

Fugro GeoConsulting Limited Fugro House Hithercroft Road Wallingford Oxfordshire OX10 9RB

NOTICE TO MARINERS – Geotechnical Investigations at Dogger Bank (04)

Notice is hereby given that Fugro GeoConsulting Limited (Fugro) will be conducting a Geotechnical Investigation within the UK Sector of the Central North Sea on behalf of Forewind, in the Dogger Bank Wind Farm Zone. Fugro currently estimate that the proposed work will take place from late September 2010 through to late October/Early November 2010, and will utilise the Dynamically Positioned Geotechnical Drilling Vessels the MV Fugro Commander, the MV Gargano and the MV Fugro Saltire (see attached vessel information, below).

1. INTRODUCTION (SURVEY LOCATION)

The Dogger Bank Wind Farm Zone is located approximately 70 kilometres from Flamborough Head, in the UK Sector of the Central North Sea. The entire survey area will cover an area of approximately 8656km² within water depths of between approximately 20 and 60m. The initial Geotechnical Investigation (Phase 1) is anticipated to comprise of forty Geotechnical Boreholes and one hundred Seabed Cone Penetration Tests (CPT's) with the majority of these works being conducted over the south western third of the Zone.





Figure 1. Outline of Dogger Bank Zone



The Dogger Bank co-ordinates are summarised as:

Eastings	Northings	Latitude	Longitude
523881.179	6183076.076	55° 47' 33.797"N	03° 22' 51.146"E
502040.715	6089767.141	54° 57' 17.444"N	03° 01' 54.718"E
467043.014	6090568.577	54° 57' 39.465"N	02° 29' 07.048"E
434004.722	6057358.865	54° 39' 33.431"N	01° 58' 37.017"E
411989.454	6066904.467	54° 44' 30.067"N	01° 37' 58.383"E
412294.919	6079765.682	54° 51' 26.230"N	01° 38' 01.448"E
392151.415	6081206.010	54° 51' 58.643"N	01° 19' 10.341"E
402499.111	6131390.223	55° 19' 09.199"N	01° 27' 48.644"E

Table 1-1: Dogger Bank Boundary

(Projected coordinate Ref. system WGS 84 UTM zone 31 N)

2. VESSELS

Fugro propose to utilise the following three Dynamically Positioned Geotechnical Drilling vessels, the MV Fugro Commander, the MV Gargano and the MV Fugro Saltire to carry out the required site operations.

MV Fugro Commander (Figure 2), a 56m dynamically positioned geotechnical vessel, fitted with a gantry, A frame and marine crane and will be carrying out seabed CPT's through a centrally located moonpool.



Figure 2. MV Fugro Commander

Fugro Commander Communications	Details
Call Sign	HO3057
E-Mail	master@fugrocommander.com
SAT M (voice)	00 870 764 667 990
SAT M (fax)	00 870 764 667 992
GSM	00 31 653 635 005
Fleet 77 (Bridge)	00 870 764 821 986



MV Gargano (Figure 3), a 72m geotechnical drill ship fitted with an R50 heave compensated drilling rig, will be drilling geotechnical boreholes, through a centrally located moonpool.



Figure 3. MV Gargano

MV Gargano Communications	Details
Call Sign	VSMW5
E-Mail	gargane@gtships.com
SEVSAT-Tel (Bridge)	00 44 20 7858 5704
Inmarsat number V-Sat number SAT-C 1+2 (Bridge)	00 871 323 536 210 / 220
Fax (Bridge)	00 871 323 536 214
Vessel Mobile (Captain)	00 44 7789 178 336

MV Fugro Saltire (Figure 4), a 111m (LOA) purpose built dynamically positioned geotechnical vessel complete fitted with an R100 heave compensated drilling rig, will also be drilling geotechnical boreholes, through a centrally located moonpool.





Figure 4. MV Fugro Saltire

Fugro Saltire Communications	Details
Call Sign	LHOD
E-Mail	captain@fugrosaltire.fugro.com
Telephone (Bridge/Captain)	00 44 8452 419 381
Inmarsat number (fleet 33)	00 87 0764 876 152
Fax (Bridge)	00 44 8452 419 381

Each of the three geotechnical vessels will be operating on a 24 hour basis (weather permitting). Throughout survey operations, the vessels will be displaying the appropriate lights and shapes as required under the COLREGS Rule 27 (b) and requests other vessels maintain a wide berth and pass at slow speed.

3. WORK SCHEDULE

The proposed work schedule for the Geotechnical survey is shown below in Table 2.

Vessel	Anticipated number of days on site	Estimated start date (week commencing)	Estimated completion date (week commencing)
MV Fugro Commander	42	11 th October 2010 (late week 41) to 18 th October	22nd November 2010 (week 47)
MV Gargano	21	2010 (early week 42) 4 th October 2010 (early week 40)	25 th October 2010 (week 43)
MV Fugro Saltire	28	11 th October 2010 (week 41)	1st November 2010 (end of week 44)

Table 2. Proposed work schedule

<u>Please note that the dates specified above are based upon our current vessel planning and is</u> <u>therefore subject to change. if appropriate an updated NTM will be submitted with as much notice</u> <u>as possible.</u>



4. DISTRIBUTION LIST

DISTRIBUTION			
Contact	Name	Email	
UK Hydrographic Office (UKHO)	n/a	hdcfiles@ukho.gov.uk	
ABP Ports	B Guyton	bguyton@abports.co.uk	
Humber Maritime Rescue Sub-Centre	n/a	wm.humber@mcga.gov.uk	
Kingfisher Information Services	n/a	kingfisher@seafish.co.uk	
Kings Lynn Port Authority	n/a	harbourmaster@portauthoritykingslynn.fsnet.co.uk	
Marine Coastguard Agency	Paul Townsend	paul.townsend@mcga.gov.uk	
Port of Boston	R Walker	rwalker@portofboston.co.uk	
Port of Wisbech	C Dorrington	cdorrington@fenland.gov.uk	
Skegness Lifeboat Station	n/a	Skegness@rnli.org.uk	
Trinity House	n/a	Navigation.Directorate@thls.org	
Wells Harbour	n/a	harbouroffice@wellsharbour.co.uk	
Wells Life boat	n/a	coxswain@wellslifeboat.org	
Yarmouth Coastguard	n/a	yarmouthcoastguard@mcga.gov.uk	
Yarmouth Coastguard	n/a	Wm.yarmouth@mcga.gov.uk	
CEFAS	n/a	jon.rees@cefas.co.uk	
DEFRA (Eastern Fisheries Inspectorate Lowestoft)	n/a	lowestoft@mfa.gsi.gov.uk	
Eastern Sea Fisheries Joint Committee	n/a	mail@esfjc.co.uk	
Gt Yarmouth Port Authority	Harbour Master - Pat McNamara	pmcnamara@eastportuk.co.uk and info@eastportuk.co.uk	
HO Radio Navigational Warnings	n/a	noticestomariners@ukho.gov.uk	
The UKHO	n/a	noticetomariners@ukho.gov.uk	
Andy Hinton	Andy Hilton	andy.hinton@ukho.gov.uk	
Robert Lilly	Robert Lilly	robert.lilly@decc.gsi.gov.uk and correspondence@decc.gsi.gov.uk	
Benjamin Lander Humber Maritime Rescue Sub Centre	Benjamin Lander T Mostyn	benjamin.lander@marinemanagement.org.uk WM.HUMBER@mcga.gov.uk	
Scottish Fishermen's Federation	-	sff@sff.co.uk	
	n/a		
Lowestoft Harbour Master National Federation of Fishermen's	R Musgrove	Rmusgrove@abports.co.uk	
Organisations	n/a	nffo@nffo.org.uk	
Whitby Lifeboat	n/a	whitby@rnli.org.uk	
Scarborough Lifeboat	n/a	scarborough@rnli.org.uk	
Flamborough Lifeboat	n/a	flamborough@rnli.org.uk	
Spurn Head Lifeboat	n/a	humber@rnli.org.uk	
Lowestoft Lifeboat	n/a	lowestoft@rnli.org.uk	
Southwold Harbour Master	Peter Simmons	petersimmons@waveney.gov.uk	
District Marine Officer	Paul Bryan	grimsby@marinemanagement.org.uk	
North East Sea Fisheries Committee	Paul Lane	paul.lane@eastriding.gov.uk	
Forewind Development Team	Nikki Smith	nikki.smith@rwe.com	
Forewind Fisheries Liaison Co-ordinator	Nigel Proctor	n.proctor@precisionmarine.co.uk	
Forewind - Survey Manager	Tor-inge Tjelta	ttjelta@statoil.com	
Forewind - HSEQ Manager	Stein Møller-Nilsen	stmni@statoil.com	
Forewind – Project Developer	Sophie Barrell	Sophie.Barrell@statkraft.com	
Forewind – General Information	N/A	info@forewind.co.uk	



Fugro GeoConsulting Limited - Project	Scott McHugh	s.mchugh@fugro.co.uk
Manager		
Fugro GeoConsulting Limited - Associate	David Williams	d.williams@fugro.co.uk
Director, Commercial		

5. SUMMARY

The contents of this notice are based upon our current understanding of Forewind's project requirements and upon Fugro's planning at the time of submission. It should be noted that Fugro will endeavour to update this notice as required.

Enquiries regarding the contents of this NTM or any other matter should be directed to Fugro GeoConsulting Limited:

Scott McHugh - Project Manager Tel: (+44)1491 820 865; e.mail: <u>s.mchugh@fugro.co.uk</u>

On Behalf of Forewind:

Nigel Proctor - Fisheries Liaison Co-ordinator Tel: (+44)1964 624423; e.mail: <u>n.proctor@precisionmarine.co.uk</u>

Tor-inge Tjelta - Survey Manager Tel: (+44)1189 001927; e.mail: <u>ttjelta@statoil.com</u>