

## Ørsted - East Coast Operational Assets

## **Notice to Mariners**

## **Period of Notice: July 2023**

Version: 3



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#### 1 Introduction

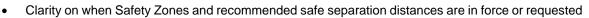
Ørsted is an offshore wind farm owner and operator with ten operational wind farms in UK waters. Of these ten, the following offshore wind farms are located off the East Coast of England:



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



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: <u>https://kis-orca.org/downloads/</u> 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: <u>rowoffshorec@orsted.com</u>	Ady Woods Phone: 07468 898948 Email: <u>firwoods@hotmail.com</u>
Westermost Rough	Phone: 07867 674941 Email: <u>wmroffshorec@orsted.com</u>	Guy Pasco Phone: 07880 362082 Email: <u>guy@seascopefisheries.co.uk</u>
Lincs	Phone: 07766443319 — Email: <u>lincsoffshorec@orsted.com</u>	Ady Woods Phone: 07468 898948 Email: <u>finwoods@hotmail.com</u> Merlin Jackson
Sands		Phone: 07989 520484 Email: merlinjackson@btinternet.com
Hornsea One	Phone: 07775005465 Email: <u>HOWoffshoreC@orsted.com</u>	Nick Garside Phone: 07538 827013 Email: <u>nick.garside@live.co.uk</u>
Hornsea Two	Phone: 07775005465 Email: <u>HOW02offshoreC@orsted.com</u>	Nick Garside Phone: 07538 827013 Email: <u>nick.garside@live.co.uk</u>

#### **Company Fisheries Liaison Officer**

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

Email: LEETH@orstred.com

#### 3 Notice to Mariners Summary:

Site	Lighting and Marking Status	Survey	Jack-Up Vessel	Other Works
Race Bank	ОК	None	Yes	Main Bearing Exchange *° Blade LEP**** Structural Inspections **
Westermost Rough	D01- Marine Lantern Extinguished	None	Yes	Blade LEP***, Main Bearing Exchange *° Structural Inspections **
Lincs	LS33 Marine Lantern Extinguished	None	None	Oil exchange Drill Arising Benthic Monitoring**** Structural Inspections **
Gunfleet Sands	ОК	None	None	Blade LEP***
Hornsea One	OK	Yes	Yes	Main Bearing Exchange *° USV Operations Cable stabilisation campaign
Hornsea Two	T29 – Fog signal constantly sounding	None	None	Structural Inspections **



\* Formal 500m safety zone in place ° Licensable activity

\*\*\* 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-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. There will also be a CTV supporting operations.

	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	

#### 4.2.2 New SES Site Vessel

Racebank windfarm will begin operating new SES Site vessels, which will replace the CTVs currently in use. The vessels are capable of speeds up to 40kts when transiting between Grimsby and Racebank Windfarm.

	General Information	Vessel Picture
Name	Word Firmus	
Flag	Denmark	
Year Built		
MMSI Number	21921300	
Call Sign	OYJX2	E St., Gwyne vine Transport
	Vessel Contact Details	
Bridge	+45 48 80 85 69	
Party Chief		
Email	<u>mho-falcon@mho-co.dk</u>	VesselFinder



#### 4.2.3 LEP Campaign

In mid-August, there will be a LEP campaign we anticipate lasting 23 days. The scope involves rope access technicians. When the technicians are on the ropes, we will require a 200m exclusion zone.

	General Information	Vessel Picture
Name	lceni Defiant	-0
Flag	UK	B
Year Built	2010	
MMSI	235090838	5
Call Sign	2FF06	
	Vessel Contact Details	
Bridge	07719 423 772	
Party Chief		
Email	Defiant@turnericeni.com	



WTG ID	Degrees, Decimal Minutes		
	Latitude	Longitude	
A05	0.771711	53.30361	
D02	0.811108	53.328453	
D03	0.82307	53.325066	
D04	0.814847	53.318757	
D06	0.812835	53.301449	
D07	0.807669	53.284227	
F05	0.832343	53.259126	
G01	0.844258	53.289039	
G06	0.83976	53.246736	
H02	0.856459	53.277301	
K06	0.877683	53.235235	
K07	0.879027	53.22714	
L01	0.891077	53.274552	
L03	0.893878	53.254232	
R01	0.924704	53.25542	

#### **4.2.4 Structural Inspections**

Structural Inspection of subsea assets, using ROV from Jif Marlin on DP mode. Expected to start on the 6<sup>th</sup> August and will work between WMR, ROW, HOW01 and LINCS windfarm for circa 35days

	General Information	
Name Jif Marlin		
Flag	France	
Year Built	2017	
MMSINumber	228093900	
Call Sign	FJYT	
	Vessel Contact Details	
Bridge	+33 6 99 73 04 11	
Party Chief	+44 (0) 776 949 3413	
Email	JifMarlin@jifmar.net	



#### Coordinates



Race Bank		
ID	Latitude	Longitude
A06	53.2960577	0.771226337
B04	53.3042232	0.784463982
B05	53.296783	0.783038112
B07	53.2817815	0.781874679
C06	53.2960883	0.796057968
D05	53.3095906	0.813664252
D06	53.3014472	0.812829469
E09	53.2482625	0.815637547
G04	53.263513	0.843871559
G06	53.2467329	0.83976746
J04	53.2465649	0.865565971
M03	53.2510328	0.907075612
N02	53.2414367	0.912642856



#### 5 Westermost Rough – Notice to Mariners

#### 5.1 Lighting and Marking Status

D01 Marine lantern is currently extinguished. We will investigate and repair this as soon as possible.

#### 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		
Name	Name Iceni Defiant		
Flag	UK		
Year Built	2010		
MMSI Number 235090838			
Call Sign	2FF06		
	Vessel Contact Details		
Bridge	Bridge +44 7809 727 397		
Party Chief			





#### 5.2.2 WMR Main Bearing Exchange

Main Bearing Exchange Campaign on Westermost Rough at location B03. Campaign is estimated to start in late 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	1000 A 101	
	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

#### 5.2.4 New SES Site Vessel

Westermost Rough windfarm will begin operating new SES vessels, which will replace the CTVs currently in use. The vessels are capable of speeds up to 40kts when transiting between Grimsby and Westermost Rough Windfarm.

	General Information	Vessel Picture
Name	World Rapid	
Flag	Denmark	
Year Built	2017	
MMSI Number	219024900	
Call Sign	OYRX2	
	Vessel Contact Details	
Bridge	+45 92 92 05 56	
Party Chief		
Email	MHO-Flash@mho-co.dk	VeseiFinder

#### 5.2.5 Structural Inspections

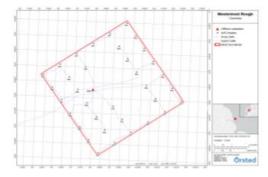
Structural Inspection of subsea assets, using ROV from Jif Marlin on DP mode. Expected to start on the 6<sup>th</sup> August and will work between WMR, ROW, HOW01 and LINCS windfarm for circa 35days

General Information		Vessel Picture
Name	Jif Marlin	
Flag	France	
Year Built	2017	
MMSI Number	228093900	
Call Sign	FJYT	N alley W
	Vessel Contact Details	The Party and the second
Bridge	+33 6 99 73 04 11	
Party Chief	+44 (0) 776 949 3413	
Email	JifMarlin@jifmar.net	

Depending on the work scope you may need to provide a Map & Coordinates showing location of work.

GIS Map example

#### Coordinates



Westernmost Rough				
ID	Туре	Latitude	Longitude	
A03	WTG	0.122976446	53.78401631	
C02	WTG	0.159503799	53.78903062	
D07	WTG	0.131667762	53.82974017	
F07	WTG	0.160138699	53.84152714	
DS4	B' Reef	0.101373	53.789364	
DS8	B' Reef	0.133711	53.819476	
DS15	B' Reef	0.163259	53.837817	
DS17	B' Reef	0.188962	53.817455	
DS18	B' Reef	0.150371	53.78001	

#### 6 Lincs – Notice to Mariners

#### 6.1 Lighting and Marking Status

LS33 Marine lantern Extinguished. We will investigate and repair this as soon as possible.

#### 6.2 Other Operations



#### 6.2.1 WTG Oil exchange

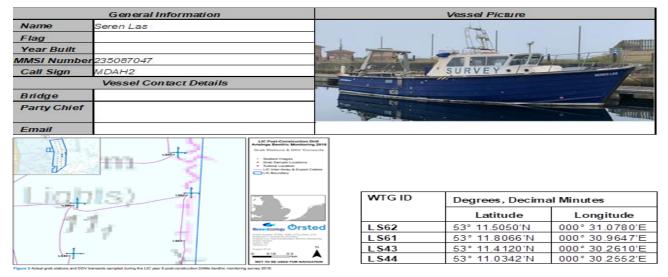
On the 1<sup>st</sup> May, the vessel MMS Superior will be on site conducting an oil exchange. All 75 locations will be visited with the scope anticipated on taking just over 3 months.

#### Vessel information

General Information		Vessel Picture	
Name	MMS Superior		
Flag	UK		
Year Built	2019		
MMSI Number	232024742		
Call Sign	MGF09		
	Vessel Contact Details		
Bridge	07471752805		
Party Chief			
Email	mmssuperior@mms-offshore.co.uk	© Frank-Peter Mecklenbeck	

#### 6.2.2 Drill Arising Benthic Monitoring

On 31<sup>st</sup> July survey vessel "Seren Las" will be conducting Drill Arising Benthic Monitoring survey works for four days. These works will involve multiple grab samples and underwater video / photography at each location. These works will be conducted close to the four below mentioned turbines. Mariners are requested to remain a distance of 250m from "Seren Las" when it is observed undertaking this survey work due to the survey equipment that will be in the water. The equipment will be lowered using a frame winch on the aft of the vessel.



#### 6.2.3 Structural Inspections

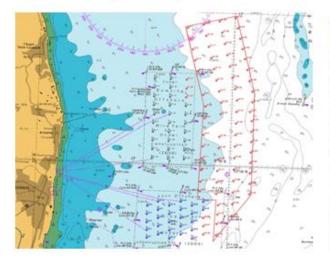


Structural Inspection of subsea assets, using ROV from Jif Marlin on DP mode. Expected to start on the 6<sup>th</sup> August and will work between WMR, ROW, HOW01 and LINCS windfarm for circa 35days

	General Information	Ve
Name	Jif Marlin	
Flag	France	
Year Built	2017	
MMSI Numbe	r 228093900	1
Call Sign FJYT		
	Vessel Contact Details	State of
Bridge	+33 6 99 73 04 11	
Party Chief	+44 (0) 776 949 3413	
Email	JifMarlin@jifmar.net	

# Vessel Picture

#### Coordinates



Lincs				
ID	Туре	Latitude	Longitude	
LSS1 (AS1)	WTG	53* 08.365	00* 30.183	
LS44 (B44)	WTG	53° 11.016	00* 30.226	
LS66 (B66)	WTG	53* 10.117	00* 31.047	
L538 (D38)	WTG	53* 13.254	00* 29.814	
L554 (D54)	WTG	53* 14.170	00* 30.293	
LSO3 (EO3)	WTG	53* 13.772	00° 27.866	
LS18 (E18)	WTG	53* 13.511	00* 28.840	
LS08 (F08)	WTG	53* 11.532	00* 28.604	
LS20 (F20)	WTG	53° 12.786	00* 29.145	
LS09 (G09)	WTG	53° 10.992	00* 28.576	
LS26 (G26)	WTG	53* 10.192	00* 29.377	
LS74 (H74)	WTG	53* 07.993	00* 28.738	
LS75 (H75)	WTG	53° 07.726	00° 28.754	

#### 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: 14<sup>th</sup> 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	<u>ц</u> ,
MMSI	235096731	
Call Sign	2GEQ9	
	Vessel Contact Details	
Bridge	ТВС	
Party Chief	ТВС	North Sex Logistics
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_T0_01-UnidentifiedOther	F08-F09	13.4	1° 17.383' E	51° 44.721' N	1° 17.396' E	51° 44.723' N
GFS_MBES_T0_02-CableExposure	F08-F09	790.93	1° 16.787' E	51° 44.486' N	1° 17.376' E	51° 44.718' N
GFS_MBES_T0_03-CableExposure	F07-F08	533.19	1° 16.562' E	51° 44.401' N	1° 16.726' E	51° 44.466' N
GFS_MBES_T0_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

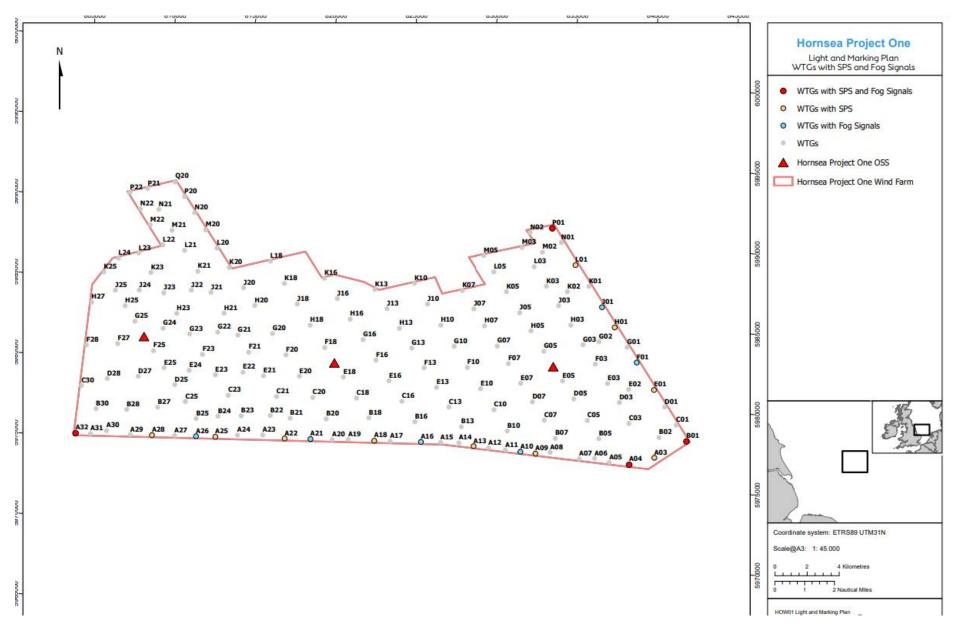
The lighting and/ or navigational warning systems are currently operational. No planned outages



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	Х	
Q20	Х	Х
C30	Х	Х
H27	Х	Х
P22	Х	Х
L20		Х
K16		Х
K10		Х
M05		Х



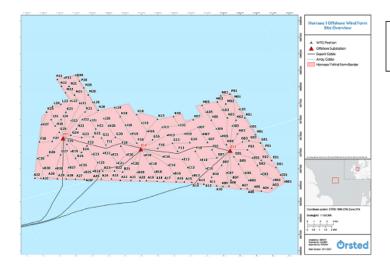


#### 8.2 Other Operations

#### 8.2.1 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	Daniel Bernoulli	
Flag	Luxembourg	
Year Built	2017	
MMSI	253350000	
Call Sign	LXUC	
	Vessel Contact Details	
Bridge	+3250946017	INTE INSTALL
Party Chief	<u>captain@bi.jandenul.com</u>	
Email	captain@bi.jandenul.com	



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

#### 8.2.2 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

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 LV 195 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 an	d 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	



#### 8.2.3 Main Bearing Exchange

Main Bearing Exchange Campaign on Hornsea 01 at C23, M22 & A22. Campaign is estimated to start Early October 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.

#### 9.2 Other Operations

#### 9.2.1 Structural Inspections

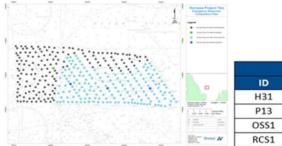
Structural Inspection of subsea assets, using ROV from Jif Marlin on DP mode. Expected to start on the 6<sup>th</sup> August and will work between WMR, ROW, HOW02 and LINCS windfarm for circa 35days

General Information		Vessel Picture
Name	Jif Marlin	
Flag	France	
Year Built	2017	
MMSINumber	228093900	
Call Sign	FJYT	W CHART IN
	Vessel Contact Details	State Public State
Bridge	+33 6 99 73 04 11	
Party Chief	+44 (0) 776 949 3413	
Email	JifMarlin@jifmar.net	

Depending on the work scope you may need to provide a Map & Coordinates showing location of work.

GIS Map example

Coordinates



Hornsea			
ID	Туре	Longitude	Latitude
H31	WTG	001° 34' 39.577" E	53° 54' 52.637" N
P13	WTG	001° 53' 6.314" E	53° 57' 43.830" N
OSS1	OSS	001° 37' 50.474" E	53° 56' 21.869" N
RCS1	RCS	000° 55' 56.151" E	53 ° 38' 0.138" N