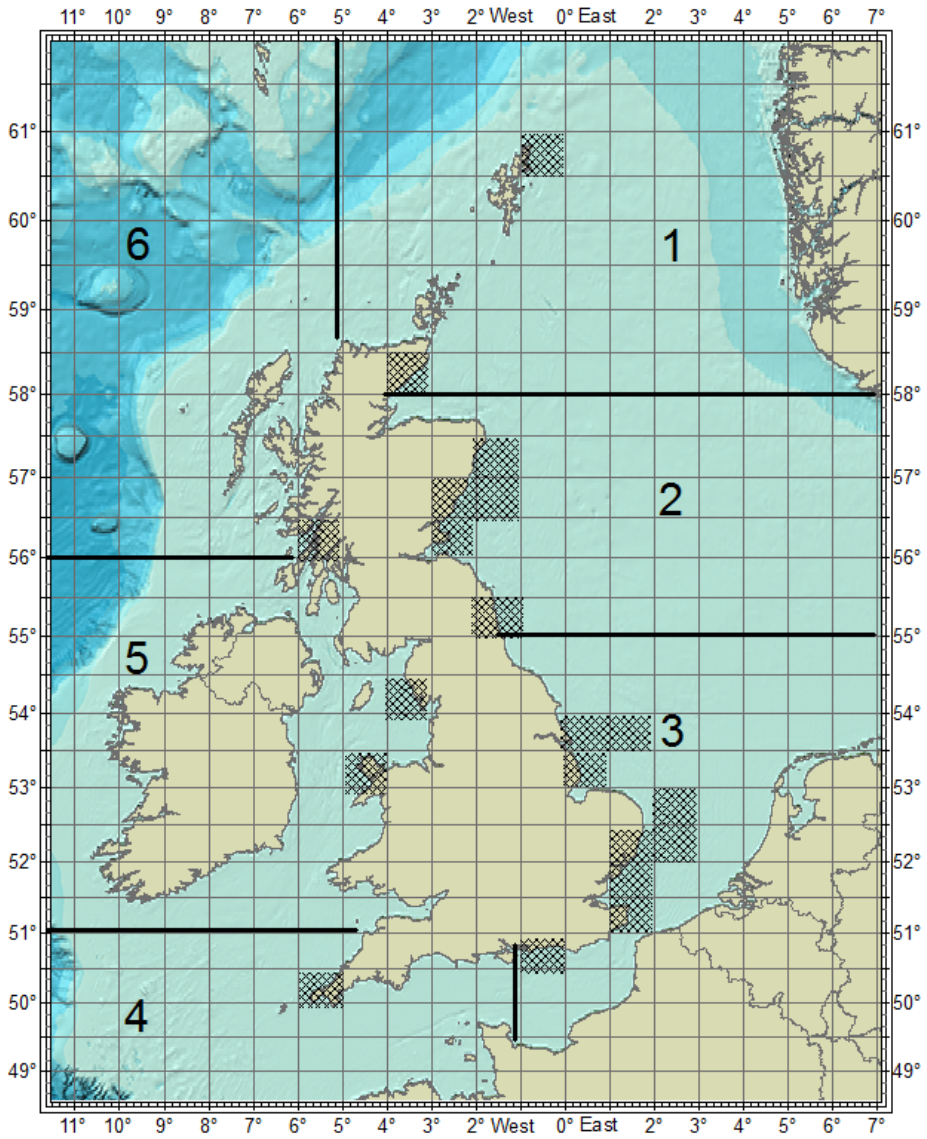
The Kingfisher Bulletin
Offshore News

RENEWABLE ENERGY

18 OCTOBER 2018 | ISSUE 21

Shaded blocks indicate activity.



What's inside?

SEAFISH | The Kingfisher Information Service

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@KingfisherInfo | www.kingfishercharts.org

Support

The Kingfisher Bulletin is provided by the Kingfisher Information Service of Seafish, to promote the awareness of offshore hazards to fishing, new structures and zones and conflicting offshore operations. Support for the production of renewable industry information is received from The Crown Estate.

Information

Information contained within the Kingfisher Bulletin comes from a variety of sources, although is in the majority, supplied directly to Kingfisher from the offshore operating industry, or government licensing authorities.

Coordinates within the Kingfisher Bulletin are converted into World Geodetic System 1984 (WGS84) and displayed as degrees, minutes and decimal minutes, to three decimal places (ddd°mm.mmm'). Route or boundary coordinates may be simplified for ease of use.

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New Hazards

Area 1 Hazard List

Hazard Type	Position	Issue Date	Contact Details	Map
Lost Vibro Corer West of Shetland	60°21.430'N 003°51.360'W	20 Sept 2018	*Raymond Hall,Tel: 01224 646944 email: R.Hall@sff.co.uk*	
New suspended wellhead on seabed (204/10a-5Y)	60°49.083'N 004°09.351'W	20 Sept 2018	*Marcelle Wynter, DECC, Tel: 0300 067 1616 email: Marcelle.wynter@ogauthority.co.uk*	
Significant free-spans have been identified along the PL1043 Dunbar to Alwyn pipeline	60º38.646'N 01º39.193'E 60º38.713'N 01º39.207'E 60º39.017'N 01º39.267'E 60º39.033'N 01º39.271'E	31 May 2018	*David Colliard,email: david.colliard@total.com*	

Area 2 Hazard List

Hazard Type	Position	Issue Date	Contact Details	Map
Lost steel drill and conductor casing.	56°16.450'N 002°15.170'W	04 Oct 2018	Sarah MacNab *sarah@consult-poseidon.com Tel: +44(0)7766 900074*	
Lost a drill string	56°15.147'N 002°18.574'W	06 Sept 2018	Sarah MacNab *sarah@consult-poseidon.com Tel: +44(0)7766 900074*	
Snagging Hazard at Abandoned Well 30/01c-9	56°50.655'N 002°10.022'E	04 Oct 2018	*Nick Strachan, BP email: nick.strachan@uk.bp.com*	

Area 3 Hazard List

Hazard Type	Position	Issue Date	Contact Details	Map
Loss of approximately 35m of steel CPT rods 3.6cm Dia	54°45.505'N 001°44.479'E	06 Sept 2018	Dave Scott. SSE. Tel: +44(0)1738 516993 email: david.scott@sse.com	
Wreck FV Sonja Z.19 Least Depth 35.15m, Surround Depths 45.5m Laying 45° to Port.	52°48.410'N 002°19.570'E	06 Sept 2018	*Duty Officer, UKHO, Tel: +44(0)1823 353448 email: navwarnings@btconnect.com*	
Anchor approx. 3.5m x 1.8m	50°41.147'N 000°17.657'W	28 June 2018	*Gordon Bain (Eon Marine Coordination) +44(0)7787241442*	

Area 5 Hazard List

Hazard Type	Position	Issue Date	Contact Details	Map
Dropped Ladder 1.5 metres above the seabed and is 50cm wide	53°51.599'N 03°17.774'W	20 Sept 2018	*Gavin Scarff, Orsted, Tel: +44 74 6 9377056 email: GAVSC@orsted.co.uk*	

Notice to Fishermen

First Published: 20 September 2018 | **Latest Update: 20 September 2018**

Fishing Hazard – Lost Vibro Corer West of Shetland

Map Link

Please be advised that the Stirl Explorer managed to break away from the Vibro Corer, recovery failed and it has been left on the seabed in position

60°21.430'N 003°51.360'W

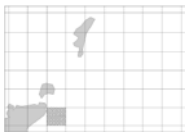
The Vibro corer is believed to have penetrated 3 metres into the seabed and is a hazard to fishing boats as its also standing a few metres off the seabed.

For further information: Raymond Hall, SFF, Tel: +44 (0)1224 646944 email: r.hall@sff.co.uk

Seabed Activity

First Published: 22 February 2018 | **Latest Update: 15 October 2018**

Beatrice Offshore Windfarm Ltd – Construction Operations



Beatrice Offshore Windfarm Limited (BOWL) is developing the Beatrice Offshore Wind Farm in the 'Outer' Moray Firth on the north-western point of the Smith Bank, approximately 7 nm off the Caithness coastline.

Jan De Nul, using the Fall Pipe Vessel Simon Stevin, will install rock on 45 of the array cables of the Beatrice Offshore Windfarm Limited. The work is planned to be completed in 3 loadings of the FPV Simon Stevin. The first campaign was completed in September , with 2 further load-outs and installation occurring between 20th – 31st October approximately.

Pile Installation completed at 86 locations. Foundation installation completed at 45 locations.

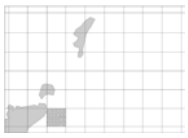
Location ID	Lat WGS84	Long WGS84	Location ID	Lat WGS84	Long WGS84
BE-A5	58° 12.471' N	002° 59.996' W	BE-G4	58° 13.142' N	002° 53.464' W
BE-B5	58° 12.687' N	002° 58°.873' W	BE-G5	58° 13.762' N	002° 53.254' W
BE-B6	58° 13.308' N	002° 58°.664' W	BE-G6	58° 14.384' N	002° 53.044' W
BE-B7	58° 13.929' N	002° 58°.456' W	BE-G7 (OTM)	58° 15.004' N	002° 52.834' W
BE-C4	58° 12.307' N	002° 57.948' W	BE-G8	58° 15.625' N	002° 52.625' W
BE-C5	58° 12.902' N	002° 57.749' W	BE-G9	58° 16.247' N	002° 52.415' W
BE-C6	58° 13.524' N	002° 57.541' W	BE-G10	58° 16.867' N	002° 52.204' W
BE-C7	58° 14.144' N	002° 57.332' W	BE-G11	58° 17.488' N	002° 51.994' W
BE-C8	58° 14.766' N	002° 57.124' W	BE-G12	58° 18.109' N	002° 51.784' W
BE-C9	58° 15.386' N	002° 56.915' W	BE-G13	58° 18.730' N	002° 51.574' W
BE-D3	58° 11.995' N	002° 57.002°' W	BE-G14	58° 19.351' N	002° 51.362' W
BE-D4	58° 12.497' N	002° 56.834' W	BE-H4	58° 13.356' N	002° 52.339' W
BE-D5	58° 13.117' N	002° 56.626' W	BE-H5	58° 13.977' N	002° 52.130' W
BE-D6	58° 13.739' N	002° 56.417' W	BE-H6	58° 14.598' N	002° 51.920' W
BE-D7	58° 14.359' N	002° 56.209' W	BE-H7	58° 15.219' N	002° 51.709' W
BE-D8	58° 14.981' N	002° 55.999' W	BE-H8	58° 15.840' N	002° 51.499' W
BE-D9	58° 15.602' N	002° 55.790' W	BE-H9	58° 16.461' N	002° 51.289' W
BE-D10	58° 16.223' N	002° 55.58°2' W	BE-H10	58° 17.082' N	002° 51.079' W
BE-D11	58° 16.844' N	002° 55.373' W	BE-H11	58° 17.703' N	002° 50.867' W
BE-E1	58° 10.900' N	002° 56.256' W	BE-H12	58° 18.324' N	002° 50.657' W
BE-E2	58° 11.470' N	002° 56.128' W	BE-H13	58° 18.944' N	002° 50.446' W
BE-E3	58° 12.090' N	002° 55.920' W	BE-J5	58° 14.192' N	002° 51.005' W
BE-E4	58° 12.712' N	002° 55.710' W	BE-J6	58° 14.812' N	002° 50.795' W
BE-E5	58° 13.333' N	002° 55.502' W	BE-J7	58° 15.433' N	002° 50.58°5' W
BE-E6	58° 13.954' N	002° 55.293' W	BE-J8	58° 16.055' N	002° 50.373' W
BE-E7	58° 14.575' N	002° 55.084' W	BE-J9	58° 16.675' N	002° 50.163' W
BE-E8	58° 15.196' N	002° 54.875' W	BE-J10	58° 17.296' N	002° 49.952' W
BE-E9	58° 15.817' N	002° 54.665' W	BE-J11	58° 17.917' N	002° 49.741' W
BE-E10	58° 16.438' N	002° 54.456' W	BE-J12	58° 18.538' N	002° 49.530' W
BE-E11	58° 17.059' N	002° 54.247' W	BE-J13	58° 19.159' N	002° 49.319' W
BE-E12	58° 17.680' N	002° 54.037' W	BE-K6	58° 15.027' N	002° 49.669' W
BE-F2	58° 11.685' N	002° 55.005' W	BE-K7	58° 15.648' N	002° 49.459' W
BE-F3	58° 12.306' N	002° 54.796' W	BE-K8	58° 16.269' N	002° 49.247' W
BE-F4	58° 12.927' N	002° 54.58°8' W	BE-K9	58° 16.890' N	002° 49.036' W
BE-F5	58° 13.548' N	002° 54.378' W	BE-K10	58° 17.510' N	002° 48.825' W
BE-F6	58° 14.168' N	002° 54.169' W	BE-K11	58° 18.131' N	002° 48.614' W
BE-F8 (OTM)	58° 15.411' N	002° 53.750' W	BE-K12	58° 18.752' N	002° 48.403' W
BE-F9	58° 16.031' N	002° 53.540' W	BE-L7	58° 15.862' N	002° 48.333' W
BE-F10	58° 16.653' N	002° 53.330' W	BE-L8	58° 16.482' N	002° 48.122' W
BE-F11	58° 17.274' N	002° 53.120' W	BE-L9	58° 17.104' N	002° 47.910' W
BE-F12	58° 17.894' N	002° 52.911' W	BE-L10	58° 17.724' N	002° 47.698' W
BE-F13	58° 18.516' N	002° 52.701' W	BE-M9	58° 17.317' N	002° 46.784' W
BE-G3	58° 12.544' N	002° 53.726' W	BE-M10	58° 17.938' N	002° 46.571' W

For further information: Beatrice Offshore Windfarm Limited, Tel: +44 (0) 330 202 0329, Mob: +44 (0) 7931 991577

Survey Activity

First Published: 16 October 2018 | **Latest Update: 16 October 2018**

Moray Wind Farm (West) Ltd – Geophysical Survey



Please be advised that Moray Offshore Windfarm (West) Limited (Moray West) will have survey vessels working in the Moray West Wind Farm site for approximately 15 survey days, excluding weather downtime. The table below provide details of the survey location.

The Kommandor Stuart will commence the geophysical survey, involving 24 hour operations on 17 October 2018. Equipment will be towed from the stern at up to 350 metres in length from the stern of the vessel down to a depth of 1.5 metres above the seabed. Other equipment will be hull mounted.

Please see below for Fisheries Liaison Officer (FLO) contact details.

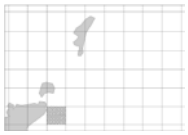
Company, Vessel & Call Sign	*Survey Area*	*Survey Area*	*Start Timeframe & Duration*
Igeotest Kommandor Stuart MPQH3	58°02.993'N 003°16.860'W 57°58.017'N 003°09.875'W	58°12.571'N 002°52.451'W 58°07.573'N 002°45.492'W	17 October for 15 days excluding weather downtime

*For further information: A*lex Eakin, Moray Offshore Windfarm (West) Ltd, Tel: +44 (0)7741 904826 email: alex.eakin@edpr.com
FLO Contact Details: Kommandor Stuart: Ian Downie, Tel: + 44(0)7765172762, email: i.downie007@btinternet.com

Survey Activity

First Published: 16 October 2018 | **Latest Update: 16 October 2018**

Moray Wind Farm (West) Ltd – Geotchnical Survey



Please be advised that Moray Offshore Windfarm (West) Limited (Moray West) will have a survey vessel working in the Moray West Wind Farm site for approximately 6 survey days, excluding weather downtime. The table below provide details of the survey location.

The Synergy will commence the geotechnical survey, involving 24 hour operations on 22 October 2018 at the earliest to conduct drilling of two geotechnical boreholes with the Moray West Site.

Please see below for Fisheries Liaison Officer (FLO) contact details.

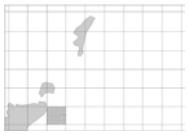
Company, Vessel & Call Sign	*Survey Area*	*Survey Area*	*Start Timeframe & Duration*
Synergy	58°02.993'N 003°16.860'W 57°58.017'N 003°09.875'W	58°12.571'N 002°52.451'W 58°07.573'N 002°45.492'W	22 October at the earliest for 6 days excluding weather downtime

For further information: lex Eakin, Moray Offshore Windfarm (West) Ltd, Tel: +44 (0)7741 904826 email: alex.eakin@edpr.com
FLO Contact Details: Synergy: TBC Tel: TBC, email: TBC – Note: FLO details will be included in the NtM to be issued prior to commencement of the survey.

Survey Activity

First Published: 08 March 2018 | **Latest Update: 05 October 2018**

Moray Wind Farm (East) Ltd – Geophysical and Shallow Geotechnical Site Investigations



Please be advised that Moray Offshore Windfarm (East) Limited (Moray East) will have survey vessels working in the Moray East Wind Farm and export cable route site for approximately 132 survey days, including weather downtime. The table below provides details of the survey location.

The Kommandor Stuart commenced the UXO survey, involving 24 hour operations on 29 May 2018 and has completed the first phase of this survey. Due to operational changes with the vessel, the scheduled surveying operations will now only likely resume at the beginning of November. It is also possible that a new vessel will be used for the remaining surveying operations. Further vessel and operation details will be presented in future NtMs as and when the information becomes available. Therefore, no surveying will likely be undertaken in the Moray East Wind Farm site for the remainder of October.

Please see below for Fisheries Liaison Officer (FLO) contact details.

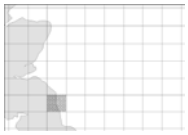
Company, Vessel & Call Sign	*Survey Area*	*Survey Area*	*Start Timeframe & Duration*
Bibby HydroMap Kommandor Stuart MPQH3	58°19.849'N 002°50.458'W 58°02.409'N 002°34.944'W	58°18.301'N 002°30.461'W 58°03.946'N 002°54.796'W	29th May 2018 For 132 Days

For further information: John Yorston, Moray Offshore Windfarm (East) Ltd, Tel: +44(0)131 556 7602 email: john.yorston@edpr.com
FLO Contact Details: Kommandor Stuart: Ian Downie, Tel: +44 7765 172762, email: i.downie007@btinternet.com

Survey Activity

First Published: 16 October 2018 | **Latest Update: 16 October 2018**

Moray Offshore Wind Farm (West) Ltd – Flidar Buoy Removal



Please be advised that Moray Offshore Windfarm (West) Limited (Moray West) will have a vessel working in the Moray West Wind Farm site for approximately 2 days, excluding weather downtime. The table below provide details of the location.

The vessel, Green Marine will commence the installation of the FLIDAR buoy at the Moray West site, involving 24 hour operations on 23 October 2018 at the earliest.

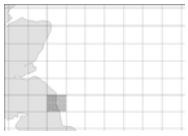
58°05.381'N 003°00.877'W

For further information: Alex Eakin, Moray Offshore Windfarm (West) Ltd, Tel: +44 (0)7741 904826 email: alex.eakin@edpr.com
FLO Contact Details: Green Marine: TBC Tel: TBC, email: TBC – Note: Details of the FLO will be included in the NtM which will be issued prior to removal of the FLIDAR buoy.

Survey Activity

First Published: 16 October 2018 | **Latest Update: 16 October 2018**

Moray Offshore Wind Farm (West) Ltd – Notice of Application



MORAY OFFSHORE WINDFARM (EAST) LIMITED THE ENERGY ACT 2004
NOTICE OF APPLICATION FOR SAFETY ZONE SCHEME DURING CONSTRUCTION AND MAJOR MAINTENANCE OF MORAY EAST OFFSHORE WIND FARM
THE ELECTRICITY (OFFSHORE GENERATING STATIONS) (SAFETY ZONES) (APPLICATION PROCEDURES AND CONTROL OF ACCESS) REGULATIONS 2007 – STATUTORY INSTRUMENT 2007 NO 1948

Notice is hereby given that Moray Offshore Windfarm (East) Limited, Company Number 07101438, Registered Office c/o 7side Secretarial Ltd 1st Floor 14/18 City Road, Cardiff, United Kingdom CF24 3DL, has applied for consent from Marine Scotland as set out in the Energy Act 2004 and the Electricity (Offshore Generating Stations) (Safety Zones) (Application Procedures and Control of Access) Regulations 2007 (SI No 2007/1948) for safety zones as follows, for the previously consented Offshore Renewable Energy Installation known as Moray East Offshore Wind Farm, during construction and major maintenance phases.

The safety zone scheme, including details of those zones being applied for during construction and major maintenance, will be available for download from Marine Scotland at http://marine.gov.scot/ml/moray-east-offshore-windfarm. Alternatively, a request to receive a hard copy may be made in writing to Moray Offshore Windfarm (East) Limited at 5th Floor, Atria One, 144 Morrison Street, Edinburgh EH3 8EX. Any person wishing to make representations to the Secretary of State about the application should do so in writing to the Scottish Ministers, c/o Marine Scotland – Licensing Operations Team, Marine Laboratory, PO Box 101, Victoria Road, Aberdeen, AB11 9DB moray-east.representations@gov.scot, stating the name of the proposal and nature of their representations, not later than 28 days from the date, or latest date of this notice.

Fair Processing Notice

The Scottish Government's Marine Scotland Licensing Operations Team ("MS-LOT") determine applications for marine licences under the Marine (Scotland) Act 2010, the Marine and Coastal Act 2009 and section 36 consents under The Electricity Act 1989 (as amended). During the consultation process any person having an interest in the outcome of the application may make a representation to MS-LOT. The representation may contain personal information, for example a name or address. This representation will only be used for the purpose of determining an application and will be stored securely in the Scottish Government's official corporate record. Representations will be shared with the applicant and/or agent acting on behalf of the applicant, any people or organisations that we consult in relation to the application, the Directorate of Planning and Environmental Appeals should the Scottish Ministers call a PLI and, where necessary, be published online, however personal information will be removed before sharing or publishing.

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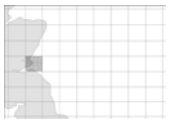
http://www.gov.scot/Topics/marine/Licensing/marine/PrivacyNotice. If you are unable to access this, or you have any queries or concerns about how your personal information will be handled, contact MS-LOT at: ms.marinerenewables@gov.scot or Marine Scotland - Licensing Operations Team, Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB.

Notice to Fishermen

First Published: 04 October 2018 | **Latest Update: 04 October 2018**

Dropped Object – Neart na Gaoithe Offshore Wind Farm (Firths of Forth and Tay) – Unexploded Ordnance and Geotechnical Surveys

Map Link



Please be advised that whilst conducting geotechnical investigations the survey vessel Omalius lost steel drill and conductor casing. The dropped object has been marked with an orange buoy at the following position:

56°16.450'N 002°15.170'W

Measures are being taken to survey and then retrieve the dropped object where practicable. Fishing vessels are advised to remain clear of the area defined by the coordinates shown above until further advised.

For further information: *Neart na Gaoithe Offshore Wind Limited; Ewan Walker on +44(0) 7850 207515 and at Ewan.Walker@edf-re.uk or Sarah MacNab on +44(0) 7766 900074 and at sarah@consult-poseidon.com*
Offshore FLO contact: *Guard vessel Horizon II on* +44 (0) 1346 454584 or at *Horizon@e-catch.info*

Notice to Fishermen

First Published: 06 September 2018 | **Latest Update: 06 September 2018**

Dropped Object – Neart na Gaoithe Offshore Wind Farm (Firths of Forth and Tay) – Unexploded Ordnance and Geotechnical Surveys

Map Link

Please be advised that whilst conducting geotechnical investigations the survey vessel *Omalius* lost a drill string. The dropped object has been marked with an orange buoy at the following position:

56°15.147'N 002°18.574'W

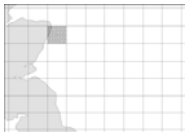
Measures are being taken to survey and then retrieve the dropped object where practicable. Fishing vessels are advised to remain clear of the area defined by the coordinates shown above until further advised.

For further information: Neart na Gaoithe Offshore Wind Limited; Ewan Walker on +44(0) 7850 207515 and at Ewan.Walker@edf-re.uk or Sarah MacNab on +44(0) 7766 900074 and at sarah@consult-poseidon.com

Seabed Activity

First Published: 04 October 2018 | **Latest Update: 04 October 2018**

Aberdeen OWF – Completion of Construction



Please be advised Aberdeen Offshore Wind Farm Site construction has now been completed. Turbines have been installed in below positions

Location of Installed Wind Turbines

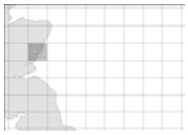
WTG ID	Latitude	Longitude	Depth
AWF 01	57° 13.420' N	02° 00.758' W	-19.86
AWF 02	57° 13.703' N	02° 00.132' W	-23.02
AWF 03	57° 14.010' N	01° 59.371' W	-27.29
AWF 04	57° 14.405' N	01° 58.551' W	-29.73
AWF 05	57° 12.948' N	02° 00.671' W	-21.75
AWF 06	57° 13.203' N	02° 00.013' W	-25.38
AWF 07	57° 13.465' N	01° 59.274' W	-29.51
AWF 08	57° 13.809' N	01° 58.450' W	-31.51
AWF 09	57° 12.476' N	02° 00.627' W	-23.50
AWF 10	57° 12.704' N	01° 59.921' W	-27.30
AWF 11	57° 12.960' N	01° 59.151' W	-31.54

For further information: aowf.marinecoordination@vattenfall.com https://corporate.vattenfall.co.uk/eowdc

Seabed Activity

First Published: 30 September 2018 | **Latest Update: 16 October 2018**

Inch Cape Offshore Wind Farm – Met Mast Maintenance



All Mariners are to be advised that there will be maintenance works on the Inch Cape Offshore Met Mast. The work will last for approximately 7 days, over 3 weeks, weather permitting.

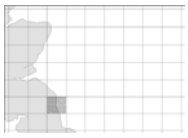
56°26.404'N 002°14.489'W

For further information: Andrew Blyth, Red Rock Power, Tel:)7867170987 email: Andrew.blyth@redrockpower.co.uk

Survey Activity

First Published: 16 October 2018 | **Latest Update: 16 October 2018**

Moray Offshore Wind Farm (West) Ltd – Flidar Buoy Removal



Please be advised that Moray Offshore Windfarm (West) Limited (Moray West) will have a vessel working in the Narec site (Blyth) for approximately 1 day, excluding weather downtime.

The vessel, Green Marine will commence the removal of the FLIDAR buoy from its current mooring, involving a 24 hour operation on 22 October 2018 at the earliest.

55°08.752'N 001°25.374'W

For further information: Alex Eakin, Moray Offshore Windfarm (West) Ltd, Tel: +44 (0)7741 904826 email: alex.eakin@edpr.com
FLO Contact Details: Green Marine: TBC Tel: TBC, email: TBC – Note: Details of the FLO will be included in the NtM which will be issued prior to removal of the FLIDAR buoy.

Survey Activity

First Published: 28 June 2018 | **Latest Update: 12 July 2018**

Inch Cape Offshore Wind Farm (Firths of Forth and Tay) – Geophysical & Geotechnical Site Investigations

Please be advised that survey vessels will be working in the Moray East Wind Farm and export cable route site for approximately three and a half months (105 survey days, excluding weather downtime). Up to 4 vessels will be present at any one time.

Please be advised that Horizon Geosciences will be performing site investigation works on behalf of Inch Cape Offshore Limited. The works are being carried out in the Development Area and Offshore Export Cable Corridor of the proposed Inch Cape Offshore Wind Farm located within the Outer Firth of Tay.

The site investigation works consist of a geophysical survey and geotechnical boreholes. The works will be undertaken using the vessels listed below, up to three vessels will be present on site at any one time. Works will be undertaken over ~110 days, excluding weather downtime.

During the geotechnical works the vessel will hold station on DP and all vessels are also requested to remain 500 m clear. The vessel will be displaying the relevant RAM lights and displays during periods of restricted manoeuvrability.

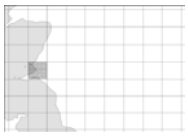
Company, Vessel & Call Sign	*Survey Area*	*Survey Area*	*Start Timeframe & Duration*
Horizon GeoBay, 3ETG2 Horizon Kommandor Iona,GAAK GEOxyz Geo Ocean II, LXHX Geo Ocean III, LXGP Geosurveyor IV, 2DEW4 Geosurveyor VI, 2GRS3 Geosurveyor VIII, 2FUH9	56°25.401'N 002°17.290'W 56°35.721'N 002°17.096'W 56°35.624'N 002°02.594'W 56°25.305'N 002°02.854'W	55°58.465'N 003°00.690'W 56°30.479'N 002°15.269'W 56°25.095'N 002°03.133'W 55°53.154'N 002°48.616'W	On or after 16th July 2017 For up to 110 day (excluding weather down time) End October 2018

For further information: Horizon Geosciences, Tel: +44 (0)117 329 1080, enquiries@horizon-geosciences.com Or Inch Cape Offshore Limited, Tel: +44 (0) 131 557 7101, Email: inchcapewind@redrockpower.co.uk

Survey Activity

First Published: 12 July 2018 | **Latest Update: 18 October 2018**

Neart na Gaoithe Offshore Wind Farm (Firths of Forth and Tay) – Unexploded Ordnance and Geotechnical Surveys



Please be advised that survey vessels will be working within the boundaries of the Neart na Gaoithe Offshore Wind Farm Site for approximately 99 days. The survey work will be carried out by G-tec, operating out of the Port of Dundee.

The UXO survey is complete. The geotechnical survey comprised of cone penetration tests and boreholes is ongoing and will last approximately 90 days. Up to three vessels will be present on site at any one time. The survey vessels will hold on station and display the relevant RAM markings during periods of restricted manoeuvrability.

A Fisheries Liaison Officer will be present offshore at all times; please see below for FLO contact details.

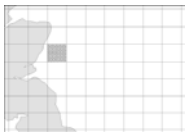
Company, Vessel & Call Sign	*Survey Area*	*Survey Area*	*Start Timeframe & Duration*
Geotechnical survey: *Omalius* ORRS; *Apollo* LXBP	56°15.271'N 002°09.898'W 56°12.721'N 002°09.255'W 56°12.752'N 002°13.998'W 56°12.766'N 002°16.293'W 56°15.479'N 002°19.628'W	56°15.827'N 002°20.055'W 56°17.430'N 002°20.232'W 56°19.752'N 002°17.826'W 56°20.312'N 002°16.518'W 56°20.171'N 002°14.910'W	Geotechnical survey (~90 days) Start ~ 12 August 2018; End ~ 9 November 2018.

For further information: Neart na Gaoithe Offshore Wind Limited; Ewan Walker on +44(0) 7850 207515 and at Ewan.Walker@edf-re.uk or Sarah MacNab on +44(0) 7766 900074 and at sarah@consult-poseidon.com
Offshore FLO contact: Sheryl Gove / Greg Wood on +44(0) 1224 646944 and at ops@sff.co.uk

Survey Activity

First Published: 12 July 2018 | **Latest Update: 12 July 2018**

Seagreen Alpha and Bravo Wind Warms - Survey



Mariners are advised that a detailed Geophysical Survey is planned within the boundary of the Seagreen Alpha and Seagreen Bravo offshore wind farms in the Firth of Forth Offshore Wind Round 3 Zone off the east coast of Scotland.

Company, Vessel & Call Sign	*Survey Area*	*Survey Area*	*Start Timeframe & Duration*
Gardline Ocean Vantage	1. 56°40.900'N 001°56.6361'W 2. 56°30.529'N 001°56.7745'W	3. 56°31.732'N 001°28.7025'W 4. 56°40.817'N 001°34.7606'W	24/07/18 For 82 Days

For further information: Nick Brockie, SSE, Tel: +44 0141 2247152 email@ nick.brockie@sse.com

Notice to Fishermen

First Published: 18 October 2018 | **Latest Update: 18 October 2018**

Race Bank Wind Farm – Potential Export Cable Exposure

Map Link

The Race Bank Project has received information from the Port of Wisbech Harbour Authority indicating that the Wisbech Eye Channel has migrated from its previous position. It is understood that the Port of Wisbech Authority may imminently relocate one of the nearby navigational buoys to reflect the shift in the position of the channel.

In light of the information received from the Port of Wisbech Harbour Authority, the Race Bank Project is mobilising the Rix Leopard to undertake survey work within the vicinity of the Fenland Buoy. The aim of the survey work is to establish whether one, or both, of the Race Bank export cables may've become exposed, or insufficiently buried, as a result of local changes in bathymetry. The Rix Leopard is due to commence survey operations on Wednesday 10th October (a.m.)

Until further information becomes available, mariners are asked to navigate with caution within the area delineated on the below chart. Any anchors, or towed fishing equipment, deployed within this area present a significant risk to vessels, to fishing gear, to vessel crews, and to the export cables. An update NtM will provided in the coming days.

Possible Shallow or Exposed Cable:
KP 5.15 52°51.556'N 00°14.656'E
KP 5.60 52°51.793'N 00°14.741'E

For further information: *Hywel Roberts, Orsted, Tel: +44 78 2 7841869 email: HYWRO@orsted.co.uk*

Notice to Fishermen

First Published: 20 September 2018 | **Latest Update: 20 September 2018**

Race Bank Wind Farm – Notice for Safety Zone Application

Map Link

A number of areas along both the north and south export cables are currently either exposed at seabed or insufficiently buried (see chart at end of this notice). A Marine Licence application detailing the proposed remedial works has been submitted to the Marine Management Organisation and remains pending.

Fishermen are reminded that static gear (inc. anchors), or towed fishing equipment, deployed along an exposed section of export cable presents a significant risk to gear, to vessels, to crews, and to the export cable. In line with standard industry practice, fishermen are advised to temporarily refrain from fishing within the immediate vicinity of any exposed sections of export cable. Further communication regarding these Cable Exposure Zones will follow in due course.

The G/V Linda C is currently located along the export cable route within the vicinity of The Well. The G/V Jason 2 is located along the export cable further inshore towards the intertidal area. Both G/V's will provide mariners with relevant information regarding exposed sections of export cable.

Out at the Race Bank wind farm array area, construction works are complete and the inter-array cables that run between turbines and substations are sufficiently buried. The Edda Passat Service and Operations Vessel (81m LOA, pictured below) remains active within the array area servicing the wind turbines, and is working alongside the G/V Channel Chieftain VII

For further information: *Hywel Roberts, Orsted, Tel: +44 78 2 7841869 email: HYWRO@orsted.co.uk*

Notice to Fishermen

First Published: 20 September 2018 | **Latest Update: 20 September 2018**

Galloper Wind Farm – Risk of cable exposure

Map Link

Following a recent survey within the Galloper windfarm some evidence of cable exposure was observed.

As cable exposure is a known risk at Galloper and across the offshore wind industry, we would remind Mariners of the safety information found on the KIS-ORCA website 'The risks of fishing near cables and renewable energy structures'.

To avoid crossing cables when towing equipment follow the cable corridors- locations of the cables can be found on the Galloper awareness charts via KIS-ORCA.

For further information: Simon Barber, Galloper Wind Farm, Tel: +4 1255 508 277 Mobile 07596662772 email: srv_galmcc.service@innogy.com

Notice to Fishermen

First Published: 09 August 2018 | **Latest Update: 16 October 2018**

Fishing Hazard Norfolk Boreas OWF– CPT Rods on/in seabed

Map Link

Fugro had completed a geophysical, geotechnical and environmental survey in 2017 at the Norfolk Boreas Offshore Wind Farm. During the course of those survey works, CPT rods had been left on/in the seabed at three borehole locations.

Recovery operations have taken place, however not all equipment was recoverable.

Please note CPT027 and CPT030 the rods snapped below seabed so nothing present on the seabed at these sites

CPT rod of different lengths is found at the following coordinates at the site:

Location/Object	Location	Water depth (m)	Rods lost (m)	Comment
NB-CPT027	53°00.731'N 002°49.159'E	38.4	21.36	Top of Rods located >1m below seabed
NB-CPT030 CPT	53°03.298'N 002°48.534'E	36.2	22.3	Top of CPT rods located >11.0m below seabed
NB-CPT031a CPT North End	53°03.726'N 002°51.058'E	26.9	28	Laying Flat on seabed Buried beneath sand cover
NB-CPT031a CPT South End	53°03.720'N 002°51.056'E	26.9	28	Laying Flat on seabed Buried beneath sand cover

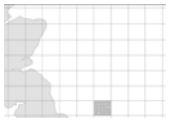
For further information: *Joseph Hine, Senior Geophysicist, Vattenfall, Tel: +44(0)776 644 293 email: joseph.hine@vattenfall.com*

Notice to Fishermen

First Published: 06 September 2018 | **Latest Update: 06 September 2018**

Dropped Object – Dogger Bank Creyke Beck A

Map Link



Please be advised that the loss of approximately 35m of steel CPT rods 3.6cm Dia within the Dogger Bank Creyke Beck A site. The location has been marked with a buoy

54°45.505'N 001°44.479'E

For further information: Dave Scott. SSE. Tel: +44(0)1738 516993 email: david.scott@sse.com

Notice to Fishermen

First Published: 28 June 2018 | **Latest Update: 28 June 2018**

Fishing Hazard – Rampion OWF Anchor

Map Link

Please note that an anchor approx. 3.5m x 1.8m is lying close to WTG F05 at the Rampion OWF position below:

50°41.147'N 000°17.657'W

For further information: *Gordon Bain (Eon Marine Coordination) +44(0)7787241442 email leadmc@rampionoffshore.com*

Notice to Fishermen

First Published: 31 May 2018 | **Latest Update: 31 May 2018**

Hazard to Fishermen – Dropped Buoy Chain on the East Anglia One project

Please be advised that a dropped buoy chain on the EA ONE project. several individual lengths of anchor chain is used to form one anchor weight of around 800kg, all lost.

Anchor chain 1.5 m x 2 m x 1 m, Ballast chain 6 m x 0.42 m x 0.20 m (Cage attached alongside), Cage: 0.4 m x 0.2 m x 0.3 m
Riser chain 10 m x 0.1 m x 0.03 m

52°19.333'N 02°32.493'E

For further information: *Dominic North Scottish Power, East Anglia One, Tel: +44 1416143847 email: dnorth@scottishpower.com*

Notice to Fishermen

First Published: 14 November 2017 | **Latest Update: 14 November 2017**

Fishing Hazard – Cable Spans Along Greater Gabbard WF Export Cable

Map Link

Recent results from the export cable surveys at Greater Gabbard show that there are 8 free-spans

Whilst the results continue to be processed, Balfour Beatty have asked that in the interest of safety and the integrity of the cable, extreme caution be used when Fishing near the export cables and that Fishermen refrain from using towed gear across the export cables wherever possible.

Cable	Position (from)	Position (to)	Span Length(m)	Span height(cm)
L1	52°12.284N 001°39.364E	52°12.283N 001°39.369E	6	0
L1	52°12.271N 001°39.434E	52°12.270N 001°39.441E	8	13
L1	52°12.064N 001°40.559E	52°12.061N 001°40.565E	8	20
L2	52°12.128N 001°40.524E	52°12.124N 001°40.535E	15	5
L2	52°12.119N 001°40.560E	52°12.118N 001°40.567E	8	76
L3	52°12.169N 001°40.502E	52°12.169N 001°40.504E	3	11
L3	52°12.148N 001°40.594E	52°12.146N 001°40.604E	13	34
L3	51°59.194N 001°57.431E	51°59.187N 001°57.442E	17	10

For further information: Merlin Jackson email: merlinjackson@btinternet.com Tel: 07989520484

Seabed Activity

First Published: 18 October 2018 | **Latest Update: 18 October 2018**

East Anglia One Wind Farm – Met Mast Racon beacon inoperable

Please be advised that the Racon beacon on the East Anglia 1 Met Mast is inoperable, in position

52°12.863'N 002°30.110'E

For further information: Anthony Robson, Tel:01416144880 email: EA1_MCC@scottishpower.com

Seabed Activity

First Published: 04 October 2018 | **Latest Update: 04 October 2018**

Hornsea Three Offshore Wind Farm – Acoustic Current Profilers

Mariners are advised that as part of a current measurement campaign for Hornsea Three, 8 Acoustic Current Profilers (ADCP's) have been installed by the Bibby Tethra off the North Norfolk Coast within the project's proposed export cable and array area.

Each profiler is mounted on the seabed with an "L" shape mooring design and marked by a surface marker buoy equipped with navigation light. A further 4 will be installed in October. The total campaign is for 12 ADCPs. Eight of the ADCPs have been deployed and 4 are awaiting deployment when the weather permits.

The locations of the Acoustic current profilers are provided below. The equipment will remain in those locations for 60 days.

Site Name	Coordinates
ADCP 1	53°04.167'N 01°09.086'E
ADCP 2	53°04.063'N 01°15.457'E
ADCP 3	53°04.327'N 01°27.957'E
ADCP 4	53°13.831'N 01°42.912'E
ADCP 5	53°22.778'N 01°48.138'E
ADCP 6	53°27.493'N 01°49.319'E
ADCP 7	53°30.600'N 02°01.024'E
ADCP 8	Awaiting Deployment
ADCP 9	Awaiting Deployment
ADCP 10	53°44.438'N 02°23.247'E
ADCP 11	Awaiting Deployment
ADCP 12	Awaiting Deployment

For further information: Felicity Browner, Orsted, Tel: +44 7826663963 email: felbr@orsted.co.uk

Notice to Fishermen

First Published: 11 January 2018 | **Latest Update: 02 October 2018**

Hornsea Offshore Wind Farms – Export Cable Open Trenches & Surveys

Map Link

Map Link

Open Trenches and Exposed Cables

HOW01 wish to inform mobile gear fishermen that trenching works and cable laying is ongoing within the HOW01 export cable corridor as illustrated in the **Map Link** (top right). Coordinates of these areas are displayed below. There is exposed cable, as well as cut trenches which pose a snagging risk to fishermen, caution should be exercised. Any static gear anchors, or towed fishing equipment, deployed within these areas presents a significant risk to gear, to vessels, to crews, and to the export cables. The trenches range in depth to circa 2m, further information can be obtained via Nick Garside the Project's Fishing Industry Representative (nick.garside@live.co.uk).

Open Trench areas:

Area 1 Coordinates	Area 2 Coordinates	Area 3 Coordinates
53° 46.624' N 1° 42.295' E	53° 32.198' N 0° 39.308' E	53° 37.992' N 0° 56.502' E
53° 47.390' N 1° 46.068' E	53° 32.138' N 0° 40.572' E	53° 37.412' N 0° 56.733' E
53° 47.967' N 1° 46.047' E	53° 35.519' N 0° 42.350' E	53° 36.918' N 0° 47.612' E
53° 48.003' N 1° 51.668' E	53° 35.243' N 0° 43.419' E	53° 36.428' N 0° 47.971' E
53° 48.538' N 1° 51.557' E	53° 31.898' N 0° 38.210' E	53° 37.445' N 0° 50.134' E
53° 47.134' N 1° 42.000' E	53° 31.307' N 0° 38.658' E	53° 36.907' N 0° 50.205' E
53° 49.947' N 1° 59.989' E	53° 36.464' N 0° 44.833' E	53° 37.302' N 0° 51.825' E
53° 49.428' N 2° 00.180' E	53° 35.862' N 0° 45.295' E	53° 36.768' N 0° 51.958' E
53° 52.756' N 2° 05.756' E		
53° 52.410' N 2° 06.283' E		

Cable Laid (exposed) areas:

Area 1 Coordinates	Area 2 Coordinates	Area 3 Coordinates
53° 44.566' N 1° 22.463' E	53° 47.172' N 1° 41.782' E	53° 52.409' N 1° 53.961' E
53° 43.861' N 1° 22.798' E	53° 47.591' N 1° 44.126' E	53° 53.375' N 1° 50.922' E
53° 43.030' N 1° 16.006' E	53° 50.284' N 1° 47.307' E	53° 52.833' N 1° 50.921' E
53° 42.358' N 1° 16.279' E	53° 50.054' N 1° 48.132' E	53° 53.670' N 1° 42.618' E
53° 42.935' N 1° 14.426' E	53° 51.156' N 1° 47.925' E	53° 53.182' N 1° 42.819' E
53° 42.326' N 1° 14.783' E	53° 50.698' N 1° 48.464' E	53° 52.961' N 1° 53.946' E
53° 38.835' N 1° 2.301' E	53° 51.548' N 1° 50.956' E	53° 52.088' N 1° 58.953' E
53° 38.161' N 1° 2.626' E	53° 51.061' N 1° 51.350' E	53° 52.620' N 1° 58.794' E
53° 38.015' N 0° 56.001' E	53° 52.567' N 1° 53.016' E	53° 52.359' N 2° 06.081' E
53° 37.400' N 0° 56.345' E	53° 52.409' N 1° 53.961' E	53° 52.828' N 2° 06.488' E

Expected Cable Lay:	Cable Buried Area:	Expected Opened Trenches:	
Area 1 Coordinates	Area 1 Coordinates	Area 1 Coordinates	Area 2 Coordinates
53° 30.141' N 0° 30.525' E	53° 28.508' N 0° 20.245' E	53° 30.245' N 0° 32.436' E	53° 35.862' N 0° 45.295' E
53° 30.266' N 0° 31.624' E	53° 29.179' N 0° 20.098' E	53° 30.860' N 0° 31.932' E	53° 36.464' N 0° 44.833' E
53° 30.463' N 0° 30.370' E	53° 29.828' N 0° 04.698' E	53° 31.307' N 0° 38.658' E	53° 36.874' N 0° 51.948' E
53° 30.606' N 0° 31.489' E	53° 30.070' N 0° 30.730' E	53° 31.340' N 0° 38.314' E	53° 37.010' N 0° 49.899' E
	53° 30.119' N 0° 04.027' E	53° 31.827' N 0° 38.035' E	53° 37.261' N 0° 53.764' E
	53° 30.581' N 0° 30.488' E	53° 31.898' N 0° 38.210' E	53° 37.394' N 0° 56.050' E
	53° 30.877' N 0° 06.452' E		53° 37.409' N 0° 51.829' E
	53° 30.910' N 0° 14.214' E		53° 37.548' N 0° 49.838' E
	53° 31.501' N 0° 14.720' E		53° 37.789' N 0° 53.570' E
	53° 31.521' N 0° 06.032' E		53° 38.020' N 0° 55.915' E
	53° 31.544' N 0° 12.158' E		
	53° 32.168' N 0° 12.227' E		
	53° 30.310' N 0° 04.199' E		
	53° 29.957' N 0° 04.941' E		
	53° 31.111' N 0° 05.198' E		
	53° 30.668' N 0° 06.038' E		
	53° 31.454' N 0° 05.712' E		
	53° 30.872' N 0° 06.411' E		
	53° 31.525' N 0° 06.036' E		
	53° 30.900' N 0° 06.689' E		

https://twitter.com/Kingfisherinfo/status/997059331530088449

For further information: Nick Garside, Tel: +44(0)7538 827013 email: nick.garside@live.co.uk

Seabed Activity

First Published: 04 October 2018 | **Latest Update: 04 October 2018**

East Anglia One Wind Farm – Cable Crossings and Wet Stowed cable end

Please be advised that as of week 40 of 2018, guard vessels 'Ardent' and 'Isla B' will be providing guard vessel duties for East Anglia One at the wind farm's 'cable crossings' and 'wet stowed cable end'.

Guard Vessel Ardent will be covering 'crossing 1' (Farland, Gabbard & Galloper) Guard Vessel 'Isla B' will cover 'Crossing 2' (Concerto & Cable 1.1 End) Both vessels will be broadcasting safety information periodically on VHF CH 16.

Crossing	Cable Out	Cable In
Fairland	52°05.290'N 01°45.440'E	52°05.382'N 01°45.534'E
CG West	52°05.732'N 01°46.048'E	
CG East		52°05.846'N 01°46.295'E
Galloper 1	52°06.015'N 01°46.661'E	
Galloper 2		52°06.095'N 01°46.836'E
Cable Laydown	52°09.229'N 01°57.776'E	
Concerto South	52°09.023'N 01°56.946'E	

For further information: *Alan Thoms, East Anglia ONE project, Tel: 01416144880 email: EA1_MCC@scottishpower.com*

Seabed Activity

First Published: 06 September 2018 | **Latest Update: 06 September 2018**

Hornsea Offshore Wind Farm – Intertidal & Nearshore Export Cable Works

Mariners are advised that Hornsea Project One will be continuing the intertidal and nearshore export cable works along the offshore export cable corridor. Hornsea Project One Offshore Wind Farm is located within the UK Sector of the North Sea off the coast of East Yorkshire.

The intertidal and nearshore Export cable works will re-commence on or about the 1 September 2018

Target ID	Coordinates
1	53°29.946'N 00°04.431'E
2	53°30.081'N 00°05.365'E
3	53°31.190'N 00°05.747'E
4	53°31.006'N 00°06.070'E

Wet Storage Anchor locations

Target ID	Coordinates
1	53°31.857'N 00°12.443'E
2	53°29.020'N 00°19.671'E

Please be advised that VBMS will be carrying out cable installation operations with the Ndurance and Coastal Challenger, and a barge, JB 108, will support operations alongside other workboats/ anchor handling tugs.

The vessels will be installing cables, deploying anchors or assisting in these activities and this will restrict their ability to manoeuvre. It will be requested that all vessels operating within the area keep a safe distance (500m) and pass at minimum speed to reduce vessel wash.

For further information: Zoe Auckland, Orsted, Tel: +44 7775 720 039 email: ZOAUC@orsted.co.uk

Seabed Activity

First Published: 03 May 2018 | **Latest Update: 03 May 2018**

Gunfleet Sands Offshore Wind Farm – Array Cable Burial

Recent surveys at Gunfleet Sands offshore wind farm have illustrated that some array/in-field cables are lying exposed on the seabed and are no longer buried and there is one freespan.

These are the following cables located in the eastern part of Gunfleet Sands 1 and the north eastern part of Gunfleet Sands 2

Location	Start of Exposure	End of Exposure
Cable between turbines C06-D06	51°44.590'N 01°14.923'E	51°44.383'N 01°15.101'E
Cable between turbines F09-F08	51°44.736'N 01°17.428'E	51°44.481'N 01°16.772'E
Cable between turbines F08-F07	51°44.481'N 01°16.772'E	51°44.225'N 01°16.115'E
Cable between turbines F07-F06	51°44.225'N 01°16.115'E	51°43.969'N 01°15.459'E
Cable between turbines G08-G07	51°44.274'N 01°16.950'E	51°44.018'N 01°16.294'E

Mariners are advised to be aware of these areas which may represent a hazard to fishing.

For further information: *Merlin Jackson, Tel: 07989520484 email: merlinjackson@btinternet.com or Anthony Mayhew / Steve Breeden, Dong Tel: +44(0)1206 307915 email: gfscoordinators@dongenergy.co.uk*

Seabed Activity

First Published: 06 September 2018 | **Latest Update: 27 September 2018**

Rampion Wind Farm – Installation of New Export Cable

Map Link

The Costa La Luz call sign: EANU is planned to arrive on or around the 08/10/2018 at the nearshore export cable location. Operations are to backfill the float pits planned to last approximately 50 days weather permitting.

The vessel will transit between the spoil grounds NW of the OSP where she will collect the spoil taken out of the pits and return it to its origin. The vessel will transit up and down the export cable route.

50°49.034'N 00°20.175'W	50°45.274'N 00°19.224'W	50°43.179'N 00°18.477'W
50°48.817'N 00°20.067'W	50°45.179'N 00°19.222'W	50°43.131'N 00°18.427'W
50°48.499'N 00°19.917'W	50°45.073'N 00°19.196'W	50°42.958'N 00°18.205'W
50°47.507'N 00°19.275'W	50°44.401'N 00°18.983'W	50°42.787'N 00°17.929'W
50°46.910'N 00°19.040'W	50°44.230'N 00°18.939'W	50°42.383'N 00°17.155'W
50°46.862'N 00°19.028'W	50°44.011'N 00°18.881'W	50°42.290'N 00°16.978'W
50°46.634'N 00°18.995'W	50°44.011'N 00°18.881'W	50°41.902'N 00°16.244'W
50°46.586'N 00°18.995'W	50°43.729'N 00°18.779'W	50°41.796'N 00°16.006'W
50°46.069'N 00°19.062'W	50°43.441'N 00°18.649'W	50°41.647'N 00°15.666'W
50°45.436'N 00°19.194'W	50°43.297'N 00°18.571'W	50°41.623'N 00°15.635'W
50°45.331'N 00°19.218'W	50°43.245'N 00°18.534'W	50°41.576'N 00°15.598'W

Mariners are advised to give the vessel a wide berth as the vessel will be restricted in manoeuvrability whilst carrying out operations. All vessels are requested to remain a minimum safe distance of 500m from the vessel during operations and whilst she is on location.

Spoil Location Coordinates: 50°41.826'N 00°16.388'W

Work Area Coordinates:

Coordinates
50°48.637'N 00°19.763'W
50°48.588'N 00°19.970'W
50°47.924'N 00°19.624'W
50°47.999'N 00°19.323'W

For further information: *Gordon Bain (Eon Marine Coordination) +44(0)7787241442 email leadmc@rampionoffshore.com*

Seabed Activity

First Published: 20 September 2018 | **Latest Update: 20 September 2018**

East Anglia One Wind Farm – Export Cable Installation & Burial

Please be advised the Maersk Connector shall commence Export Cable Installation and Burial operations from 28th August for 8 to 10 weeks. The Maersk Connector is equipped with 6 anchors with have each 1000 meters of wires.

The vessel will run these wires back and forth and deploy and recover the anchors as required. An anchor buoy will be deployed at the anchor positions. The Maersk Connector will request a wide berth of at least 1500 meters.

Cable will now be landed 23rd September 2018 subject to weather

The following tugs will be assisting with the operations: C-Fenna, Forth Worrier, Green Isle And the Smit Sentosa
The Maersk Connector can be contacted on VHF channel 16 and will transmit Nav warnings on Ch69.

Anchor ID	Coordinates	Anchor ID	Coordinates
1	51°59.167'N 001°26.717'E	25	51°59.700'N 001°26.400'E
2	51°59.200'N 001°26.117'E	26	51°59.783'N 001°26.817'E
3	51°59.217'N 001°26.350'E	27	51°59.783'N 001°26.183'E
4	51°59.217'N 001°26.033'E	28	51°59.783'N 001°26.667'E
5	51°59.250'N 001°27.233'E	29	51°59.817'N 001°26.750'E
6	51°59.267'N 001°26.133'E	30	51°59.817'N 001°26.733'E
7	51°59.267'N 001°26.000'E	31	51°59.817'N 001°25.517'E
8	51°59.300'N 001°26.650'E	32	51°59.833'N 001°26.767'E
9	51°59.317'N 001°26.933'E	33	51°59.850'N 001°25.917'E
10	51°59.333'N 001°26.050'E	34	51°59.883'N 001°27.067'E
11	51°59.367'N 001°27.033'E	35	51°59.883'N 001°26.117'E
12	51°59.400'N 001°27.533'E	36	51°59.883'N 001°25.983'E
13	51°59.400'N 001°27.283'E	37	51°59.900'N 001°26.967'E
14	51°59.433'N 001°27.233'E	38	51°59.900'N 001°26.067'E
15	51°59.433'N 001°27.650'E	39	51°59.917'N 001°26.033'E
16	51°59.417'N 001°25.767'E	40	51°59.950'N 001°27.033'E
17	51°59.450'N 001°25.733'E	41	51°59.967'N 001°25.900'E
18	51°59.517'N 001°27.667'E	42	52°00.017'N 001°27.583'E
19	51°59.517'N 001°27.450'E	43	52°00.033'N 001°27.267'E
20	51°59.550'N 001°25.617'E	44	52°00.050'N 001°27.450'E
21	51°59.333'N 001°28.217'E	45	52°00.100'N 001°27.833'E
22	51°59.433'N 001°28.267'E	46	52°00.100'N 001°27.733'E
23	51°59.600'N 001°28.050'E	47	51°59.850'N 001°28.717'E
24	51°59.700'N 001°26.583'E	48	51°59.983'N 001°28.367'E

For further information: *Alan Thoms, East Anglia ONE project, Tel: 01416144880 email: EA1_MCC@scottishpower.com*

Deployment of Buoys

First Published: 18 October 2018 | **Latest Update: 18 October 2018**

East Anglia One Wind Farm – Wave Rider Buoy

East Anglia ONE Offshore Windfarm will install meteorological monitoring buoy in the proposed following location Circa 07-10-2018 until further notice by the Heavy lift vessel Aegir.

Coordinates: 52°08.64'N 002°32.5'E. (approx. 0.4nm due east of the South Cardinal Buoy)

For further information: Anthony Robson, Tel:01416144880 email: EA1_MCC@scottishpower.com

Deployment of Buoys

First Published: 23 August 2018 | **Latest Update: 06 September 2018**

Norfolk Boreas Offshore Wind Farm – Deployment of Wave Buoy

All Mariners are to be advised that a Metocean Measurement Campaign, primarily measuring waves and currents, is being conducted in the vicinity of the EA ZE Met Mast in the north-east of the Norfolk Boreas Offshore Wind Farm development zone.

One surface Directional Waverider Buoy, two CEFAS Toroidal Guard Buoys and one seabed frame-mounted AWAC were deployed on 11th May 2018 and will remain in position for one year.

Work will be conducted from onboard CEFAS Endeavour - Call Sign: VQHF3.

Equipment	Deployment	Recovery	Locations
Wave Buoy	11th May 2018	31st May 2019	53°10.644'N 02°59.369'E
Guard Buoy 1	11th May 2018	31st May 2019	53°10.753'N 02°59.370'E
AWAC	11th May 2018	31st May 2019	53°10.617'N 02°58.714'E
Guard Buoy 2	11th May 2018	31st May 2019	53°10.752'N 02°58.828'E

For further information: Jaqueline Read, Cefas, Tel: +44(0)7903952360 email: Jacqueline.read@cefas.co.uk

Deployment of Buoys

First Published: 23 August 2018 | **Latest Update: 06 September 2018**

Norfolk Boreas Offshore Wind Farm – Deployment of Wave Buoy

All Mariners are to be advised that a Metocean Measurement Campaign, primarily measuring waves and currents, is being conducted in the vicinity of the EA ZE Met Mast in the north-east of the Norfolk Boreas Offshore Wind Farm development zone.

One surface Directional Waverider Buoy, two CEFAS Toroidal Guard Buoys and one seabed frame-mounted AWAC were deployed on 11th May 2018 and will remain in position for one year.

Work will be conducted from onboard CEFAS Endeavour - Call Sign: VQHF3.

Equipment	Deployment	Recovery	Locations
Wave Buoy	11th May 2018	31st May 2019	53°10.644'N 02°59.369'E
Guard Buoy 1	11th May 2018	31st May 2019	53°10.753'N 02°59.370'E
AWAC	11th May 2018	31st May 2019	53°10.617'N 02°58.714'E
Guard Buoy 2	11th May 2018	31st May 2019	53°10.752'N 02°58.828'E

For further information: Jaqueline Read, Cefas, Tel: +44(0)7903952360 email: Jacqueline.read@cefas.co.uk

Seabed Activity

First Published: 04 April 2018 | **Latest Update: 15 October 2018**

East Anglia One Wind Farm – Construction and UXO Disposal

Please be advised that construction activities and UXO disposal are continuing at the East Anglia One Wind Farm.

Construction

- The Glomar Drifa will continue Guard vessel duties
- Heavy Lift vessel Bokalift 1 will continue pile and jacket installation on East Anglia One Wind Farm.
- Olympic Taurus will continue pile cleaning on various locations.
- Iceni Vengeance, Iceni Defender, World Seagull and Sure Pride to carry out crew transfers
- Guard vessels Ardent and Isla B to guard exposed export cable areas over cable crossing and wet stowed cable end.
- Aegir will install Jackets on East Anglia One Wind Farm supported by A. H Liguria and Union Sapphire.
- Bibby Athena continues inter array cable survey.
- Red Squirrel will return back to the HDD pit at Bawdsey.
-

Please be advised that confirmed unexploded ordnance has been identified at the following as found coordinates:

Location	Location	Location	Location
52°18.381'N 002°30.384'E	52°11.547'N 002°12.908'E	52°18.770'N 002°33.920'E	52°15.887'N 002°31.882'E
52°18.308'N 002°30.456'E	52°18.352'N 002°30.331'E	51°59.788'N 001°25.955'E	52°17.031'N 002°30.999'E
52°18.239'N 002°30.460'E	52°15.688'N 002°28.028'E	52°11.100'N 002°28.618'E	52°17.472'N 002°30.824'E
52°16.547'N 002°33.295'E	52°15.667'N 002°31.968'E	51°59.647'N 001°26.064'E	52°11.572'N 002°28.315'E
52°18.788'N 002°33.930'E	52°17.442'N 002°30.806'E	51°59.449'N 001°26.219'E	52°13.243'N 002°27.347'E
52°03.700'N 001°38.848'E	51°59.545'N 001°30.163'E	52°11.367'N 002°12.567'E	52°16.523'N 002°33.431'E
52°03.800'N 001°39.233'E	52°03.072'N 001°36.326'E	52°11.798'N 002°26.246'E	52°02.435'N 001°35.322'E
52°03.072'N 001°36.326'E	52°13.046'N 002°27.512'E	52°11.356'N 002°09.539'E	52°01.772'N 001°34.237'E

52°11.255'N 002°28.446'E 52°11.953'N 002°20.511'E 52°13.046'N 002°27.502'E 52°00.739'N 001°32.701'E
52°10.927'N 002°06.960'E 52°16.767'N 002°27.440'E 52°03.906'N 001°39.456'E 52°13.111'N 002°27.512'E
52°03.486'N 001°37.402'E 52°12.563'N 002°27.176'E 52°09.621'N 002°27.445'E 52°03.748'N 001°39.892'E
52°00.783'N 001°35.744'E 52°11.231'N 002°12.906'E 52°11.537'N 002°12.911'E 52°11.338'N 002°10.735'E
51°59.773'N 001°26.651'E 52°11.437'N 002°28.288'E 52°16.421'N 002°27.587'E 52°02.751'N 001°35.663'E
52°11.540'N 002°12.916'E 52°04.317'N 001°39.752'E 52°03.944'N 001°38.212'E 52°04.028'N 001°38.361'E
52°00.737'N 001°32.688'E 52°12.070'N 002°31.675'E 52°04.332'N 001°39.751'E 52°14.578'N 002°29.930'E

For further information: *Graham Farrant, Tel: 0141614290 or 7834 603291 email: gfarrant@scottishpower.com*

Deployment of Buoys

First Published: 31 May 2018 | **Latest Update: 20 September 2018**

North Coast of Cornwall – Wave Hub Subsea Cable Safety Notice

Mariners are reminded to exercise caution when navigating in the vicinity and are advised not to anchor or fish within the Wave Hub offshore site (as defined by the four special marks and charted as 'Renewable Energy Development Area') or in proximity to the main export cable.

Please be advised that the subsea cable system safety notification remains in force and the system is live at 11,000V. The majority of Wave Hub subsea cables are surface laid with varying levels of protection and alongside a dynamic seabed present a potential snag risk to anchors or fishing gear.

The following safety information and attachments should be carefully digested by any mariner operating in the vicinity of the Wave Hub offshore site or export cable route:

1. Overall, the 2017 cable survey shows that approximately 18% of the export cable remains exposed. Key characteristics are as follows (KP chart and RPL attached):
a. From the shore to KP1.9 the subsea power cable remains buried to the design depth of 1.5m from top of product
b. Due to varying sediment depths alongside shallow burial or a partial rock berm, From KP 1.9 to KP 8.1 the subsea power cable is in many areas exposed or carries a high risk of exposure
c. From KP 8.1 to the Wave Hub itself (KP 25) the subsea power cable is generally covered by a rock berm with 0.3m depth of cover. However, the 2017 survey has recorded a number of longstanding cable exposures and free-spans through this zone so the berm should not be considered as continuous protection.
2. Four cable tails extend across the charted offshore Renewable Energy Development Area to provide Developers with a proximate point of connection (KP chart and RPLs attached). These cables are stabilised against current and wave action through rock bags positioned at regular intervals but are otherwise exposed and unprotected to facilitate ease of handling. Many free-spans were removed in 2016 during construction by use of further rock bags but further free-spans due to the seabed mobility have been recorded during the 2017 cable survey.

Boundary Point	Position
SW	50°20.707'N 05°37.211'W
NW	50°22.812'N 05°37.734'W
NE	50°22.977'N 05°36.110'W
SE	50°20.873'N 05°35.587'W

Wave Hub AtoN Name	Details	Assigned Position	Current Status
Wave Hub NW N18100	North Cardinal – 3m Diameter Buoy Light: VQ	50°23.060'N 05°38.240'W	OK
Wave Hub SE N18107	VQ(6) +L Fl 10s Pillar YB Cardinal S	50°20.640'N 05°35.010'W	OK
Wave Hub Site – NW N18101	Fl Y 5s (sync) Pillar Y Cross Y X	50°22.791'N 05°37.943'W	OK
Wave Hub Site – NE N18102	Fl Y 5s (sync) Pillar Y Cross Y X	50°22.999'N 05°35.901'W	OK
Wave Hub Site – SE N18106	Fl Y 5s (sync) Pillar Y Cross Y X	50°20.894'N 05°35.378'W	OK
Wave Hub Site – SW N18105	Fl Y 5s (sync) Pillar Y Cross Y X	50°20.541'N 05°37.196'W	OK

Wave Buoy: 50°20.834'N 05°36.850'W

Subsea Infrastructure	Position
Wave Hub (Centre of 500m Safety Zone)	50°20.825'N 05°37.136'W
End of Cable Tail Bundle	50°20.904'N 05°37.095'W
Cable Tail 1 Dry Mate Connector	50°20.955'N 05°36.762'W
Cable Tail 2 Dry Mate Connector	50°21.318'N 05°37.202'W
Cable Tail 3 Dry Mate Connector	50°21.939'N 05°37.277'W
Cable Tail 4 Dry Mate Connector	50°22.418'N 05°37.356'W

For further information: *Julius Besterman, Wave Hub Limited, Tel:01736 800291 email: Julius.besterman@wavehub.co.uk*

Notice to Fishermen

First Published: 30 September 2018 | **Latest Update: 30 September 2018**

Hazard to Fishermen – Dropped Ladder

Map Link

Old access ladder from Met Mast 1 at the Shell Flats Wind Farm. The ladder is sticking up 1.5 metres above the seabed and is 50cm wide (the ladder may also be buried several metres into the seabed). The ladder has become uncovered due to seabed movement and a survey of the area in October will provide further information and evidence.

53°51.599'N 03°17.774'W

For further information: *Gavin Scarff, Orsted, Tel: +44 74 6 9377056 email: GAVSC@orsted.co.uk*

Seabed Activity

First Published: 06 September 2018 | **Latest Update: 06 September 2018**

Robin Rigg Offshore Wind Farm – Shallow Buried Cable

Mariners are advised that the most recent survey of the east and west export cables of the Robin Rigg OWF have indicated several areas of shallow buried cables, calculated to be buried to less than 0.2 m below seafloor.

ID	Longitude	Latitude
1	54°41.242'N	003°32.977'W
2	54°41.320'N	003°33.165'W
3	54°41.631'N	003°33.874'W
4	54°42.272'N	003°35.423'W
5-1	54°43.814'N	003°39.099'W
5-2	54°43.764'N	003°39.164'W
5-3	54°44.029'N	003°39.804'W
5-4	54°44.083'N	003°39.746'W
6-1	54°44.775'N	003°41.366'W
6-2	54°44.704'N	003°41.449'W
6-3	54°44.766'N	003°41.611'W
6-4	54°44.841'N	003°41.518'W

Fishermen are requested and advised to avoid trawling or setting any pots along the Export Cable Route at the positions marked as being shallow buried.

For further information: *Tom Watson: Tel: 01253 875565, Mob: 07903 173 624*

Seabed Activity

First Published: 26 July 2018 | **Latest Update: 26 July 2018**

Walney Extension Wind Farm – Rock Replacement

Map Link

The Walney Extension project has undertaken remedial rock placement at various locations along the export cable routes outside of existing subsea infrastructure crossing locations.

Point ID	Start Lat	Start Long	End Lat	End Long	
RP 1	53° 56.912' N	3° 04.447' W	53° 56.982' N	3° 04.193' W	306 meters
RP 2	54° 05.362' N	3° 49.619' W	54° 05.303' N	3° 49.585' W	116 meters
RP 3	54° 05.797' N	3° 50.165' W	54° 05.805' N	3° 50.217' W	58 meters
RP 4	54° 05.683' N	3° 50.907' W	54° 05.671' N	3° 50.934' W	440 meters
RP 5	53° 58.328' N	3° 01.341' W	53° 58.304' N	3° 01.407' W	80 meters
RP 6	53° 56.975' N	3° 04.343' W	53° 56.960' N	3° 04.387' W	55 meters
RP 7	54° 05.894' N	3° 50.415' W	54° 05.863' N	3° 50.612' W	
	54° 05.863' N	3° 50.612' W	54° 05.701' N	3° 50.934' W	1015 meters
	54° 05.701' N	3° 50.934' W	54° 05.666' N	3° 51.218' W	
RP 8	53° 55.075' N	3° 22.131' W	53° 55.078' N	3° 22.301' W	750 meters
RP 9	53° 55.215' N	3° 10.468' W	53° 55.126' N	3° 10.667' W	500 meters

These location coordinates are listed below and give the start and end position of each rock placement as well as the length in meters. Please mark these locations on your charts/plotter and keep clear.

The above locations of rock placements along the WOWO3+4 Export Cables are shown on the attached chartlet as being shaded red.

The coordinates of the Crossing Locations over existing subsea infrastructure are listed below and these locations are protected with industry standard rock placement techniques.

Please mark these positions on your chart/plotter and keep clear

Latitude	Longitude	Latitude	Longitude
54° 03.950' N	3° 47.221' W	53° 59.064' N	3° 36.740' W
54° 03.904' N	3° 46.955' W	53° 59.039' N	3° 36.736' W
54° 00.679' N	3° 40.347' W	53° 59.096' N	3° 36.637' W
54° 00.683' N	3° 40.318' W	53° 59.088' N	3° 36.636' W
54° 00.885' N	3° 40.349' W	53° 59.064' N	3° 36.631' W
54° 00.889' N	3° 40.322' W	53° 55.562' N	3° 26.553' W
53° 54.527' N	3° 11.832' W	53° 55.738' N	3° 26.290' W
53° 54.564' N	3° 11.931' W	53° 55.355' N	3° 24.345' W
53° 59.072' N	3° 36.742' W	53° 55.495' N	3° 24.206' W

This information has been posted to all of the fishermen who I have addresses for and it is expected that information covering the material presented in this NtM will also be made available via Kingfisher/KIS-ORCA".

Please note that the chartlet is provided for information purposes only and should not be used for navigation.

For further information: *Tom Watson: Tel: 01253 875565, Mob: 07903 173 624*

Notice to Fishermen

First Published: 12 July 2018 | **Latest Update: 12 July 2018**

Fishing Hazard – Plat-I Connel Removal Operations

Map Link

Please be advised that the PLAT-I platform was successfully removed from site on June 7th. The mooring system was removed on June 8th.

It is intended to leave 4 * rock anchors in-situ in the event that we wish to conduct further testing at the site in the near term. Please be advised that a Marine License application has been submitted to Marine Scotland to enable the anchors to remain in place until October 2020 – in line with the Lease Option previously awarded to Sustainable Marine Energy Ltd by the Scottish Crown Estate.

In terms of a description of the anchors:

- They are of steel construction
- 1.4t each
- The 'head' of each of the anchors protrudes between 50cm – 70cm from the seabed.

Coordinates
56°27.303'N 005°23.999'W
56°27.275'N 005°23.982'W
56°27.321'N 005°23.893'W
56°27.301'N 005°23.865'W

For further information: *John McGlynn, Sustainable Marine Energy Ltd, Tel: +44 0131 285 4620 email: john.mcglynn@sustainablemarine.com*

Local Awareness Charts

Chart	Area	Location	Turbines	Developer	Completed	Link
Barrow	5	7km dudgeon Island	30	Orsted	1 Jul 2006	Download
Blyth	2	1km N.E Coast	2	E.ON	-	Download
Burbo Bank	5	5.2km Crosby	25	Orsted	27 Oct 2007	Download
Dudgeon	3	38km Outer Wash	67	Statkraft / Statoil	-	Download
Greater Gabbard	3	26km off Orford, Sufflk	140	SSE & RWE Npower / Innogy	7 Sept 2012	Download
Gwynt y Mor	5	13km off N Wales Cst	160	RWE Innogy / SWM	18 Jun 2015	Download
Gunfleet Sands 1, 2 & 3	3	8.5km off Clacton-On-S	50	Orsted	19 April 2010	Download
Humber Gateway	3	8km off Holderness Cst	73	E.ON UK	5 Jun 2015	Download
Hywind	2	25km off Peterhead	5	Statoil	-	Download
Inner Dowsing	3	5km off Skegness	27	Siemens	30 Mar 2009	Download
Kentish Flats	3	9km off Whitstable	30	Vattenfall	1 Oct 2015	Download
Lincs	3	8km off Skegness	75	Centrica	10 Oct 2013	Download
London Array	3	24km off Clacton-on-S	175	Orsted	1 May 2013	Download
Lynn	3	5km off Skegness	27	Siemens	30 Mar 2009	Download
North Hoyle	5	7.5km off Prestatyn	30	RWE Innogy UK	1 Dec 2003	Download
Race Bank	3	27km Lincolnshire	91	Orsted	-	Download
Ormonde	5	off Walney Island	30	Vattenfall	22 Feb 2012	Download
Rampion	3	Off Sussex Coast	116	E.ON UK Renewables	-	Download
Rhyl Flats	5	8km Abergele	25	RWE Innogy UK	2 Dec 2009	Download
Robin Rigg	5	9.5km Maryport	60	E.ON UK Renewables	16 Apr 2010	Download
Scroby Sands	3	3km NE Great Yarmth	30	E.ON UK Renewables	1 Mar 2004	Download
Sheringham Shoal	3	Sheringham, Grtr Wash	88	Statkraft / Statoil	27 Sep 2007	Download
Teesside	3	1.5km NE Teesmouth	27	EdF ER	1 Aug 2013	Download
Thanet	3	11km Foreness Point	100	Vattenfall	23 Sept 2010	Download
Walney 1	5	14km Walney Island	51	Orsted / SSE (+ prtnrs)	9 Jan 2012	Download
Walney 2	5	14km Walney Island	51	Orsted / SSE (+ prtnrs)	9 Jan 2012	Download
West of Duddon Sands	5	14km Walney Island	108	Scottish Power / Orsted	30 Oct 2014	Download
Westermost Rough	3	25km north of Spurn P	35	Orsted	26 Mar 2015	Download

National Awareness Charts

Chart	Link
North Sea North & West	Download
North Sea Central	Download
North Sea South	Download
English Channel	Download
South Western Approaches	Download
Irish Sea	Download
Baltic North	Download
Baltic South	Download

National Fishing Plotter Files

File	Link
Kingfisher Fishing Plotter Files – KIS-ORCA January 2018 (Subsea Cables and Wind Farms)	Download