Hornsea 2
Offshore Wind Farm

Ørsted

Notice to Mariners – Hornsea Project Two

UPDATE - Notice of Geophysical Survey – Issued 11/03/2019

1. INTRODUCTION

Mariners are advised that Hornsea Project Two will be carrying out geophysical investigations for the proposed Hornsea Project Two Offshore Wind Farm located within the UK Sector of the North Sea, off the coast of East Yorkshire as shown in the figures attached with this notice. Survey work will commence at selected locations along the proposed export cable route from the 4th March, it is currently anticipated that survey work will last for four days however, due to vessel availability and weather, Hornsea Project Two note that works could be conducted at these areas until late March. In addition, survey work will commence at the wind farm array (as shown in Figure 2 attached in this notice) from 22nd March potentially until October 2019, weather dependent.

The surveys will commence with one vessel being used to conduct the geophysical survey. Additional vessels will also join the survey campaign, this Notice will be updated and re-issued as the surveys continue and in advance of vessels arriving on site and once works are complete. All vessels will be towing geophysical survey equipment.

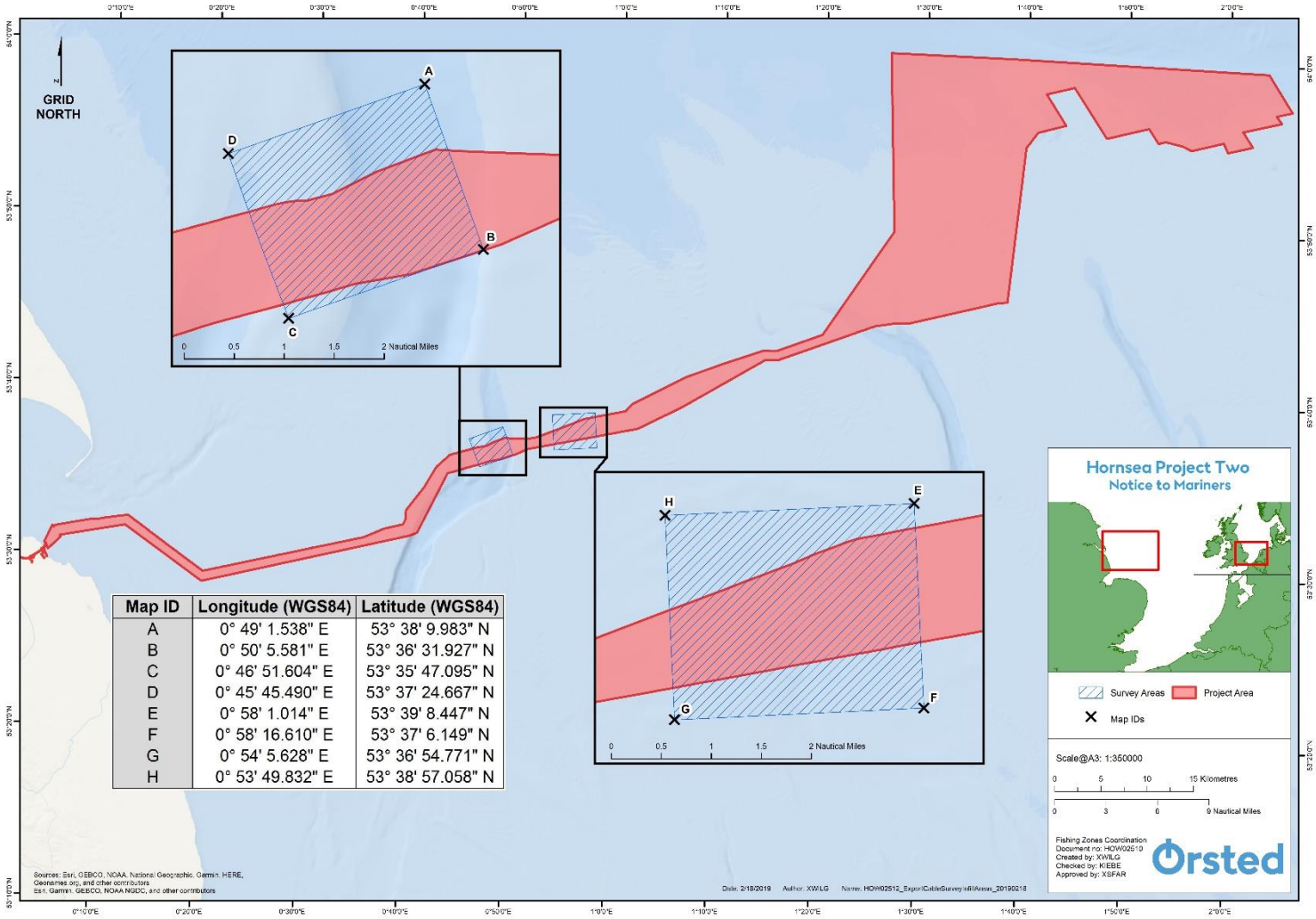
2. AREA OF OPERATIONS

Activities will centre on the Hornsea Project Two offshore wind farm proposed export cable route and array as shown in Figures 1 and 2. The coordinates of the proposed survey are appended to the end of this Notice. Mariners are advised that MaxSea and Olex plotter files of the proposed survey areas can be provided by the Project's Commercial Fisheries Advisors at Brown and May Marine Limited and the Project's onshore fisheries liaison. Contact details are provided in Section 5 of this Notice.

The survey will encompass two specific areas of the export cable route and the wind farm array. As the vessels will be towing equipment they will require an adequate buffer to allow for turning circles, included within the stipulated survey areas shown in Figure 1 and Figure 2. Note that survey works at Hornsea Project Two are in addition to ongoing construction at the adjacent Hornsea Project One Offshore Wind Farm.

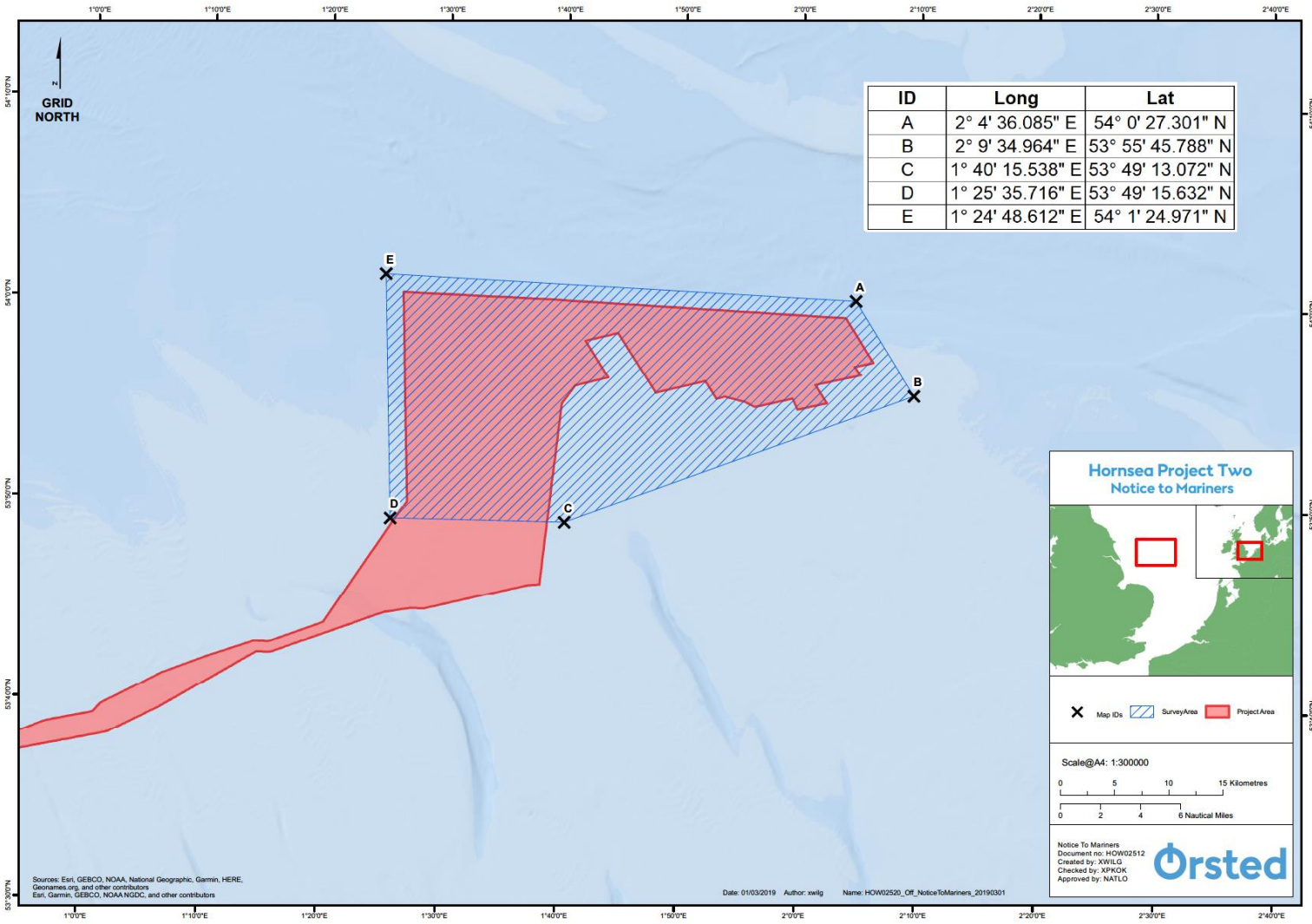
The survey vessel will be deployed to survey locations within the area at times and positions determined by client requirements, weather and sea conditions. The vessels are expected to operate out of Grimsby.

Figure 1. Proposed Survey Area – Export Cable Infill Areas (Farshore)



Map ID	Longitude (WGS84)	Latitude (WGS84)
A	0° 49' 1.538" E	53° 38' 9.983" N
B	0° 50' 5.581" E	53° 36' 31.927" N
C	0° 46' 51.604" E	53° 35' 47.095" N
D	0° 45' 45.490" E	53° 37' 24.667" N
E	0° 58' 1.014" E	53° 39' 8.447" N
F	0° 58' 16.610" E	53° 37' 6.149" N
G	0° 54' 5.628" E	53° 36' 54.771" N
H	0° 53' 49.832" E	53° 38' 57.058" N

Figure 2. Proposed Survey Area – Wind Farm Array



3. SURVEY

3.1 Geophysical Survey

Please be advised that Ørsted will be carrying out geophysical surveys using the Kommandor Stuart, Fugro Pioneer and Fugro Frontier within the Hornsea Project Two Wind Farm boundary.

The operations are planned to commence Monday 4th March 2019 along the export cable route using the Kommandor Stuart. The exact survey dates are dependent on weather and work progress, as such Hornsea Project Two notes that the areas along the export cable route may be required until the end of March 2019. When the works are complete, this Notice will be updated and re-issued.

In addition, the Kommandor Stuart may also operate within the array area along with the Fugro Pioneer and Fugro Frontier depending on availability of other vessels, scheduling and weather. As such, clearance for the wind farm array is also requested from 22nd March 2019.

The vessels will be towing geophysical survey equipment (side scan sonar, magnetometer, sub bottom profiler) and will also be using a hull-mounted system (MBES). As such, the vessels will have limited maneuverability and it is requested that all vessels operating near the proposed survey area keep a safe distance (at least 500m) and pass all vessels at minimum speed.

3.2 Safety

Furthermore, it is requested that anybody having knowledge of any potential objects submerged or moored on the seabed within the survey area that could be damaged or form a hazard to the survey vessel and its equipment advises the Project's Fishing Industry Liaison of their position and nature. The Project has also requested the clearance of static fishing gear within the boundary shown in Figure 1 and Figure 2 and described in Section 7 of this Notice. When surveys commence a listening watch will be maintained on VHF Channel 12 and 16 when within the appropriate port authority area, and will actively transmit an AIS signal. The survey vessels will also broadcast at regular daily intervals the vessel position, operational information and intentions.

4. IMMEDIATE CONTACTS

The contents of this notice are based upon our current understanding of Project Two requirements. A further notice will be issued once survey operations are completed.

Enquiries regarding the contents of this Notice to Mariners or any other matters should be directed to:

Project Manager (Ørsted) (Office hours only)	Mira Rosten	
	Mob: +44 (0)7824 545178	E-mail: mirro@orsted.co.uk
Vessel Manager (Kommandor Stuart)	Sam Litchfield	
	Tel: +44 (0) 7748 988393	E-mail: s.litchfield@fugro.com
Vessel Manager (Fugro Pioneer)	Andreas Schönke	
	Tel:+31 62 1357 889	E-mail: a.schonke@fugro.com
Vessel Manager (Fugro Frontier)	Kate Jackson	
	Tel: +31 628 349 097	E-mail: k.jackson@fugro.com

5. FISHERIES LIAISON

Project Two Onshore Fisheries Liaison for this survey is provided by Nick Garside and Alex Winrow-Griffin who can be contacted on:

E-mail: nick.garside@live.co.uk	Mob: +44 (0) 7538 827013
Email: alex@brownmay.com	Mob: +44 (0) 7760 160039

It is envisaged that an Offshore Fisheries Liaison Officer may be on-board the Kommandor Stuart during the works, contactable on VHF channel 16.

In the event the Onshore Fisheries Liaison is not contactable please direct fisheries enquiries related to the survey works to the Ørsted Company Fisheries Liaison Officer:

Company Fisheries Liaison Officer – Sophie Farenden	Tel: +44 (0)7551 176 795	E-mail: XSFAR@orsted.co.uk

6. SURVEY VESSELS

Survey operations will be conducted by the Kommandor Stuart, Fugro Pioneer and Fugro Frontier. Contact can be made directly with the vessels, where necessary, using the contact details listed below. Client and contractor contact details are provided in Section 4 and 5 of this NtM.

Vessel Contact Details – Kommandor Stuart	
Vessel telephone	+31 10 7130 938 +881 63 1419 009
Vessel email	Kommandorstuart@haysshipping.com kommandorstuartbridge@gmail.com

Vessel Contact Details – Fugro Pioneer	
Vessel telephone	Master: +31 10 7130 944 Party Chief: +31 10 7130 946 +31 65 3702 893
Vessel email	master@pioneer.fugro.com partychief@pioneer.fugro.com

Vessel Contact Details – Fugro Frontier	
Vessel telephone	Master: +31 10 7130 936 / +881 63 1419 009 Party Chief: +31 10 7130 938 +881 63 1419 009
Vessel email	master@frontier.fugro.com partychief@frontier.fugro.com

General Information	
Name	**Kommandor Stuart**
Flag	United Kingdom [GB]
Year Built	1976
MMSI Number	235011900
Call Sign	MPQH3
Class	DNVGL (Research / Survey Vessel)

Dimensions	
Length	60.36m
Breadth	12.04m
Draught	5.5m

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General Information	
Name	**Fugro Pioneer**
Flag	Bahamas (BS)
Year Built	2014
MMSI Number	311000262
Call Sign	C6BH3
Class	DNVGL (Research / Survey Vessel)

Dimensions	
Length	53.63m
Breadth	12.5m
Draught	3.1m
Engine	2 x Azimuth thrusters, 1 x tunner thruster (bow)

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General Information	
Name	**Fugro Frontier**
Flag	Bahamas (BS)
Year Built	2014
MMSI Number	311000263
Call Sign	C6BH4
Class	Research / Survey Vessel

Dimensions	
Length	53.7m
Breadth	12.5m
Draught	3.1m
Engine	2 x Azimuth thrusters, 1 x tunnel thruster

7. COORDINATES

Export Cable Route Infill Areas (Figure 1)		
Map ID	**Longitude (WGS84)**	**Latitude (WGS84)**
A	0° 49.026' E	53° 38.166' N
B	0° 50.093' E	53° 36.532' N
C	0° 46.860' E	53° 35.785' N
D	0° 45.758' E	53° 37.411' N
E	0° 58.017' E	53° 39.141' N
F	0° 58.277' E	53° 37.103' N
G	0° 54.094' E	53° 36.913' N
H	0° 53.831' E	53° 38.951' N

Wind Farm Array (Figure 2)		
Map ID	**Longitude (WGS84)**	**Latitude (WGS84)**
A	2° 4.602' E	54° 0.455' N
B	2° 9.583' E	53° 55.763' N
C	1° 40.259' E	53° 49.218' N
D	1° 25.595' E	53° 49.261' N
E	1° 24.810' E	54° 1.416' N