

Ørsted - East Coast Operational Assets

Notice to Mariners

Period of Notice: August 2021

Version: 4

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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

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: <http://www.kis-orca.eu/downloads#.XWUTQUxFwjZ>. 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.co.uk	Ady Woods Phone: 07468 898948 Email: firwoods@hotmail.com
Westermost Rough	Phone: 07867 674941 Email: wmroffshorec@orsted.co.uk	Guy Pasco Phone: 07880 362082 Email: guy@seascopefisheries.co.uk
Lincs	Phone: 07766443319 Email: lincsoffshorec@orsted.co.uk	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.co.uk	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:

Courtney French

Email: CONFR@Orsted.co.uk

3 Notice to Mariners Summary:

Site	Lighting and Marking Status	Survey	Jack-Up Vessel	Other Works
Race Bank	OK	None	None	Piggyback campaign,, Cable Bandage Solutions** Above Water Inspections Internal Blade Inspections
Westermost Rough	OK	None	None	HV Maintenance, ROV operations.
Lincs	OK	None	None	Blade repair***
Gunfleet Sands	OK	Yes	Wind Pioneer °*	Corrosion campaign
Hornsea One	H27 Fog Signal	None	None	Blade repair***

* Formal 500m safety zone in place

° Licensable activity

** 500m safety distance requested

*** 200m 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 Piggyback rectification work

On the 10th June the Eden Rose will be on site to conduct some WTG internal repairs. The scope is expected to last throughout August and will be across the full wind farm.

Vessel information

General Information		Vessel Picture
Name	Eden Rose	
Flag	UK	
Year Built	2012	
MMSI Number	235092732	
Call Sign	2FNN5	
Vessel Contact Details		
Bridge	Master (TBC)	
Party Chief	07852125057	
Email	edenrose@tidal-transit.com	

4.2.2 Cable Bandage Solutions

Start date: 7th July 2021

Duration of work scope: Expected 6 weeks

Description of work: Ørsted will be performing diving works on cable ends, repairing the cable protection system at a number of selected WTG positions on ROW. During nights ROV inspections will be performed on all WTG positions

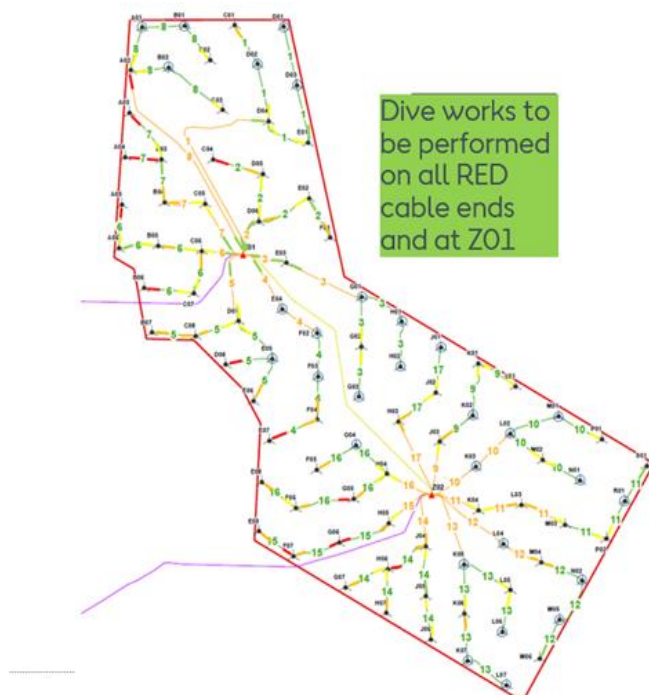
Is this a licensed activity: Yes – Consent has been obtained with the MMO

Safety zone required. During dive operations a 500m safetyzone shall apply (approx 2 x 1 hrs per day)

The Eden Rose will support the works as CTV between Piggyback Campaign.

Vessel information

Name	HBC Achiever
Flag	DK
Year Built	2014
MMSI Number	219305000
Call Sign	OWMH2
Vessel Contact Details	
Bridge	+45 28 56 47 99 / +45 82 13 10 43
Party Chief	
Email	achieverbridge@hbc-tec.dk




WTG ID	Degrees, Decimal Minutes	
	Easting (ETRS89 UTM31N)	Northing (ETRS89 UTM31N)
A02	351700,00	5910926,00
A03	351675,00	5910116,00
A04	351586,00	5909271,00
A05	351521,00	5908361,00
B03	352310,00	5909221,00
B06	351967,00	5906765,00
C04	353341,00	5909222,00
D08	353590,00	5905297,00
E07	354466,00	5903852,00
F07	354946,00	5901636,00
G05	356151,00	5902731,00
G06	355863,00	5901896,00
H06	356829,00	5901396,00
Z01	353944,00	5907400,00

4.2.3 Above Water Inspections

Above water inspection campaign due to start 3rd July for approx. 2 months. Teams will carry out TP and Internal inspections on the basement of all WTG and will be supported by the NOS Maker.


Vessel information

General Information		Vessel Picture
Name	Nos Maker	
Flag	Denmark	
Year Built		
MMSI Number	219026749	
Call Sign	OZJD2	
Vessel Contact Details		
Bridge	+46 738 62 76 02	
Party Chief		
Email	maker@n-o-s.eu	

4.2.4 Internal Blade Inspections


The work scope is to complete internal Blade inspections across all locations on Racebank Wind farm, supported by the Rix Lion. The works will start around 8th July and last approx. 2 months with all works being contain inside the WTG and no requirements for Safety Zones.

Vessel information

General Information		Vessel Picture
Name	Rix Lion	
Flag	UK	
Year Built	2014	
MMSI Number	235105282	
Call Sign	2HOH3	
Vessel Contact Details		
Bridge	07702 975599	
Party Chief		
Email	rix.lion@rix.co.uk	

4.2.5 Wave Buoy Service

We will undertake an offshore service of a Measurement Buoy. Mariners should note that the service of the Measurement Buoy is scheduled for 4th August (weather permitting) and service works should last 6 hours. An example image of a Measurement Buoy is shown in the figure below as well as the vessel details.

General Information		Vessel Picture
Name	Afon Las	
Flag	United Kingdom	
Year Built	2010	
MMSI	235115261	
Call Sign	2JEM8	
Vessel Contact Details		
Bridge	Sat phone : +88 16 777 05375 Mobile: +44 7875 941 072	
Party Chief		
Email	afonlas@holyhead.co.uk	

Location - ROW: 53° 14.320' N, 000° 54.007' E

MEASUREMENT BUOY



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 HV Maintenance

During the first week in September, the Edda Mistral will be on site to conduct some routine maintenance, their intention is not to enter the array and the Mistral Worker will conduct the WTG transfers.

Vessel information

General Information		Vessel Picture
Name	Edda Mistral	
Flag	Norway	
Year Built	2018	
MMSI Number	9808778	
Call Sign	LALY8	
Vessel Contact Details		
Bridge	+441472868003	
Party Chief		
Email	Master.mistral@ostensjo.no	

General Information		Vessel Picture
Name	Mistral Worker	
Flag	Norway	
Year Built	2018	
MMSI Number	232010633	
Call Sign	MBSC9	
Vessel Contact Details		
Bridge	+441472868003	
Party Chief		
Email	Master.mistral@ostensjo.no	

5.2.2 ROV Operations

On or around the 23rd August, the HBC Achiever will conduct ROV inspections at all locations on Westernmost Rough including the OSS (sub-station). The work is expected to take around 1 week. 500m exclusion zone will be required when ROV is in the water

Vessel details

Name	HBC Achiever
Flag	DK
Year Built	2014
MMSI Number	219305000
Call Sign	OWMH2
Vessel Contact Details	
Bridge	+45 28 56 47 99 / +45 82 13 10 43
Party Chief	
Email	achieverbridge@hbc-tec.dk



B	C	D
TURBINEID	WGS84 (Deg, decimal Minutes)	
	LONGITUDE	LATITUDE
A01	000° 08.38675416' E	53° 46.20680735' N
A02	000° 07.87307123' E	53° 46.62059878' N
A03	000° 07.37885722' E	53° 47.04119733' N
A04	000° 06.85818950' E	53° 47.47696658' N
A05	000° 06.36879385' E	53° 47.91073237' N
A06	000° 05.86400276' E	53° 48.29994135' N
A07	000° 05.36214519' E	53° 48.70983696' N
B01	000° 09.23182012' E	53° 46.56428159' N
B02	000° 08.69155112' E	53° 46.96943653' N
B03	000° 08.23086383' E	53° 47.39513512' N
B04	000° 07.70116565' E	53° 47.83499605' N
B05	000° 07.19724055' E	53° 48.25473358' N
B06	000° 06.72217424' E	53° 48.65437277' N
B07	000° 06.22105553' E	53° 49.06651082' N
C01	000° 10.06644598' E	53° 46.92462112' N
C02	000° 09.57049861' E	53° 47.34205597' N
C03	000° 09.07015927' E	53° 47.75758861' N
C06	000° 07.55870254' E	53° 49.00926756' N
C07	000° 07.05438217' E	53° 49.42629772' N
D01	000° 10.92727074' E	53° 47.27953417' N
D07	000° 07.90033622' E	53° 49.78462890' N
E01	000° 11.78279790' E	53° 47.63978678' N
E02	000° 11.26664084' E	53° 48.05476553' N
E03	000° 10.76361486' E	53° 48.46369275' N
E04	000° 10.22837514' E	53° 48.90393455' N
E05	000° 09.72876104' E	53° 49.32957074' N
E06	000° 09.25156373' E	53° 49.72492298' N
E07	000° 08.74459922' E	53° 50.14413601' N
F01	000° 12.61599900' E	53° 47.99516287' N
F02	000° 12.11293553' E	53° 48.41299278' N
F03	000° 11.60091884' E	53° 48.83725758' N
F04	000° 11.07456307' E	53° 49.26159634' N
F05	000° 10.57587435' E	53° 49.68731194' N
F06	000° 10.09818165' E	53° 50.08295371' N
F07	000° 09.60859260' E	53° 50.49184716' N

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 Blade repair

Towards the end of August, we will be carrying out a blade repair on LS54 shown below. A 200m exclusion zone will be required for the duration of the works. One of the site CTV's will be used for this work.



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 Internal corrosion protection

We will conduct a corrosion protection campaign around the 12th July, all locations will be visited, and the campaign is anticipated to last around 6 weeks.

Vessel Information

General Information		Vessel Picture
Name	CWind Adventure	
Flag	UK	
Year Built	2013	
MMSI Number	235097139	
Call Sign	2GGG9	
Vessel Contact Details		
Bridge	07508452177	
Party Chief		
Email	Adventure@cwind.global	

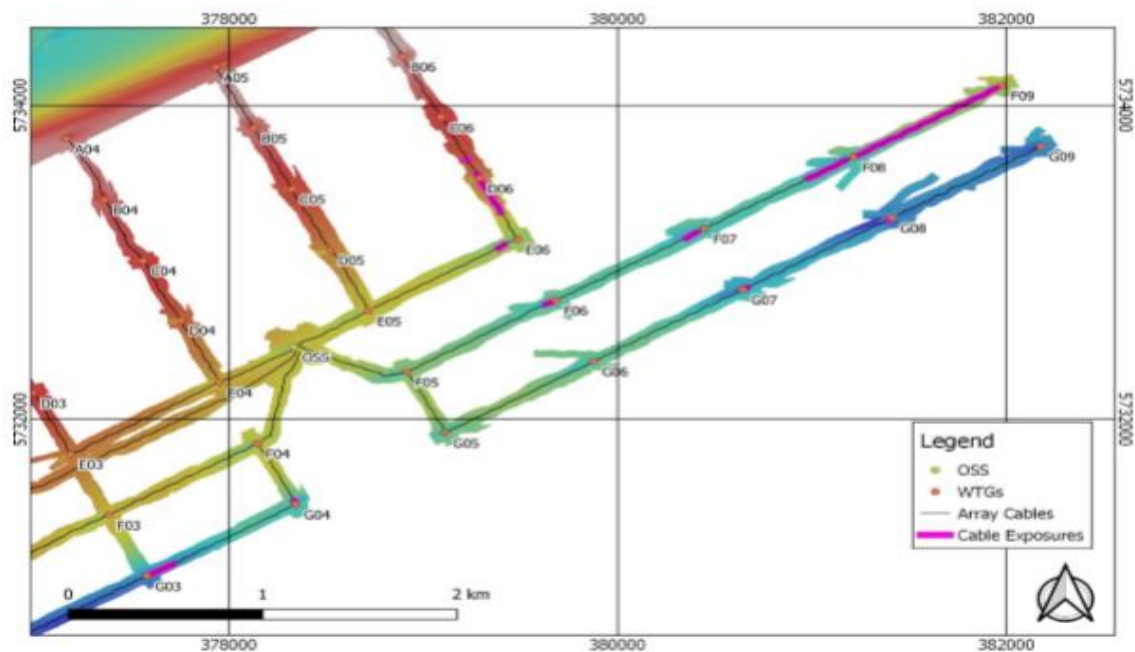
General Information		Vessel Picture
Name	CWind Challenger	
Flag	UK	
Year Built	2013	
MMSI Number	235099967	
Call Sign	2GRU4	
Vessel Contact Details		
Bridge	07944639671	
Party Chief		
Email	challenger@cwind.global	

7.2.2 Cable exposure

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

Array cable	Nearest WTG	Distance from WTG to start exposure [m]	Exposure length [m]	Coordinates start exposure		Coordinates end exposure	
				X	Y	X	Y
F06-F07	F07	53.9	73.9	380400.9	5733188.0	380341.2	5733147.0
F07-F08	F08	52.4	216.1	381166.3	5733649.0	380982.7	5733538.0
F08-F09	F08	28.1	827.9	381238.4	5733685.0	381942.3	5734108.0
G03-G04	G03	19.9	129.8	377595.9	5731011.0	377708.3	5731074.0
G07-G08	G07	15.4	5.8	380657.0	5732835.0	380662.0	5732838.0
G07-G08	G08	6.5	11.0	381404.9	5733280.0	381395.3	5733275.0

Table 5-1; Array cable exposures detected in GFS0102





7.2.3 Main component exchange

Jack up vessel, The Wind Pioneer will be carrying out a main bearing exchange on Gunfleet Sands windfarm on C05 and D01 on or around the 23rd of August. The CTV CRC Sentinel will be supporting this scope.

Mariners must observe an approved exclusion zone of 500m whenever The Wind Pioneer is attached/ anchored next to C05 and D01. A minimum separation distance of 500m is also requested when the vessel is observed manoeuvring into position. The duration of the work will be approximately 14 days.

Vessel Information

General Information		Vessel Picture
Name	Wind Pioneer	
Flag	Denmark	
Year Built	2010	
IMO/MMSI	219017684	
Call Sign	OWLA2	
Vessel Contact Details		
Bridge	+45 21 82 21 80	
Party Chief	WIP Master	
Email	master.windpioneer@ziton.eu	

General Information		
Name	CRC Sentinal	
Flag	UK	
Year Built	2011	
IMO/MMSI	235083968	
Call Sign	2ECN8	
Vessel Contact Details		
Bridge	TBC	
Party Chief	TBC	
Email	TBC	


WTG coordinates

WTG ID	Degrees, Decimal Minutes		WTG ID	Degrees, Decimal Minutes	
	Latitude	Longitude		Latitude	Longitude
C05	51°44.334'N	01°14.267'E	D01	51°44.103'N	01°11.822'E

7.2.4 Seabed Survey

Seabed Survey to be conducted around WTG D01. Vessel will be Spectrum Nyquist and works expected to take approx. 2 hrs on 20th August (date dependent on weather). No exclusion zone required

Vessel Information

General Information		
Name	Spectrum Nyquist	
Flag	UK	
Year Built	2010	
MMSI	232031312	
Call Sign	MIIG4	
Vessel Contact Details		
Bridge	+44 (0)7803 031728	
Party Chief	TBD	
Email	+44 (0)7803 031728	

WTG ID	Degrees, Decimal Minutes	
	Latitude	Longitude
D01	51°44.103'N	01°11.822'E

8 Hornsea One – Notice to Mariners

8.1 Lighting and Marking Status

H27 Foghorn is active constantly due to a software error, to be rectified as soon as possible.

8.2 Other Operation

8.2.1 Summer campaigns including blade repairs

From the 8th September until the end of October, we will be conducting routine maintenance and repairs as listed below. The Wind of Hope with the support of several CTV's shown below will be supporting the various projects.

- E03 Transition piece repair, *position shown below
- Structural inspections
- Blade Leading Edge Repairs ****200m exclusion zone required, locations below**
- Radio system maintenance

- Corrosion cable repair
- Water delivery to OSS'

* TP repair


TURBINE ID	WGS84 (Deg, decimal Minutes)	
	LONGITUDE	LATITUDE
E03	002° 09.26499148' E	53° 52.08358583' N

**Blade repair locations

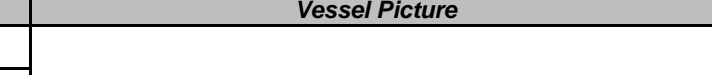
TURBINE ID	WGS84 (Deg, decimal Minutes)	
	LONGITUDE	LATITUDE
K13	001° 55.95939234' E	53° 55.14090761' N
J16	001° 53.82503167' E	53° 54.81603957' N
G16	001° 55.33144553' E	53° 53.44793508' N
H16	001° 54.57828973' E	53° 54.13197937' N
K03	002° 05.71483291' E	53° 55.32989358' N
K03	002° 05.71483291' E	53° 55.32989358' N
B22	001° 50.12039074' E	53° 50.84600556' N
B22	001° 50.12039074' E	53° 50.84600556' N
B22	001° 50.12039074' E	53° 50.84600556' N
J07	002° 01.60804537' E	53° 54.53475330' N
H07	002° 02.22640902' E	53° 53.97103510' N
G07	002° 02.96741382' E	53° 53.29508194' N
K02	002° 06.91516245' E	53° 55.15292769' N
B21	001° 51.25370796' E	53° 50.77138184' N
A23	001° 49.70898464' E	53° 50.19143262' N
A24	001° 48.27426542' E	53° 50.16716991' N
B16	001° 58.34561108' E	53° 50.71241057' N
B16	001° 58.34561108' E	53° 50.71241057' N
F21	001° 48.83553080' E	53° 52.96433698' N
K18	001° 50.80210644' E	53° 55.29576105' N
L20	001° 46.93451926' E	53° 56.44801123' N
B23	001° 48.46612469' E	53° 50.82172399' N
C18	001° 55.00623172' E	53° 51.47955538' N
C18	001° 55.00623172' E	53° 51.47955538' N
C20	001° 52.52070201' E	53° 51.47676506' N
E20	001° 51.73937643' E	53° 52.18625668' N
H20	001° 49.13711817' E	53° 54.53728429' N
H20	001° 49.13711817' E	53° 54.53728429' N


F13	001° 58.82576654' E	53° 52.53357759' N
D01	002° 12.52946057' E	53° 51.31752065' N
G05	002° 05.62392589' E	53° 53.14027402' N
G05	002° 05.62392589' E	53° 53.14027402' N
J22	001° 45.51292689' E	53° 55.01721126' N
P01	002° 06.01363874' E	53° 57.27927117' N
M20	001° 46.26551672' E	53° 57.04926498' N

Vessel Information

General Information		Vessel Picture
Name	Wind of Hope	
Flag	France	
Year Built	2021	
MMSI Number	228388900	
Call Sign	FLZT	
Vessel Contact Details		
Bridge	tbc	
Party Chief		
Email	operation@windofhope.lda.fr	


General Information		Vessel Picture
Name	MCS KAVER	
Flag	UK	
Year Built	2013	
MMSI Number	235098572	
Call Sign	2GMB8	
Vessel Contact Details		
Bridge	Mob - 07876 861 746 VSAT - 0044 1475 830641	
Party Chief	StevenJ@maritimecraft.co.uk colinm@maritimecraft.co.uk	
Email	MCSKaver@maritimecraft.co.uk	

General Information		Vessel Picture
Name	World Bora	
Flag	United Kingdom	
Year Built	2014	
MMSI	219019933	
Call Sign	OWJW2	
Vessel Contact Details		

Bridge	+45 30807479	
Party Chief		
Email	bora@wm-offshore.com	

8.2.2 Wave Buoy Service

We will undertake an offshore service of a Measurement Buoy. Mariners should note that the service of the Measurement Buoy is scheduled for 5th August (weather permitting) and service works should last 6 hours. An example image of a Measurement Buoy is shown in the figure below as well as the vessel details.

General Information		Vessel Picture
Name	Afon Las	
Flag	United Kingdom	
Year Built	2010	
MMSI	235115261	
Call Sign	2JEM8	
Vessel Contact Details		
Bridge	Sat phone : +88 16 777 05375 Mobile: +44 7875 941 072	
Party Chief		
Email	afonlas@holyhead.co.uk	

Location - HOW1: 53° 50.203' N, 001° 49.253' E
MEASUREMENT BUOY

