

3 Notice to Mariners Summary:

Site	Lighting and Marking Status	Survey	Jack-Up Vessel	Other Works
Race Bank	OK	None	Yes	Main Bearing Exchange *°
Westermost Rough	OK	None	None	Blade LEP***, Main Bearing Exchange *°
Lincs	OK	None	None	Oil exchange Generator Exchange *°
Gunfleet Sands	OK	None	None	Blade LEP***
Hornsea One	OK	Yes	None	Main Bearing Exchange *° USV Operations
Hornsea Two	T29 – Fog signal constantly sounding	None	None	WTG Inspections, Drone inspections

- * Formal 500m safety zone in place
- ° Licensable activity
- ** 500m safety distance requested
- *** 100m safety distance requested
- **** 250m safety distance requested

Status of lighting & marking is correct at time of issue; any changes will be communicated through an updated version being issued.

4 Race Bank – Notice to Mariners


4.1 Lighting and Marking Status

The lighting and/ or navigational warning systems are currently operational. No planned outages.

4.2 Other Operations

4.2.1 Main Bearing Exchange

Main Bearing Exchange Campaign on Racebank at locations D02, R01 & J05. Campaign is estimated to start Mid-August for 20 days approx. A 500m exclusion zone will be required whilst the Jack Up vessel is in position at the turbines and whilst jacking up and down. There will also be a CTV supporting operations, vessel TBC.

General Information		Vessel Picture
Name	Wind Enterprise	
Flag	Denmark	
Year Built	2011	
MMSI Number	219370000	
Call Sign	OZTU2	
Vessel Contact Details		
Bridge	+45 29 81 58 85	
Party Chief		
Email	Master.windenterprise@ziton.eu	

5 Westermost Rough – Notice to Mariners

5.1 Lighting and Marking Status


The lighting and/ or navigational warning systems are currently operational. No planned outages.


5.2 Other Operations

5.2.1 Blade LEP campaign

In mid-April we are starting an LEP campaign which we anticipate will take between 3-4 months. The SOV CF Explorer and with CTV will support the project. The work scope involves rope access technicians. When the technicians are on the ropes, we will require a 100m exclusion zone.

Vessel Information

General Information		Vessel Picture
Name	CF EXPLORER	
Flag	Cyprus	
Year Built	2008	
MMSI Number	209816000	
Call Sign	5BKK5	
Vessel Contact Details		
Bridge	+31686489927	
Party Chief	master.cfexplorer@tsmvessel.com	
Email	master.cfexplorer@tsmvessel.com	

General Information		Vessel Picture
Name	Iceni Defiant	
Flag	UK	
Year Built	2010	
MMSI Number	235090838	
Call Sign	2FFO6	
Vessel Contact Details		
Bridge	+44 7809 727 397	
Party Chief		
Email	defiant@turnericensi.com	

5.2.2 WMR Main Bearing Exchange

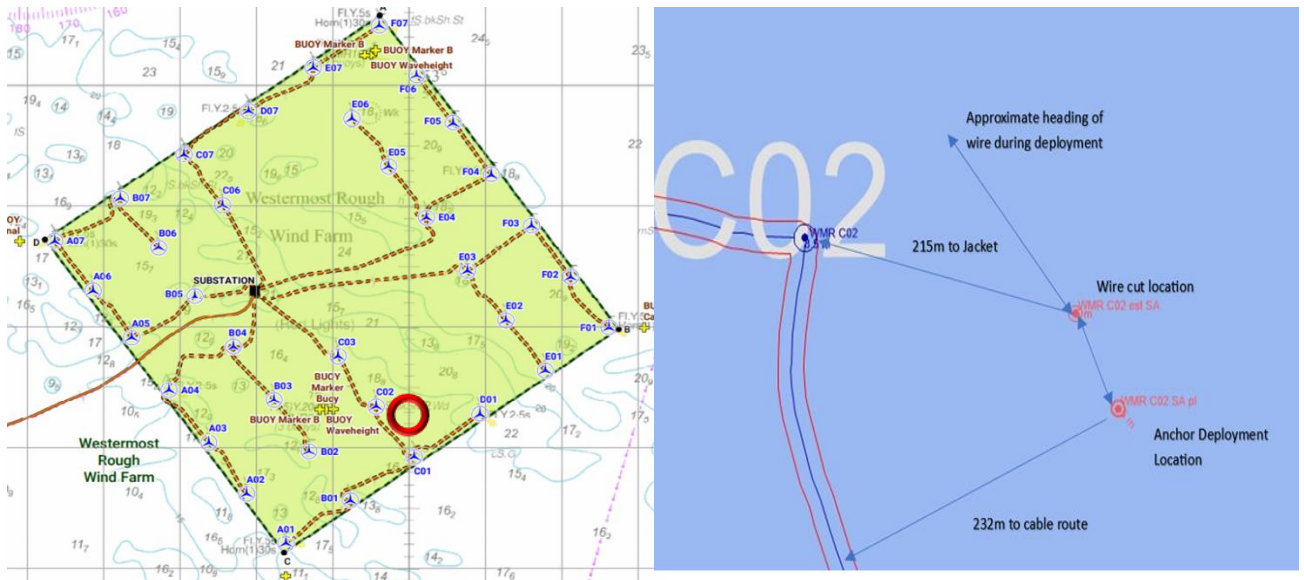
Main Bearing Exchange Campaign on Westermost Rough at location B03. Campaign is estimated to start in early July and take 7 days approx. A 500m exclusion zone will be required whilst the Jack Up vessel is in position at the turbines and whilst jacking up and down.

General Information		Vessel Picture
Name	Wind Enterprise	
Flag	Denmark	
Year Built	2011	
MMSI Number	219370000	
Call Sign	OZTU2	
Vessel Contact Details		
Bridge	+45 29 81 58 85	
Party Chief		
Email	Master.windenterprise@ziton.eu	



5.2.3 Dropped Anchor and Winch Wire recovery.

During routine Subsea operations, a vessel lost an anchor and 400m of winch wire, due to a winch failure, which are currently resting on the seabed. Orsted is awaiting plans on the retrieval of the objects.



- Anchor touch down: 53:47.28409N 000:09.79446E
- Wire touch down: 53:47.29031N 0:09.77316E

6 Lincs – Notice to Mariners

6.1 Lighting and Marking Status


The lighting and/ or navigational warning systems are currently operational. No planned outages.

6.2 Other Operations

6.2.1 WTG Oil exchange

On the 1st May, the vessel MMS Superior will be on site conducting an oil exchange. All 75 locations will be visited with the scope anticipated on taking just over 3 months.

Vessel information


General Information		Vessel Picture
Name	MMS Superior	 <p>© Frank-Peter Mecklenbeck</p>
Flag	UK	
Year Built	2019	
MMSI Number	232024742	
Call Sign	MGFO9	
Vessel Contact Details		
Bridge	07471752805	
Party Chief		
Email	mmssuperior@mms-offshore.co.uk	

6.2.2 Emergent Generator Exchange

On the 17th June the Jack Up Vessel Wind will be on site to conduct Generator exchange's on LS32 and LS42. Mariners must observe an approved safety zone of 500m whenever Wind is attached to a WTG. A minimum separation distance of 500m is also requested when the vessel is observed manoeuvring into position

Vessel information

General Information		Vessel Picture
Name	Wind	
Flag	Danish	
Year Built	1996	
MMSI	220520000	
Call Sign	OXSW2	
Vessel Contact Details		
Bridge	+45 20 48 55 86	
Party Chief		
Email	master.wind@ziton.eu	



7 Gunfleet Sands – Notice to Mariners

7.1 Lighting and Marking Status

The lighting and/ or navigational warning systems are currently operational. No planned outages.

7.2 Other Operations

7.2.1 GFS LEP Campaign


Start date: 14th April 2023

Duration of work scope: 110 days

Description of work: Rope Access Blade Maintenance Blade Repair across all 48 WTGs at Gunfleet Sands

Safety zone required. 100m exclusion zone around the WTG on Gunfleet Offshore windfarm

Vessel Information

General Information		Vessel Picture
Name	NSL DISCOVERY	
Flag	UK	
Year Built	2012	
MMSI	235096731	
Call Sign	2GEQ9	
Vessel Contact Details		
Bridge	TBC	
Party Chief	TBC	
Email	discovery@northsealogistics.co.uk	

7.3 Cable exposure

There are subsea cables currently exposed as shown on the below chart and coordinates

WGS84 Degrees, decimal Minutes						
ID	ArrayCableID	Length_m	StartCoord_Longitude	StartCoord_Latitude	EndCoord_Longitude	EndCoord_Latitude
GFS_MBES_TO_01-UnidentifiedOther	F08-F09	13.4	1° 17.383' E	51° 44.721' N	1° 17.396' E	51° 44.723' N
GFS_MBES_TO_02-CableExposure	F08-F09	790.93	1° 16.787' E	51° 44.486' N	1° 17.376' E	51° 44.718' N
GFS_MBES_TO_03-CableExposure	F07-F08	533.19	1° 16.562' E	51° 44.401' N	1° 16.726' E	51° 44.466' N
GFS_MBES_TO_04-CableExposure	F06-F07	25.25	1° 16.059' E	51° 44.203' N	1° 16.075' E	51° 44.210' N

8 Hornsea One – Notice to Mariners

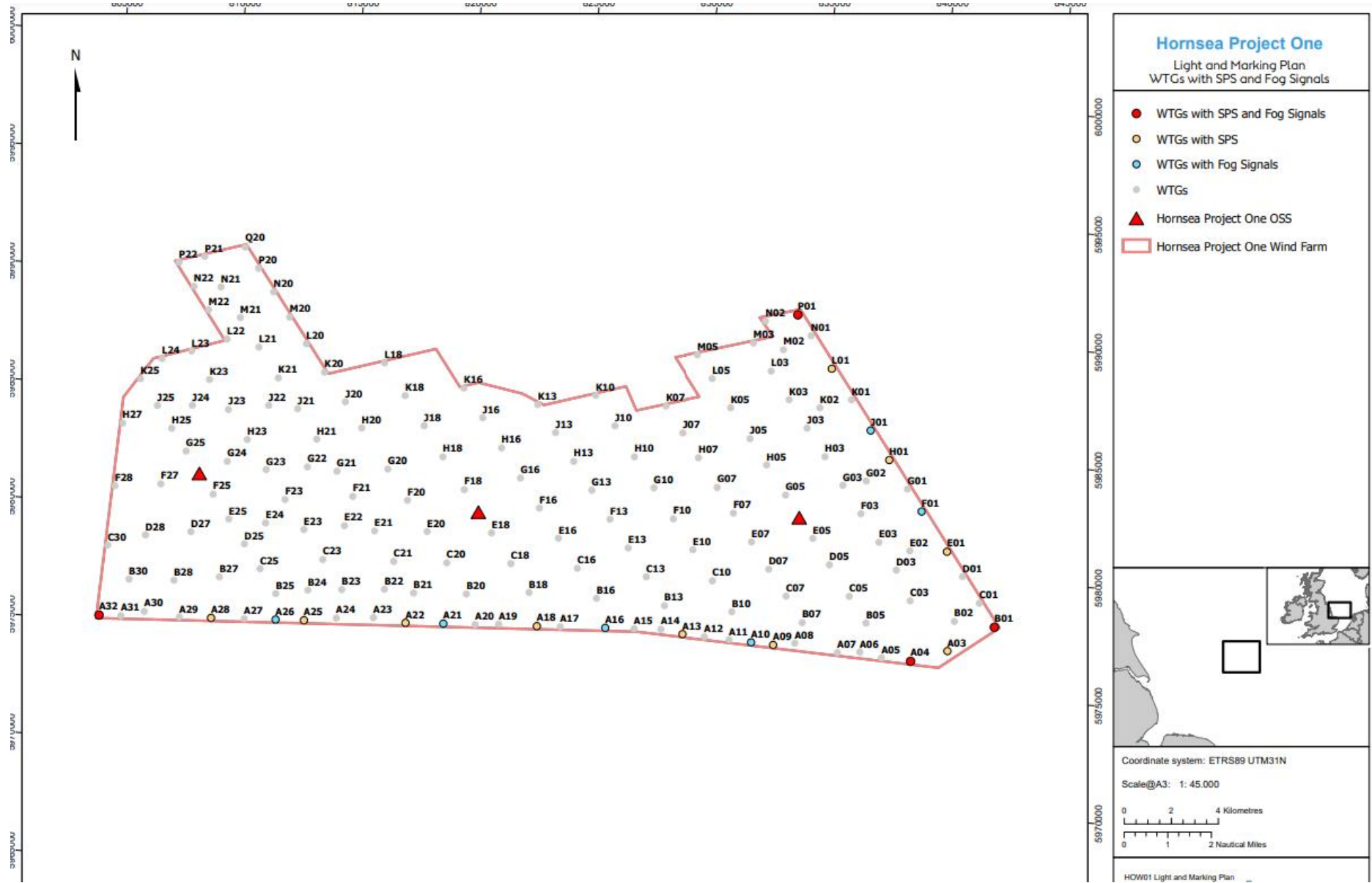
8.1 Lighting and Marking Status

The lighting and/ or navigational warning systems are currently operational. No planned outages

Mariners are advised that the marine navigation lighting and foghorns on turbines situated on the Hornsea Project One / Two adjoining perimeter have now been extinguished. Marine navigation lighting will now alight the combined perimeter of Hornsea Project One and Two.

Please see the table below showing the locations where the foghorns/marine navigation lighting has been discontinued (indicated with an X)


Turbine	Marine Navigation Lights	Foghorns
K25	X	
Q20	X	X
C30	X	X
H27	X	X
P22	X	X
L20		X
K16		X
K10		X
M05		X



8.2 Other Operations

8.2.1 Statutory Inspections Above Water

From the 22nd April the vessel Manor Venture will be on site completing WTG inspections, the scope is anticipated to take approximately 19 days, but the Vessel may remain within the Hornsea One and Hornsea Two windfarms for additional tasks

General Information		Vessel Picture
Name	Manor Venture	
Flag	UK	
Year Built	2017	
MMSI	232007444	
Call Sign	MAW16	
Vessel Contact Details		
Bridge		
Party Chief		
Email		

8.2.2 Cable Stabilisation campaign


Start Date: May 2023


Duration of work scope: 7 Months

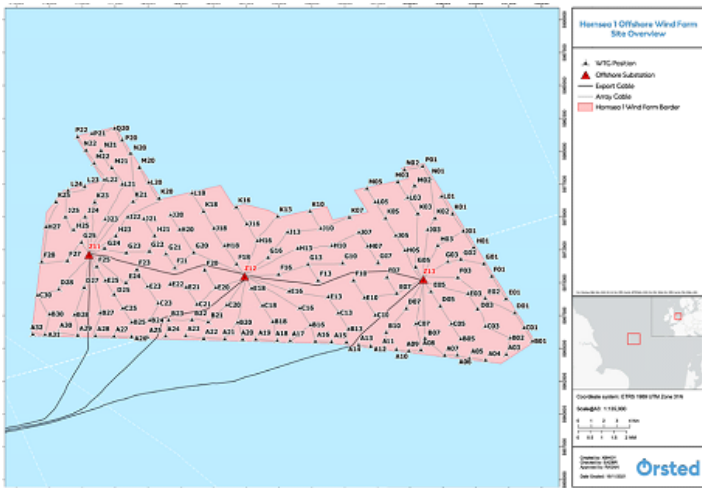
Description of Work: Cable stabilisation campaign by means of rock dumping at HOW01

Is this a licensed activity: Yes

Safety zone required: 500m

General Information		Vessel Picture
Name	Simon Stevin	
Flag	Luxembourg	
Year Built	2010	
MMSI	253309000	
Call Sign	LXUB	
Vessel Contact Details		
Bridge	+32 56 94 61 24	
Party Chief		
Email	captain@svjandenul.com	

General Information		Vessel Picture
Name	Daniel Bernoulli	
Flag	Luxembourg	
Year Built	2017	
MMSI	253350000	
Call Sign	LXUC	
Vessel Contact Details		
Bridge	+3250946017	
Party Chief	captain@bi.jandenul.com	
Email	captain@bi.jandenul.com	



Cable stabilization will be carried out at all locations at HOW01 including Offshore Substations and RCS.

8.2.3 Unmanned Survey Vessel Operations

An Unmanned Survey Vessel (USV) will be used to conduct survey operations in support of the cable stabilisation campaign (section 8.2.2). The USV will be operated from the vessel Daniel Bernoulli, details can be seen above.

USV details

GENERAL SPECIFICATIONS	
Length	6 m
Width	2.05 m
Height	2.6 m
Draft	0,5 m (excl. payload) 0.9 m with payload deployed
Propulsion	Inboard Yanmar LV195 with Hamilton HJ241 Jet BHP 195 Electrical Torqeedo Cruise 4.0 Backup propulsion FisherPanda i5000 Range Extender for Backup Propulsion
Endurance with payload	Main: 24 Hours at 4 knots Full Electric: 12 Hours at 4 knots (only batteries)
Fuel capacity	200 l
Redundant Communication links	4G (Global), WIFI (300m), Iridium (Global); Kongsberg Maritime Broadband Radio MBR179, MBR 144 (Potential range up to 20 km)
Transport	Fits 20ft container
Launch and Recovery	Integrated single point lifting slings Special Designed LARS cradle


NAVIGATION FEATURES	
Navigation Lights as per maritime standards	
Marine LED Bar / Survey Flash light	
FURUNO DRS4D-NXT Radar	
Simrad B&G V3100 Class B AIS Transponder	
Remote VHF Speaker/Receiver, according to standard ETSI EN 301-929	
XEOS Tracker	
Weather Station	
Two 180 Degrees Fixed Bullet Cameras	



SURVEY PAYLOAD	
Fixed moonpool with payload box	0.52 x 0.81 m, moonpool size
Osil Winch for turbidity and SVP sensor	
Multibeam Echosounder	R2Sonic 2024
Singlebeam Echosounder	Teledyne ECHOTRAC E20 with Airmar M192 transducer
DGPS Positioning	AsteRx-U MARINE
Gyro and IMU	SBG Navsight Apogee

8.2.4 Main Bearing Exchange

Main Bearing Exchange Campaign on Hornsea 01 at C23, M22 & A22. Campaign is estimated to start Min September for 20 days approx. A 500m exclusion zone will be required whilst the Jack Up vessel is in position at the turbines and whilst jacking up and down.

General Information		Vessel Picture
Name	Wind Enterprise	
Flag	Denmark	
Year Built	2011	
MMSI Number	219370000	
Call Sign	OZTU2	
Vessel Contact Details		
Bridge	+45 29 81 58 85	
Party Chief		
Email	Master.windenterprise@ziton.eu	

WTG ID	Degrees, Decimal Minutes	
	Latitude	Longitude
A22	53° 50' 5.059" N	01° 50' 57.533 E
C23	53° 51' 30.170" N	01° 47' 42.830 E
M22	53° 57' 11.249" N	01° 43' 6.483 E

9 Hornsea Two – Notice to Mariners


9.1 Lighting and Marking Status

T29 fog signal is constantly sounding, this will be investigated at the earliest opportunity. (Will be inoperable as per dates below).

9.2 Other Operations


9.2.1 Statutory Inspections Above Water

From the 22nd April the vessel Manor Venture will be on site completing WTG inspections, the scope is anticipated to take approximately 19 days, but the Vessel may remain within the Hornsea One and Hornsea Two windfarms for additional tasks

General Information		Vessel Picture
Name	Manor Venture	
Flag	UK	
Year Built	2017	
MMSI	232007444	
Call Sign	MAW16	
Vessel Contact Details		
Bridge		
Party Chief		
Email		

9.2.2 Blade Drone Inspections

From the 22nd June, the Ary will carry out Blade Inspections works via a Drone, All 165 WTG's will be inspected. Expected length of works is 4 weeks.

General Information		Vessel Picture
Name	ARY	
Flag	Vanuatu	
Year Built	1980	
MMSI	577031000	
Call Sign	YJQJ5	
Vessel Contact Details		
Bridge		
Party Chief		
Email		